COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES	))))	**CASE NO. 2018-00295**

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
DATED NOVEMBER 13, 2018

FILED: NOVEMBER 29, 2018

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is Treasurer for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

Daniel K. Arbough

Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Judy Schooler

Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Chief Operating Officer for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, 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.

Lonnie E. Bellar

Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Judy Schooler

Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

Robt M. Conroy
Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Judy Schooler
Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Controller for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

Christopher M. Garrett

Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 28th day of November 2018.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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

Elizabeth J. McFarland

Elizabeth J. McFarland

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Kimberly C. Brock

Notary Public

My Commission Expires:

10-16-2020

VERIFICATION

STATE OF TEXAS)
) **SS:**
COUNTY OF TRAVIS)

The undersigned, **Adrien M. McKenzie**, being duly sworn, deposes and says he is President of FINCAP, Inc., that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Adrien M. McKenzie

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 16th day of November 2018.

Notary Public (SEAL)

My Commission Expires:

04/17/2019

ROBERT LEE MARTINEZ
NOTARY PUBLIC STATE OF TEXAS
MY COMM. EXP. 4/17/2019
NOTARY ID 13019391-2

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Gregory J. Meiman**, being duly sworn, deposes and says that he is Vice President, Human Resources for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

Gregory J. Meiman

Gregory J. Meiman

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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.

W. Seelye

William Steven Seelye

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of November 2018.

Judy Schooler (SEAL)
Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **David S. Sinclair**, being duly sworn, deposes and says that he is Vice President, Energy Supply and Analysis for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

David S. Sinclair

David S. Sinclair

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 29th day of November 2018.

Judy Schooler

Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information Dated November 13, 2018

Case No. 2018-00295

Question No. 1

Responding Witness: Robert M. Conroy

Q-1. Refer to Tab 5 of the application.

a. Refer to proposed P.S.C. Electric No. 12, Original Sheet No. 10. Under "Availability"; it states that "Existing Customers with twelve (12)-month-average maximum monthly loads exceeding 50 kW who are receiving service under P.S.C. Electric No. 6, Fourth Revision of Original Sheet No. 10 as of February 6, 2009, will continue to be served under this rate at their option." Since P.S.C. Electric No. 6, Fourth Revision of Original Sheet No. 10 has been superseded, state whether this should state, "exceeding 50 kW receiving service under ...."

b. Refer to P.S.C. Electric No. 11, Second Revision of Original Sheet No. 35 and proposed P.S.C. Electric No. 12, Original Sheet Nos. 35 and 35.2. With the removal of the sentence regarding units marked with an asterisk from Original Sheet No. 35, explain why the High Pressure Sodium London and Victorian options on Original Sheet No. 35.2 are marked with an asterisk.

c. Refer to P.S.C. No. 11, Second Revision of Original Sheet No. 35 and proposed P.S.C. Electric No. 12, Original Sheet No. 35. Under "Overhead Service," explain why the following was removed from the tariff: "Company will, upon request furnish ornamental poles, of Company's choosing, together with overhead wiring and all other equipment mentioned for basic overhead service."

d. Refer to, P.S.C. Electric No. 11, First Revision of Original Sheet No. 35.3, and proposed P.S.C. Electric No. 12, Original Sheet No. 35.4. Confirm that the only change to numbers 6 and 7 of the "Terms and Conditions" section is that they were moved from Sheet No. 35.3 to Sheet No. 35.4.

e. Refer to proposed P.S.C. Electric No. 12, Original Sheet No. 35.2. Explain why five years is a reasonable amount of time to assess the conversion fee to a customer who requests to change from a current functioning non-LED fixture to an LED fixture.

f. Refer to P.S.C. Electric No. 11, Second Revision of Original Sheet No. 35.2 and proposed P.S.C. Electric No. 12, Original Sheet No. 35.3. Confirm that the only change to the "Due Date" and "Determination of Energy Consumption" sections is that they were moved from Sheet No. 35.2 to Sheet No. 35.3.

g. Refer to P.S.C. Electric No. 11, First Revision of Original Sheet No.35.3 and proposed P.S.C. Electric No. 12, Original Sheet No. 35.4. Explain the reasoning for the removal of the following language from number 6 of the terms and conditions: "that were in service less than twenty years, and requests installation of replacement lighting within 5 years of removal ...."

h. Refer to proposed P.S.C. No. 19, Original Sheet Nos. 40 through 40.25. The entire rate schedule is marked with the (T) margin notation; however, there are portions that are not changing. Provide revised tariff sheets that reflect margin notations for only the portions that are changing. For text that is not changing but is simply being moved to another page due to text being added above it, it is not necessary to mark those changes with a margin notation.

i. Refer to proposed P.S.C. Electric No. 12, Original Sheet No. 42. Explain why Rate EVS is being limited to a maximum of ten stations.

j. Refer to P.S.C. Electric No. 11, Original Sheet Nos. 71.1 and 71.2 and proposed P.S.C. Electric No. 12, Original Sheet Nos. 71 .2 and 71 .3.

   (1) Confirm that numbers 7 through 12 of the "General" section, with the exception of number 11, are not new to the tariff.

   (2) Confirm that the only change to the "Term of Contract" section is that it was moved from Sheet No. 71 .2 to Sheet No. 71.3.

k. Refer to proposed P.S.C. Electric No. 12, Original Sheet Nos. 72.1 through 72.3. The text on these pages are all marked as new; however, there are portions that are not changing from the current tariff. Provide revised tariff sheets that reflect margin notations for only the portions that are changing.

l. Refer to proposed P.S.C. Electric No. 12, Original Sheet No. 90.

   (1) Under "Term of Contract," explain what would make a franchise agreement, ordinance or other governmental enactment invalid, ineffective, or inapplicable.

   (2) Explain the reasoning for the removal of the "Definitions," "Rate," and "Terms and Conditions" sections from the tariff.

m. Refer to proposed P.S.C. Electric No. 12, Original Sheet Nos. 102 and 102.1 and proposed P.S.C. Gas No. 12, Original Sheet Nos. 102 and 102.1.

(1) Under number 4 of the "General" section, indicate whether LG&E would be willing to remove the following language since it was removed from 807 KAR 5:006 effective January 4, 2013: "except that no refund or credit will be made if Customer's bill is delinquent on the anniversary date of the deposit."

(2) Under number 5 of the "Residential" section, explain how a customer would become a new or greater credit risk.

(3) Confirm that LG&E is not charging an additional deposit to residential customers whose payment record is satisfactory unless their classification of service changes or the customer requests that their deposit be recalculated pursuant to 807 KAR 5:006, Section 8(1)(d)3.

n. Refer to proposed P.S.C. Electric No. 12, Original Sheets Nos. 106.1 and 106.2. Under b. and c. of "5. Other Line Extensions" and b. of "6. Overhead Line Extensions for Subdivisions." Explain if these mean that no refunds will be given until the 10-year refund period ends. If so, explain why that is more reasonable than giving refunds each year as set forth in 807 KAR 5:041, Section 11 (2)(b) and 807 KAR 5:041 , Section 11 (3).

o. Refer to P.S.C. Electric No. 11, Original Sheet No. 106.3 and proposed P.S.C. Electric No. 12, Original Sheet No. 106.3. Under "Underground Line Extensions, General." Explain why the following was removed from the tariff: "In consideration of Customer's underground service, Company shall credit any amounts due under the contract for each service at the rate of $50.00 or Company's average estimated installed cost for an overhead service whichever is greater."

p. Refer to P.S.C. Gas No. 11, Original Sheet No. 15.2 and proposed P.S .C. Gas No. 12, Original Sheet No. 15.1. Confirm that the only change to the "Due Date of Bill" section is that it was moved from Sheet No. 15.2 to Sheet No. 15.1.

q. Refer to P.S.C. Gas No. 11, Sixth Revision of Original Sheet No. 20.1 and proposed P.S.C. Gas No. 12, Original Sheet No. 20. Confirm that the only change to the "Contract Term" section is that language was moved from Sheet No. 20.1 to Sheet No. 20.

r. Refer to P.S.C. Gas No. 11, Original Sheet No. 20.2 and proposed P.S.C. Gas No. 12, Original Sheet No. 20. 1. Confirm that the only change to the "Penalty For Failure to Interrupt" section is that language was moved from Sheet No. 20.2 to Sheet No. 20. 1.

s. Refer to P.S.C. Gas No. 11, Original Sheet No. 20.3 and proposed P.S.C. Gas No. 12, Original Sheet No. 20.2. Confirm that the only change to the number 4 of the "Special Terms and Conditions" section is that language was moved from Sheet No. 20.3 to Sheet No. 20.2.

t. Refer to P.S.C. Gas No. 11, Original Sheet No. 20.4 and proposed P.S.C. Gas No. 12, Original Sheet No. 20.3. Confirm that the only change to the first paragraph on P.S.C. No. 11, Original Sheet No. 20.4 is that the language was moved from Sheet No. 20.4 to Sheet No. 20.3.

u. Refer to P.S.C. Gas No. 11, Fifth Revision of Original Sheet No. 21 .1 and proposed P.S.C. Gas No. 12, Original Sheet No. 21.2. Confirm that the only change to the last paragraph on P .S.C. Gas No. 12, Fifth Revision of Origin al Sheet No. 21 .1 is that the language was moved from Sheet No. 21.1 to Sheet No. 21.2.

v. Refer to P.S.C. Gas No. 11, Original Sheet No. 30.1 and proposed P.S.C. Gas No. 12, Original Sheet 30.2. Confirm that the only change to the "Gas Cost True-up Charge" section is that language was moved from Sheet No. 30.1 to Sheet No. 30.2.

w. Refer to P.S.C. Gas No. 11, Fifth Revision of Original Sheet No. 30.2 and proposed P.S.C. Gas No. 12, Original Sheet No. 30.3. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, Fifth Revision of Original Sheet No. 30.2 is that the language was moved from Sheet No. 30.2 to Sheet No. 30.3.

x. Refer to P.S.C. Gas No. 11, First Revision of Original Sheet No. 30.3 and proposed P.S.C. Gas No. 12, Original Sheet No. 30.4. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, First Revision of Original Sheet No. 30.3 is that the language was moved from Sheet No. 30.3 to Sheet No. 30.4.

y. Refer to P.S.C. Gas No. 11, Original Sheet No. 30.4 and proposed P.S.C. Gas No. 12, Original Sheet No. 30.5. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, First Revision of Original Sheet No. 30.4 is that some of the language was moved from Sheet No. 30.4 to Sheet No. 30.5.

z. Refer to P.S.C. Gas No. 11, Original Sheet No. 30.8 and proposed P.S.C. Gas No. 12, Original Sheet No. 30.9. Confirm that the only change to number 3 of the "Special Terms and Conditions" section is that some of the language was moved from Sheet No. 30.8 to Sheet No. 30.9.

aa. Refer to P.S.C. Gas No. 11, Original Sheet No. 30.9 and proposed P.S.C. Gas No. 12, Original Sheet No. 30.10. Confirm that the only change to numbers 5 through 10 of the "Special Terms and Conditions" section is that the language was moved from Sheet No. 30.9 to Sheet No. 30.10.

bb. Refer to P.S.C. Gas No. 11, Original Sheet No. 36.4 and proposed P.S.C. Gas No. 11, Original Sheet No. 36.5. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, Original Sheet No. 36.4 is that some of the language was moved from Sheet No. 36.4 to Sheet No. 36.5.

cc. Refer to P.S.C. Gas No. 11, Original Sheet No. 36.5 and proposed P.S.C. Gas No. 12, Original Sheet No. 36.6. Confirm that the only change to the bottom of P.S.C. Gas No. 11, Original Sheet No. 36.5 is that the language was moved from Sheet No. 36.5 to Sheet No. 36.6.

dd. Refer to P.S.C. Gas No. 11 , Original Sheet No. 36.6 and proposed P.S.C. Gas No. 12, Original Sheet No. 36.7. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, Original Sheet No. 36.6 is that some of the language was moved from Sheet No. 36.6 to Sheet No. 36.7.

ee. Refer to P.S.C. Gas No. 11, Original Sheet No. 52.2 and proposed P.S.C. Gas No. 12, Original Sheet No. 52.3. Confirm that the only change to number 8 of the "Special Terms and Conditions" section is that it was moved from Sheet No. 52.2 to Sheet No. 52.3.

ff. Refer to P.S.C. Gas No. 11 , Original Sheet No. 97 and proposed P.S.C. Gas No. 12, Original Sheet No. 98. Confirm that the only change to the last two paragraphs of the "Optional Rates" section is that they were moved from Sheet No. 97 to Sheet No. 98.

gg. Refer to P.S.C. Gas No. 11, Original Sheet No. 101 and proposed P.S.C. Gas No. 12, Original Sheet No. 102. Confirm that the only change to the last paragraph on P.S.C. Gas No. 11, Original Sheet No. 101, is that some of the language was moved from Sheet No. 101 to Sheet No. 102.

hh. Refer to P.S.C. Gas No. 11, Original Sheet No. 107.1 and proposed P.S.C. Gas No. 12, Original Sheet No. 107. Confirm that the only change to the "Additional Service Under Other Rate Schedules" subsection is that it was moved from Sheet No. 107.1 to Sheet No. 107.

ii. Refer to P.S.C. Gas No. 11, Original 108.3 and proposed P.S.C. Gas No. 12, Original Sheet No. 108.2. Confirm that the only changes to (3) and (4) under the "Emergency Curtailment" section are that they were changed to c. and d. and moved from Sheet No. 108.3 to Sheet No. 108.2.

jj. Refer to P.S.C. Gas No. 11, Original Sheet No. 108.4 and proposed P.S.C. Gas No. 12, Original Sheet Nos. 108.3 and 108.4. Confirm that the only change to the third paragraph of the "Penalty Charges" section is that some of the language was moved from Sheet No. 108.4 to Sheet No. 108.3

A-1.

a. The Company will modify the language from "exceeding 50 kW who are receiving service under" to "exceeding 50kW who were receiving service under". This makes it clear the grandfathering provision remains in place.

b. The asterisks are to signify that London and Victorian are the only non-LED lights offered within the LS tariff. See the testimony of Mr. Conroy at page 23. The Company can either remove the asterisks or add a note that the asterisks represents no-LED lights.

c. LG&E ceased the limited practice of installing overhead services to ornamental poles many years ago; and thus, this provision was removed, as it is no longer necessary.

d. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

e. See the response to Question No. 19, part a.

f. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

g. Regardless of the age of fixture, the cost of removal of the fixture is not factored into the monthly Lighting rate. This provision places those costs on the cost causer requesting removal of those facilities. In the event the light is converted to an LED, the cost of removing the old fixture is incidental because a crew is already onsite to install the new LED, and will not be charged to the customer.

h. Attached are revised tariff sheets 40 through 40.25 depicting the correct margin notations for all proposed modifications.

i. Company believes the Commission is asking about rate EVC on the proposed P.S.C. Electric No. 12, Original Sheet No. 42. The rate is limited to ten as specified in and consistent with the original filing and approval in Case No. 2015-00355.

j.

(1) Number 11 is not new to the tariff, but Number 12 is. Other than small wording changes and the addition of Number 12, the "General" section remains unchanged.

(2) Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

k. Attached are revised tariff sheets 72.1, 72.2, and 72.3 depicting the correct margin notations for all proposed modifications.

l.

(1) Anything that would make the ordinance, franchise agreement, or governmental enactment void or unenforceable, e.g., a judicial determination of its unlawfulness .

(2) "Definitions," and "Rate" sections were removed since they do not apply to LG&E franchises. The "Terms and Conditions" section was redundant and therefore, removed.

m.

(1) Company confirms it is willing to remove this language from the tariff.

(2) A customer could have satisfactory credit when first applying for service, and no deposit would be assessed. Thereafter, a customer could be disconnected for non-payment, have payments returned for insufficient funds, or other factors which might increase the customer's risk profile. In those cases, a deposit could be assessed.

(3) Company confirms.

n. Refunds will be provided to the customer who made the original deposit during the year when another customer connects to the requested extension. These refunds will be capped to the original deposited amount and will only be provided for the first 10 years.

o. This was a legacy practice that the Company no longer monitors or implements as the criteria for this rarely exists.

p. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

q. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

r. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

s. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

t. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

u. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

v. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

w. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

x. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

y. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

z. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

aa. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

bb. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

cc. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

dd. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

ee. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

ff. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

gg. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

hh. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

ii. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

jj. Company confirms the referenced item is neither new nor a change to the tariff; rather it is only a movement of the text.

Louisville Gas and Electric Company

Standard Rate **PSA**

Pole and Structure Attachment Charges

APPLICABLE

In all territory served.

AVAILABILITY

Available to the facilities of Governmental units, Educational Institutions, Cable Television System Operators and Telecommunications Carriers as provided below except: (1) facilities of local exchange carriers ("ILECs") with joint use agreements with the Company; (2) facilities subject to a fiber exchange agreement; and (3) Macro Cell Facilities. Nothing in this tariff expands the right to attach to the Company's structures beyond the rights otherwise conveyed by law. T

APPLICABILITY OF SCHEDULE TO CURRENT LICENSE AGREEMENTS

Any Telecommunications Carrier that executed a license agreement permitting attachments to Company's Structures prior to the July 1, 2017 shall be subject to the rates, terms, and conditions T of this Pole and Structure Attachment Charges Schedule ("this Schedule") upon expiration or T termination of its license agreement**.** Any Governmental Unit or Educational Institution that N executed a license agreement permitting attachments to Company's Structures prior to May 1, N 2019 shall be subject to the rates, terms and conditions of this Schedule upon expiration or N termination of its license agreement, unless such license agreement provides otherwise. N

DEFINITIONS

"Affiliate" means, with respect to an entity, any entity controlling, controlled by, or under common control with such entity.

"Approved Contractor" means a contractor approved by Company for a particular purpose.

"Attachment" means the Cable or Wireless Facilities and all associated appliances including without limitation any overlashed cable, guying, small splice panels and vertical overhead to underground risers but shall not include power supplies, equipment cabinets, meter bases, and other equipment that impedes accessibility or otherwise conflicts with Company's electric design and construction standards.

"Attachment Customer" means a customer that attaches its facilities to one or more of the Company's Structures and has executed an Attachment Customer Agreement with the Company.

"Contract for Attachment to Company Structures" or "Contract" means the written agreement T provided by Company and executed between Attachment Customer and Company incorporating T the terms and conditions of this Schedule.

DATE OF ISSUE: September 28, 2018

DATE EFFECTIVE: With Service Rendered
On and After November 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2018-00295 dated ____

Louisville Gas and Electric Company

P.S.C. Electric No. 12, Original Sheet No. 40.1

Standard Rate **PSA**
Pole and Structure Attachment Charges

"Business Day" means a calendar day unless it is a Saturday, a Sunday or a legal holiday.

"Cable" means the fiber optic or coaxial cable, or any other type of cable, as well as any messenger wire or support strand.

"Cable television system operator" means a Person who operates a system that transmits television signals, for distribution to subscribers of its services for a fee, by means of wires or cables connecting its distribution facilities with its subscriber's television receiver or other equipment connecting to the subscriber's television receiver, and not by transmission of television signals through the air, and subscription to the system's service is available to the public.

"Communication Space" means the area below the Communication Worker Safety Zone to the limit of allowable NESC clearance, department of transportation or other governmental requirements, and Company's internal construction standards on poles.

"Communication Worker Safety Zone" means the space between the facilities located in the Supply Space and facilities located in the Communications Space on poles.

"Contractor" means any Person employed or engaged by Attachment Customer to perform work or render services upon or in the immediate vicinity of Company's Structures or associated facilities other than Attachment Customer and Attachment Customer's employees.

"Credit Rating" means, with respect to any entity, the rating then assigned to such entity's N
unsecured, senior long-term debt obligations (not supported by third party credit enhancements) N
by Standard and Poor's Rating Group or its successor ("S&P"), or Moody's Investor Services, N
Inc. or its successor ("Moody's"), or if such entity does not have a rating for its senior unsecured N
long-term debt, then the rating then assigned to such entity as its "corporate credit rating" N
assigned by S&P, or the "long-term issuer rating" assigned by Moody's. N

"Distribution Pole" means a utility pole supporting electric supply facilities, all of which operate at less than 69 kV, but does not include a non-wood street light pole or a wood street light pole that is not located in a public right-of-way.

"Duct" means a pipe, tube, conduit, manhole, or other structure made for supporting and protecting electric and/or communications wires or cables and in which wires, cables and conduits may be placed for support or protection but excluding (1) any pipe now or previously used for the transmission or distribution of natural gas, (2) any duct system supporting electric supply lines operated at 69kV or greater, and (3) any vault.

"Educational Institution" means a public or private, non-profit university, college or community N
college N

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"Governmental Unit" means an agency or department of the Federal Government, a department, agency, or other unit of the Commonwealth of Kentucky, a county or city, special district, or other political subdivision of the Commonwealth of Kentucky. N N N

"High Volume Application" means an application or applications for Attachments to more than 300 poles or to place Cable or conduit through more than 10 manholes submitted to Company within a 30-day period.

"Letter(s) of Credit means one or more irrevocable, transferable standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch in a form acceptable to the Company. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit. N N N

"Macro Cell Facility" means a wireless communications system site that is typically high-power and high-site, and capable of covering a large physical area, as distinguished from a distributed antenna system (DAS), small cell, or WiFi attachment, by way of example. Macro Cell Facilities are typically, but not exclusively, co-located on Transmission Poles and communications monopoles and towers.

"Make Ready Survey" means a survey, in the form prescribed by the Company from time to time, prepared by the Company or an Approved Contractor describing in reasonable detail the make-ready engineering requirements, and such other information as the Company may require, for the installation of an Attachment or group of Attachments on a Structure or group of Structures.

"NEC" means the National Electrical Code.

"NESC" means the National Electrical Safety Code.

"Performance Assurance" means collateral in the form of cash, surety bond, Letter(s) of Credit, or other security acceptable to the Company. N N

"Person" is defined by KRS 278.010(2).

"Service Drop" means a Cable, attached to a pole with a J-hook or other similar hardware that connects the trunk line to an end user's premises.

"Structure" means any Company pole, conduit, duct, or other facility normally used by the Company to support or protect its electric conductors but shall not include (1) any Transmission Pole other than Transmission Poles to which the Company has attached its own electric supply lines operated at less than 69kV; (2) any street light pole that is not a wood pole located in a public right-of-way; or (3) any pole that the Company has leased to a third party.

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Supply Space" means the space above the Communications Worker Safety Zone used for the installation of electric supply lines.

"Telecommunications carrier" means a Person who operates a system that (1) transmits by wire or wireless means, between or among points specified by the user, information of the user's choosing without change in the form or content of the information as sent or received, and (2) provides such transmission services for a fee directly to or for the public, or to such classes of users as to be effectively available directly to or for the public. **T**

"Transmission Pole" means any utility pole or tower supporting electric supply facilities designed to operate at 69 kV or greater.

"Wireless Facility" means, without limitation, antennas, risers, transmitters, receivers, and all other associated equipment used in connection with Attachment Customer's provision of wireless communications services and the transmission and reception of radiofrequency signals, but shall not include power supplies, equipment cabinets, meter bases, and other equipment that impedes accessibility or that conflicts with the Company's electric design and construction standards.

ATTACHMENT CHARGES

$ 7.25 per year for each wireline pole attachment.
$ 0.81 per year for each linear foot of duct.
$36.25 per year for each Wireless Facility located on the top of a Company pole.

The attachment charge for any other Wireless Facility shall be agreed upon by Attachment Customer and the Company and set forth in a special contract to be filed with the Commission.

BILLING

All attachment charges for use of Structures will be billed semi-annually based upon the type and number of Attachment Customer's Attachments reflected in Company's records on December 1 and June 1. A bill issued under this Schedule shall be due upon its issuance. Any bill not paid in full within sixty (60) days of its issuance shall be assessed a late payment fee of three (3) **T** percent on the bill's current charges. If Attachment Customer fails to pay all charges and fees billed within six (6) months of the bill's issuance, Company may remove any or all of Attachment **T** Customer's Attachments. In lieu of or in addition to removal of Attachments, Company may **T** exercise any other remedies available under law to address Attachment Customer's failure to make timely payment of any charges assessed under this Schedule.

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TERM OF SERVICE

An executed contract shall be for a term of ten (10) years and shall thereafter automatically renew for successive one (1) year periods unless Company or Attachment Customer provides the other with written notice of termination at least sixty (60) days prior to the renewal date. **T T T**

TERMS AND CONDITIONS OF ATTACHMENT

Attachments to Company's Structures that do not interfere with the Company's electric service requirements and the Attachments of existing Customers and joint users shall be permitted in accordance with the terms and conditions of this Schedule. The Terms and Conditions set forth in Section 5 of the Company's Electric Service Tariff shall also be applicable to the extent they are not in conflict with or inconsistent with this Schedule's provisions. T

1. **CONTRACT FOR ATTACHMENT TO COMPANY STRUCTURES** **T**
   No Attachments shall be made to Company's Structures until Attachment Customer has executed a Contract for Attachment to Company Structures, in a form substantially similar to that which is included at the end of this Schedule.. The Contract shall incorporate the terms and conditions set forth in this Schedule. **T T**

2. **NO PROPERTY RIGHTS**
   No use, however extended, of Company Structures shall create or vest in Attachment Customer any right, title or interest in the Structures. A Contract confers only a non-exclusive right to affix and install Attachments to and on Company's Structures. Company is not required to maintain any Structure for a period longer than demanded by its electric service requirements. **T T**

3. **USE OF COMPANY'S FACILITIES BY OTHERS**
   Nothing in this Schedule shall affect the rights or privileges previously conferred by Company to others. The rights granted under this Schedule and the Contract shall at all times be subject to such previously conferred privileges and shall not affect the rights or privileges that may be conferred by Company in the future to others. **T T T**

4. **TRANSFER OF RIGHTS**
   Except as provided in this Schedule, Attachment Customer's rights under the Contract are non-delegable, non-transferable and non-assignable. Any delegation, transfer or assignment of any interest created by the Contract or this Schedule without Company's prior written consent is voidable at Company's option. Company shall not unreasonably withhold its consent to Attachment Customer's delegation, transfer or assignment of rights under the Contract upon notice of the delegation, transfer or assignment and if adequate evidence is provided of Transferee's compliance with Term 23 (Insurance) and Term 24 (Performance Assurance). **T T T T T**

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Attachment Customer shall not permit a third party to overlash or utilize any Attachment without Company's prior written consent. Company may condition its consent upon such third party's compliance with all provisions of the Contract, this Schedule, and such other terms as Company may reasonably require. T

5. COMPANY'S ABANDONMENT OF STRUCTURE

Company shall provide an Attachment Customer with a minimum of 180 days' notice before T abandoning a Structure to which Attachment Customer has made an Attachment unless state or local law, easement provisions, or contractual obligations to a third party requires the Structure to be abandoned in a shorter period, in which case Company shall provide as T much notice as is reasonably practicable.

6. FRANCHISES AND EASEMENTS

Attachment Customer shall secure at its own expense any right-of-way, easement, license, franchise or permit from any Person that may be required for the construction or maintenance of Attachments by or for Attachment Customer. If requested by Company, Attachment Customer shall submit to Company satisfactory evidence of such right-of-way, easement, license, franchise or permit. Company's approval of Attachments shall not constitute any representation or warranty regarding Attachment Customer's right to occupy or use any public or private right-of-way.

Upon an Attachment Customer's written request, Company may provide to Attachment **T** Customer such non-private information as Company may have regarding the name of the **T** record landowners from which Company obtained easements for Structures. Such **T** information is provided without representation or warranty as to its accuracy or completeness. Company has no obligation to correct or supplement any information so **T** provided. If Company provides assistance to Attachment Customer in obtaining easements **T** or other property rights, Attachment Customer shall reimburse Company's cost of providing **T** such assistance within thirty (30) days of its receipt of an invoice from Company. **T**

Attachment Customer shall indemnify and save harmless Company from all claims, including the expenses incurred by Company to defend itself against such claims, resulting from or arising out of the failure of Attachment Customer to secure any right of way, easement, license, franchise or permit.

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7. ATTACHMENT APPLICATIONS AND PERMITS

a. Unless waived by Company, Attachment Customer shall make written application, in the form and manner prescribed by Company for permission to install Attachments on or in any Structure. Each application shall include: (1) in the case of poles, the owner, number and location of all Structures for which license to attach is sought and the amount of space required thereon; (2) in the case of Ducts, the number of linear feet of Duct space and the specific location of each such Duct to be utilized, the amount of requested space, the nature of any changes or inner Duct or Ducts proposed to be installed and any other construction that might be required by the proposed Attachments; (3) the physical attributes of all proposed Attachments; (4) the proposed start date for installation of the Attachments; (5) any issues then known to Attachment Customer regarding space, engineering, access or other matters that might require resolution before installation of Attachments; and (6) proposed make ready drawings. Company may request additional information be included with the application at its reasonable discretion. Company may perform a pole loading study or request Attachment Customer to submit such study based upon a visual inspection or other information held by Company. If Company conducts a visual inspection of the pole to ascertain the need for a pole loading analysis, Company may assess the cost of such inspection to the Attachment Customer. If Company determines a pole loading study is required, no application shall be considered completed until submission of such study. Attachment Customer may perform the pole loading study or request Company to perform the study with cost to be borne by Attachment Customer. Nothing contained herein shall preclude Attachment Customer from submitting a pole loading study with its application without Company performing a visual inspection or otherwise requesting such study to expedite Company's review. T T T

b. Attachment Customer shall be responsible for all costs associated with the application, a Make Ready Survey, engineering analysis, and Company's review of the application. Attachment Customer shall reimburse Company upon presentation of an invoice for such costs. If Attachment Customer does not request Attachments to a Transmission Pole or Duct, Company shall complete a Make Ready Survey within sixty (60) days of its receipt of Attachment Customer's completed application. If Attachment Customer's application requests Attachments to a Transmission Pole or Duct, Attachment Customer and Company shall mutually agree to a time period for completion of a Make-Ready Survey. T T T

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c. Upon completion of the Make Ready Survey, Company shall notify Attachment Customer in writing whether its application for use of Company's Structures has been granted, of any necessary changes to the proposed construction drawings, and the conditions, if any, imposed on the installation or use of Attachments. Company reserves the right to deny access to any Structure based upon lack of capacity, safety, reliability or engineering standards. Company may deny access to Transmission Poles in its discretion for any reason; provided that such denials shall be determined in a non-discriminatory manner. The following types of Transmission Poles that do not support electric supply lines operated at less than 69kV are not available for Attachments under this Schedule: (1) Transmission Poles that do not support electric supply lines operated at less than 69kV; (2) any Transmission Poles that support electric supply lines operated at 138kV or above. T T T T T T T T

d. Within fifteen (15) days of notifying Attachment Customer of the approval of its application, Company shall provide Attachment Customer a written statement of the costs of any necessary Company make-ready work, including but not limited to rearrangement of electric supply facilities and pole change out. Attachment Customer shall indicate its approval of this statement by submitting payment of the statement amount within fifteen (15) days of receipt. If facilities of a third party are required to be rearranged or transferred, Attachment Customer shall coordinate with the third party for such rearrangement or transfer and shall pay the costs related thereto. If Attachment Customer's application requests attachments to a Transmission Pole or Duct, Attachment Customer and Company shall mutually agree to a time period for preparation of a written statement of the costs of any necessary Company make-ready work. T T

e. If an existing Structure is replaced or a new Structure is erected solely to provide adequate capacity for Attachment Customer's proposed Attachments, Attachment Customer shall pay a sum equal to the actual material and labor cost of the new Structure, as well as any replaced appurtenances, plus the cost of removal of the existing Structure minus its salvage value, within thirty (30) days of receipt of an invoice. The new Structure shall be Company's property regardless of any Attachment Customer payments toward its cost. Attachment Customer shall acquire no right, title or interest in or to such Structure. T

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f. If Company is unable to perform the Make Ready Survey and engineering analysis within
the time period established under Section 7b, Company shall advise Attachment T
Customer and promptly meet with Attachment Customer to develop a mutually agreeable
plan of performance.

g. If Company fails to perform the make-ready work within sixty (60) days of receipt of T
Attachment Customer's payment of the make-ready costs, Attachment Customer may
perform such work at its expense using an Approved Contractor, except that Attachment
Customer may not perform such work with respect to Transmission Poles or Ducts.. The T
Approved Contractor shall provide notice to Company at least one week prior to T
performing any make-ready. During the performance of any make-ready by Approved T
Contractors, an inspector designated by Company shall accompany the Approved T
Contractor(s). The inspector, in his or her sole discretion, may direct that work be T
performed in a manner other than as approved in an application, based on the then- T
existing circumstances in the field. The cost of such inspector(s) shall be reimbursed by T
Attachment Customer within 30 days of receipt of an invoice from Company. Company T
shall refund any unexpended make-ready fees within 30 days of notice that Attachment
Customer has performed the work

h. If Attachment Customer submits to Company within a thirty (30) day period an application T
or applications for Attachments to more than 300 poles or to place Cable or conduit
through more than ten (10) manholes, such application or applications shall be T
considered a High Volume Application. The provisions set forth in Sections 7b through
7g that relate to time period and cost-reimbursement of the Company's performance of
application review, engineering analysis, and a Make Ready Survey, and the
performance of make-ready work, shall not apply to High Volume Applications.
Company and Attachment Customer submitting a High Volume Application shall develop T
a mutually agreeable plan of performance and cost reimbursement for Company's
performance of application review, engineering analysis, and a Make Ready Survey, and
the performance of make ready work, shall set this plan to writing and shall file it with the
Commission as a special contract.

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i. No written application to Company to affix and attach a Service Drop to Company's poles is required but Attachment Customer shall provide notice to Company within sixty (60) days of attachment of such Service Drop. This notice shall include the Service Drop location address (or a description of the location if the address is not available), the date of the attachment, the pole number of the pole to which the service drop is affixed or attached, and a statement as to whether the Service Drop constitutes a new attachment to Company's pole for billing purposes. Any Service Drop affixed to a pole more than six (6) inches above or below a through-bolt shall be considered a separate Attachment for billing purposes. On drop or lift poles only, all Service Drops affixed within one foot of usable space shall be considered a single Attachment for billing purposes. Company may conduct an inspection of any Service Drop Attachments, and Attachment Customer shall reimburse Company within 30 days of presentation of an invoice for such inspections. The provisions of this Pole Structure Attachment Schedule shall not apply to an ILEC service drop if the ILEC has a joint use agreement with the Company and the service drop is located in the area covered by the joint use agreement. T T T T T T T T T T T

8. CONSTRUCTION AND MAINTENANCE REQUIREMENTS AND SPECIFICATIONS

a. Attachment Customer shall not construct or install any Attachments until: (1) Company has approved in writing the design, construction, and installation practices for Attachment Customer's Attachments. (2) all Company make-ready work, if any, has been completed (and, if such make-ready work has been performed by an Approved Contractor pursuant to Section 7g above, inspected by Company); and (3) any necessary third party rearrangements or transfers have been completed. Any Attachment that fails to comply with this provision shall be deemed an Unauthorized Attachment for purposes of Section 19 of this Schedule T N N N N N N

b. All Attachments shall be constructed and installed in a manner reasonably satisfactory to Company and so as not to interfere with Company's present or future use of its Structures. Attachments in Ducts shall not include any splice enclosures or excess cable. Attachment Customer shall maintain, operate and construct all Attachments in such manner as to ensure Company's full and free access to all Company facilities. All Attachments shall conform to Company's electric design and construction standards and applicable requirements of the NESC, NEC, and all other applicable codes and laws. In the event of a conflict, the more stringent standard shall apply. T

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c. Attachment Customer shall identify each of its Attachments with a tag, approved in advance by Company, that includes Attachment Customer's name, 24-hour contact telephone number, and such other information as Company may require. All Cable placed by Attachment Customer within a Company-owned or controlled Duct shall be enclosed within Attachment Customer furnished inner-duct and shall be clearly marked and identified as belonging to Attachment Customer at all access points. Service drops do not need to be tagged. Attachment Customer shall tag an Attachment at the time of construction. Any untagged Attachment existing as of the date of execution of the Contract or the effective date of this Schedule, whichever is earlier, shall be tagged by Attachment Customer when Attachment Customer or its agents perform work on the attachment. . If the Company is required to relocate or remove an Attachment or otherwise contact the owner of an Attachment to effect repairs and the Attachment is untagged and cannot be readily identified, any expense incurred by Company to identify the Attachment owner shall be borne by the Attachment Customer. Further, the Company shall be considered to have provided notice to the owner of an untagged Attachment required under Section 16 of this Schedule upon inspecting the Attachment and determining that it is untagged. T T T T T T T T

d. In the design, installation and maintenance of its Attachments, Attachment Customer shall comply with all Company standards and all federal, state and local government laws, rules, regulations, ordinances, or other lawful directives applicable to the work of constructing and installing the Attachments. All work shall be performed in accordance with the applicable standards of the NESC and the NEC, including amendments thereto adopted. Attachment Customer shall take all necessary precautions, by the installation of protective equipment or other means, to protect all Persons and property of all kinds against injury or damage caused by or occurring by reason of the construction, installation or existence of Attachments.

e. Attachment Customer shall immediately report to Company (1) any damage caused to property of Company or others when installing or maintaining Attachments, (2) any Attachment Customer's failure to meet the requirements set forth in this Schedule for assuring the safety of Persons and property and compliance with laws and regulations of public authorities and standard-setting bodies, and (3) any unsafe condition relating to Company's Structures identified by Attachment Customer.

f. Attachment Customer shall complete installation of its Attachments within sixty (60) days of the later of approval of the application for such Attachments or, if make-ready work is required under such approval, completion of make-ready work, and shall notify Company in writing upon its completion. If Attachment Customer fails to complete the installation within this time period, Company may revoke its permit for the Attachment. Prior to revoking the permit for the Attachment, Company shall provide written notice of the revocation to Attachment Customer. Company may conduct a post-construction inspection of such Attachments. Attachment Customer shall reimburse Company within thirty (30) days of presentation of an invoice for such inspections. T T T T

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g. Attachment Customer may use qualified contractors of its own choice to perform work below the Communication Worker Safety Zone. For any work in or above the Communication Worker Safety Zone that Company allows Attachment Customer to perform, Attachment Customer shall use an Approved Contractor who may, at Company's discretion, be required to be accompanied by a Company-designated inspector. For any work in Company's Ducts, Attachment Customer shall use an Approved Contractor, who must be accompanied by a Company-designated inspector. Company shall schedule a Company-designated inspector to accompany an Approved Contractor within fifteen (15) days of its receipt of such request for such inspector. Attachment Customer shall reimburse Company for the actual cost associated with providing inspection services within 30 days of receipt of an invoice. T T T N

h. Company may also monitor Attachment Customer's construction and installation of Attachments below the Communication Worker Safety Zone. If the need for a monitor is caused by Attachment Customer's failure to comply with the terms of this Schedule, the Contract, or any applicable law or regulation, Attachment Customer shall reimburse Company for the actual cost of any such monitoring within thirty (30) days of receipt of an invoice for such cost. For locations where Attachment Customer's construction and installation are within Company underground facilities, Attachment Customer shall reimburse Company for the actual cost associated with providing inspection services within thirty (30) days of receipt of an invoice. T T T T T

i. Attachment Customer shall comply with all applicable federal, state, and local laws, rules and regulations with respect to environmental practices undertaken pursuant to the construction, installation, operation and maintenance of its Attachments. Attachment Customer shall not bring, store or utilize any hazardous materials on any Company site without Company's prior express written consent. To the extent reasonably practicable, Attachment Customer shall restore any property altered pursuant to this Schedule or the Contract to its condition existing immediately prior to the alteration. Company has no obligation to correct or restore any property altered by Attachment Customer and bears no responsibility for Attachment Customer's compliance with applicable environmental regulations. T T T

j. If Attachment Customer fails to install any Attachment in accordance with the standards and terms set forth in this Schedule and Company provides written notice to Attachment Customer of such failure, Attachment Customer, at its own expense, shall make necessary adjustments within thirty (30) days of receipt of such notice. Subject to Section 15 of this Schedule, if Attachment Customer fails to make such adjustments within such time period, Company may make the repairs or adjustments, and Attachment Customer shall pay Company for the actual cost thereof plus a penalty of 50% of actual costs within thirty (30) days of receipt of an invoice. T I/N N/T

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k. Attachment Customer is responsible for any damage, fines or penalties resulting from any noncompliance with the construction and maintenance requirements and specifications set forth in this Section 8, except when Attachment Customer demonstrates that noncompliance is due to the actions of the Company or another Attachment Customer. Company undertakes no duty to require any specific action by Attachment Customer and assumes no responsibility by requiring such compliance or by requiring Attachment Customer to meet any specifications or to make any corrections, modifications, additions or deletions to any work or planned work by Attachment Customer.

l. Within fifteen (15) days of completion of the installation of the Attachment, Attachment Customer shall furnish Company with complete "as-built" drawings in a computer generated electronic format (or such other format as is agreeable to Company). Hand drawings shall not be submitted. T

9. ADDITIONAL REQUIREMENTS FOR WIRELESS FACILITIES

a. Wireless Facilities Attachments may be attached to Distribution Poles only.

b. Company may require Attachment Customer to furnish with any written application for permission to install a Wireless Facilities Attachment a mock-up of the proposed Attachment.

c. Attachment Customer is solely responsible for ensuring that the radiofrequency ("RF") radiation emitted by its Wireless Facilities, alone and/or in combination with any and all sources of RF radiation in the vicinity, is within the limits permitted under all applicable governmental and industry standard safety codes for general population/uncontrolled exposure. Attachment Customer shall install appropriate signage on the poles to which Wireless Facilities have been attached, to warn line workers or the general public of the presence of RF radiation and the need for precautionary measures. Attachment Customer shall periodically inspect the signage and replace the signage if necessary to ensure that the signage, including text and warning symbols, remains clearly visible.

d. Each Wireless Facility installation shall include a switch that operates to disconnect and de-energize the antenna. In non-emergency circumstances, Company employees or contractors will make reasonable efforts to contact Attachment Customer at a telephone number that Attachment Customer has marked on the Wireless Facility installation to request a temporary power shut-down. Company personnel or those of other entities T
working on the pole will operate the power disconnect switch to ensure that the antenna T
is not energized while work on the pole is in progress. In emergency circumstances, Company personnel and those of other entities working on Company poles may T
accomplish the power-down by operation of the power disconnect switch without advance notice to Attachment Customer.

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e. Attachment Customer is solely responsible for ensuring compliance with all Federal Communication Commission antenna registration requirements, Federal Aviation Administration air hazard requirements, or similar requirements with respect to the location of Attachment Customer's Wireless Facilities on Company's poles.

f. Attachment Customer shall not operate its Wireless Facility in a way that causes N
interference with Company-owned wireless facilities. Attachment Customer shall, after N
receiving notice from Company of such interference, immediately cease operating its N
Wireless Facility until it can be operated without causing such interference N

g. All power supplies, equipment cabinets, meter bases and other equipment associated T
with the Wireless Facilities that are large enough to impede accessibility shall be installed off-pole, consistent with the applicable standards of the NESC, Company standards, and all applicable laws, rules, regulations, ordinances, and other applicable governmental directives.

h. Attachment Customer shall not perform any construction, including but not limited to the N
initial installation of its Wireless Facilities or any maintenance thereof, above the N
Communications Space without receiving prior approval from Company as to the design, N
installation, and construction practices, which approval Company shall not unreasonably N
withhold. N

10. OVERLASHING OF CABLE

An Attachment Customer may make an initial overlash of an existing attachment if the overlash is not greater than one-half inch in diameter without any advance notice or application to the Company. No application or advance notice is required for the replacement of an existing cable with a cable that is no greater than one-half inch in diameter. With all
other overlashing, Attachment Customer shall provide Company with advance notice to T
permit Company to visually inspect its Structures to determine the need for a pole loading T
analysis. For projects involving more than ten (10) spans, the Attachment Customer must T
provide at least fifteen (15) business days' advance notice. For projects involving ten (10) T
spans or less, Attachment Customer shall provide at least seven (7) business days' advance T
notice. Notwithstanding the foregoing, no bundle of Attachment Customer's Cable shall exceed two inches in diameter without Company's express written approval.

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11. STRAND-MOUNTED WIRELESS COMMUNICATION DEVICES

A strand-mounted wireless communication device shall be considered part of wireline attachment and not subject to permitting or an additional attachment charge if it is located within the one (1) foot vertical space occupied by Attachment Customer's cable and meets all applicable loading, clearance, and RF emission requirements. Before deploying any strand-mounted wireless communications devices other than strand-mounted wi-fi access points, Attachment Customer shall at least sixty (60) days prior to planned deployment notify Company of the proposed deployment and provide sufficient information regarding the nature of device to permit Company to assess the safety and loadbearing implications of the proposed deployment. T T T T

12. MAINTENANCE OF ATTACHMENTS AND STRUCTURES

Attachment Customer shall maintain Attachments in safe condition and in good repair, in a manner reasonably suitable to Company and so as not to conflict with any use of Company facilities (including Structures) by Company or any other Person using such facilities pursuant to any license or permit by Company. Attachment Customer shall not interfere with the working use of any other Person's property on or in such facilities or any such property, which may be placed on or near the Structures and other facilities. Company reserves to itself, its successors, Affiliates and assigns, the right to maintain Structures and other Company property and to operate its business and maintain its property in such a manner as will, in its own judgment, best enable it to fulfill its own service requirements. Company shall not be liable to Attachment Customer for any interference with the operation of Attachment Customer's facilities, or loss of business arising in any manner out of the use of Company's Structures or other property.

13. NATIONAL JOINT UTILITIES NOTIFICATION SYSTEM

Within thirty (30) days of executing a Contract, and prior to making application for any Attachment, Attachment Customer will join National Joint Utilities Notification System ("NJUNS"), a web-based system developed to improve joint use communication, and will actively participate during the term of service, by entering field information into the NJUNS system within the times required by the system. Should Attachment Customer fail to actively participate in NJUNS and should such failure cause Company to incur expense or liability to others, Attachment Customer shall reimburse Company its expense and indemnify and hold Company harmless from any damages or liability arising out of such failure. If Company at a later date elects to use a different system for purposes of the communication currently facilitated by NJUNS, Company shall notify Attachment Customer at least sixty (60) days in advance of such change and Attachment Customer shall make arrangements to participate in that system. T T T T T T T T

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14. INSPECTIONS/AUDITS

Company may make periodic inspections for the purpose of determining compliance with this Schedule and with the Contract. Neither Company's right to make inspections nor any inspection made by Company shall relieve an Attachment Customer of any responsibility, obligation or liability assumed under this Schedule. T

Upon thirty (30) days' prior notice to Attachment Customer, Company may conduct an audit of its Structures to verify the number, location and type of Attachment Customer's Attachments. Company shall make available to Attachment Customer the report of such audit. Such report shall indicate the location and pole number of all attachments of the Attachment Customer. If the audit reveals that the number of Attachments exceeds the number of attachments shown in Company's existing records, the excess number of Attachments shall be presumed to be Unauthorized Attachments. Attachment Customer shall have the right to rebut this presumption and demonstrate that the attachments at issue were authorized. Attachment Customer shall reimburse Company for the expense of such N
audit, or its pro rata share of such expense if the Attachments of other Attachment Customers N
are included within the scope of the audit, within thirty (30) days of an invoice for such N
expenses. N

15. INTERFERENCE OR HAZARD

If Company notifies Attachment Customer in writing or orally with written confirmation that the Attachment Customer's Attachments or the condition of Attachment Customer's Attachments on or in any Structure (i) interfere with the use of such Structure or the operation of Company facilities or equipment, (ii) constitute a hazard to the service rendered by Company or any other Persons permitted by Company to use such Structures, (iii) cause a danger to employees of Company or other Persons, or (iv) fail to comply with the Company's standards and applicable requirements of the NESC, NEC, and all other applicable codes, laws and regulations, Attachment Customer shall, within a reasonable period, remove, rearrange, repair or change its Attachments as needed or as directed by Company. In the case of any immediate hazard or danger, such period shall not exceed twenty-four (24) hours from Attachment Customer's receipt of such notice. In case of a hazardous condition or other emergency which requires the immediate removal or relocation of the Attachment T
Customer's Attachments, Company may at Attachment Customer's expense, without prior notice and with no liability therefor, remove or relocate such Attachments; provided however, that Company shall notify Attachment Customer of such action as soon as reasonably possible by any appropriate means, including by telephone.

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P.S.C. Electric No. 12, Original Sheet No. 40.16

Standard Rate **PSA**
Pole and Structure Attachment Charges

16. REARRANGEMENT; RELOCATION OF STRUCTURES; NEW STRUCTURES

a. If Attachment Customer's Attachments can be accommodated on or in existing Structures only by rearranging Company facilities, or if because of Attachment Customer's proposed Attachments, Company rearranges or transfers its facilities on or in any facility not owned by it, Attachment Customer shall reimburse Company for the actual expense incurred in making such rearrangement or transfer.

b. Upon forty-five (45) days prior written notice delivered to Attachment Customer, T
Company may replace, relocate, or remove any Structure and cause the alteration, relocation or removal of any Attachment, consistent with normal operating, maintenance and development procedures and prudent utility practices. In cases of emergency or dangerous situations, Company shall give only as much prior notice as practical under the circumstances. Likewise, in situations where the Company is required to replace, N
relocate or remove any Structure in less than 45 days by state or local law, easement N
provisions, contractual obligations to third parties or to meet the Company's obligation to N
provide electric service to another customer, Company need provide only as much prior N
notice as reasonably practical under the circumstances, Company shall bear all costs N
and expenses of any relocation of the Structures not attributable to or caused by Attachment Customer or its Attachments. Attachment Customer shall bear all costs and expenses of any relocation and removal of the Attachments and all costs and expenses attributable to or caused by Attachment Customer or its Attachments. Attachment Customer shall be solely responsible for any losses occasioned by the interruption of Attachment Customer's business or operations and shall indemnify and hold Company harmless in connection with same.

c. Company may reserve space on its poles in accordance with a bona fide development plan for electric service. Company may direct, by written notice to Attachment Customer, that Attachment Customer's attachments in such reserve space may be removed from the Structures. Company shall use reasonable efforts to make space available as close in proximity as possible to the former Structures or to offer Attachment Customer the option to perform make-ready work to create additional space on the Structure in question. Attachment Customer shall make such relocation within sixty (60) days of the Company's request.

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d. In the event a Person other than Attachment Customer applies to make an Attachment to a Structure on which Attachment Customer has placed an Attachment, and such application requires that Attachment Customer rearrange, transfer or relocate its Attachments, then Attachment Customer shall perform such rearrangement, transfer or relocation within sixty (60) days of notice of such need to rearrange, transfer or relocate. T
Attachment Customer may condition its rearrangement, transfer or relocation upon reimbursement for the cost of such rearrangement, transfer or relocation. In the event Attachment Customer fails to perform such rearrangement, transfer or relocation within the time frame described above, the affected Attachments may be subject to rearrangement, transfer or relocation by the Person whose application necessitated the rearrangement, transfer or relocation to the extent permitted by law.

17. REMOVAL OF ATTACHMENT T

Attachment Customer may at any time voluntarily remove its Attachments from any Structure, but shall immediately give Company written notice of such removal on Company-prescribed form. Attachment Customer shall bear all cost of removal and any costs that Company incurs as a result of such removal and shall pay such costs within thirty (30) days of receipt of an T
invoice. No refund of any amount paid for use of such Structure will result from Attachment Customer's voluntary removal nor shall such voluntary removal affect any other obligation or liability of Attachment Customer under this Schedule or the Contract. T

18. INDEMNITIES

Attachment Customer shall protect, defend, indemnify and save harmless Company, its Affiliates, their officers, directors, employees and representatives from and against all damage, loss, claim, demand, suit, liability, penalty or forfeiture of every kind and nature, including but not limited to costs and expenses of defending against the same, payment of any settlement or judgment therefor and reasonable attorney's fees that are incurred in such defense, by reason of any claims arising from Attachment Customer's activities under this Schedule, or the Contract, or from Attachment Customer's presence on the Company's T
premises, or from or in connection with the construction, installation, operation, maintenance, presence, replacement, enlargement, use or removal of any facility of Attachment Customer attached or in the process or being attached to or removed from any Company Structure by Attachment Customer, its employees, agents, or other representatives, including but not limited to claims alleging (1) injuries or deaths to Persons; (2) damage to or destruction of property including loss of use thereof; (3) power or communications outage, interruption or degradation; (4) pollution, contamination of or other adverse effects on the environment; (5) violation of governmental laws, regulations or orders; or (6) rearrangement, transfer, or removal of any third party attachment on, from, or to any Company Structure whether suffered directly by Company itself or indirectly by reason of claims, demands or suits against it by third parties, resulting or alleged to have resulted from Attachment Customer's activities under this Schedule, or the Contract, or from Attachment Customer's presence on T

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Company's premises, or from or in connection with the construction, installation, operation, maintenance, presence, replacement, enlargement, use or removal of any facility of Attachment Customer attached or in the process or being attached to or removed from any Company Structure by Attachment Customer, its employees, agents, or other representatives. The indemnity set forth in this section shall include indemnity for any claims arising out of the joint negligence of Attachment Customer and Company; provided however, the indemnity set forth in this section, but not Attachment Customer's duty to defend, shall be reduced to the extent it is established by final adjudication or mutual agreement of Attachment Customer and Company that the liability to which such indemnity applies was caused by the negligence or willful misconduct of Company. If Attachment Customer is required under this provision to indemnify Company, Attachment Customer shall have the right to select defense counsel and to direct the defense or settlement of any such claim or suit. **T** T

19. UNAUTHORIZED ATTACHMENTS

If Attachment Customer makes any Attachment that requires Company approval or advance notice under this Schedule or the Contract and has not obtained such approval or provided such advance notice, such Attachment shall be deemed an "Unauthorized Attachment," and shall be presumed to have been affixed to Company Structures for two years or since completion of the most recent audit, whichever is occurring earlier. Attachment Customer shall be liable for attachment charges for this time period. In addition to the attachment charges for the period of unauthorized attachment, Attachment Customer shall pay a penalty for each Unauthorized Attachment in the amount of $25.00. Attachment Customer shall also submit to Company an application for approval of the Unauthorized Attachment within thirty (30) days of the attachment's discovery. If Attachment Customer fails to submit the required applications or fails to timely remit any necessary payments to Company in connection with the application process (including but not limited to any make-ready fees necessary to accommodate the Unauthorized Attachments), Company may remove any or all such Unauthorized Attachments at Attachment Customer's expense. T T T T T T T N T T

20. DEFAULT

a. If Attachment Customer fails to pay any undisputed fee required, perform any material obligations undertaken or satisfy any warranty or representation made under the Contract comply with any of the provisions of this rate schedule or default in any of its obligations under this Schedule, including Section 5 of the Company's Electric Tariff, and shall fail within thirty (30) days after written notice from Company to correct such default or non-compliance, Company may, at its option, terminate the license covering the Structures to which such default or non-compliance is applicable; remove, relocate or rearrange at Attachment Customer's expense the Attachments to which the default or non-compliance relates; or decline to permit additional Attachments until the failure or default is cured. Company shall give written notice to Attachment Customer of said termination. In the event of material or repeated default, Company may terminate the Contract and recover from Attachment Customer all costs and expenses incurred as a result of related to the defaults. No refund of any attachment charge will be due on account of such termination. T T T T T T T T

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P.S.C. Electric No. 12, Original Sheet No. 40.19

Standard Rate **PSA**
Pole and Structure Attachment Charges

21. TERMINATION

Attachment Customer may terminate a Contract by providing the other written notice of termination at least sixty (60) days prior to the end of the term of service. T T

Upon termination, Attachment Customer shall remove all Attachments from Structures and other Company property within 180 days. Attachment Customer shall bear all costs of such removal and shall exercise precautions to avoid damage to all Persons and to facilities of Company and other parties in so removing Attachments and assumes all responsibility for all damage it causes. If Attachment Customer's Attachments and other property are not removed within 180 days of termination of this Agreement, unless the time is extended by mutual agreement, Company may remove Attachment Customer's Attachments without liability and Attachment Customer shall pay Company the cost of such removal within thirty (30) days of receipt of an invoice. T T

Company may terminate a Contract without liability to Attachment Customer, upon giving sixty (60) days advance written notice to Attachment Customer that it has a reasonable belief that Company's performance under the Contract would be illegal under applicable law or regulation or under any order or ruling issued by the PSC, or any other federal, state or local agency having regulatory jurisdiction over Company and same cannot be cured by Company without unreasonable expense or without materially and substantially altering the terms and conditions of the Contract; or that termination is required to preserve Company's rights under any franchise, right-of-way, permit, easement or other similar right which is material and substantial to Company's business or operations. In the event of such termination, Company and Attachment Customer shall pay and perform obligations that have arisen prior to the effective date of termination, but shall not be obligated to pay and perform obligations, which arise after the effective date of termination. T T T T T

22. WAIVER

Failure by Company to enforce or insist upon compliance with any of the terms or conditions of this Schedule or the Contract shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect. T

23. INSURANCE

a. Throughout the term of service and so long as Attachment Customer's Attachments are on or in Company Structures, Attachment Customer shall, at its own expense, maintain and carry in full force and effect insurance that meets at least the following requirements (these minimum limits should not be deemed to replace Attachment Customer's full obligation under this Schedule or the Contract): T T T T

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State Regulation and Rates
Louisville, Kentucky

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P.S.C. Electric No. 12, Original Sheet No. 40.20

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(1) Workers' Compensation and Employer's Liability Policy, which shall include: (a) Workers' Compensation (Coverage A); Employers Liability (Coverage B) with minimum limits of $1,000,000 Bodily Injury by Accident, each Accident, $1,000,000 Bodily Injury by Disease, each Employee; (c) Thirty (30) Day Cancellation Endorsement; and (d) Form All States Endorsement. T T

(2) Commercial General Liability Policy, which shall have minimum limits of $1,000,000 each occurrence; $1,000,000 Products/Completed Operations Aggregate each occurrence; $1,000,000 Personal and Advertising Injury each occurrence, in all cases subject to $2,000,000 in the General Aggregate for all such claims, and including: (a) Thirty (30) Day Cancellation Endorsement; (b) Blanket Written Contractual Liability to the extent covered by the policy against liability assumed by Company under the Attachment Customer Agreement; (c) Broad Form Property Damage; and (d) General Aggregate Limit – Per Project Endorsement (CG2503); (e) Include Additional Insured Endorsement GC 2010 or CG2037, or its equivalent; and (f) Insurance for liability arising out of blasting, collapse, and underground damage (deletion of X, C, U Exclusions). N N N N

(3) Commercial Automobile Liability Insurance covering the use of all owned, non-owned, and hired automobiles, with a bodily injury, including death, and property damage combined single minimum limit of $1,000,000 each occurrence.

(4) Umbrella/Excess Liability Insurance with minimum limits of $5,000,000 per occurrence; $5,000,000 aggregate, to apply to employer's liability, commercial general liability, and commercial automobile liability; including: (a) "Follow Form" provisions; and (b) Note that Total Limits can be met by any combination of primary and umbrella/excess policies. I I T/N N N

(5) Aircraft Public Liability - Required at all times when there will be use of any type of fixed wing, rotor, or any type aircraft to perform any work required under this Schedule or the Contract. Aircraft Public Liability Insurance covering such aircraft whether owned, non-owned, leased, hired or assigned with a combined single minimum limit for bodily injury and property damage of $5,000,000 including passenger liability coverage. T T T

(6) Drones – Required at all times if any Unmanned Aircraft Systems (UAS) will be used by Contractor or Subcontractor in performing the work required under this Schedule or the Contract, Drone Liability Insurance covering such aircraft whether owned, non-owned, leased, hired or assigned with a
$1,000,000 per occurrence combined single limit for bodily injury, property damage and personal injury. N N N N N N

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(7) Professional Liability - To the extent the work required under this Schedule or the T
Contract includes any professional services that falls within a professional liability T
exclusion from the policy provided under Section 23a.(2). Coverage required with T
limits of Five Million Dollars ($5,000,000) per claim and Five Million Dollars I
($5,000,000) in the aggregate, which insurance shall be on a claims made basis. T
Policy to remain in force continuously for three (3) years or an extended discovery T
period will be exercised for a period of three (3) years beginning from the time the T
services under this contract are completed. T

b. Attachment Customer shall require its Contractors and subcontractors to provide and maintain the same insurance coverage as required of Attachment Customer.

c. Except with regard to workers' compensation and professional liability, each policy
required under this schedule shall name Company and all its Affiliates as an additional T
insured and shall waive rights of subrogation against Company, and all its Affiliates, and T
Company's insurance carrier(s). All policies shall be primary and non-contributory. N
Condition applies to Attachment Customer and its Contractors and Subcontractors. N

d. All policies shall be written by insurance companies that are either satisfactory to T
Company or have an A.M. Best Rating of not less than "A-, VII". These policies shall not T
be materially changed or canceled except with thirty (30) days written notice to Company
from Attachment Customer and the insurance carrier. Attention: Manager, Project N
Manager – Third Party Attachments, LG&E and KU Services Company, P.O. Box 32020, N
Louisville, Kentucky 40232. N

e. Company may request a summary of coverage of any of required policies or
endorsements; but is not obligated to review any of Attachment Customer's certificates
of insurance, insurance policies, or endorsements, or to advise Attachment Customer of
any deficiencies in such documents. Company's receipt or review of such documents
shall not relieve Attachment Customer from or be deemed a waiver of Attachment
Customer's obligations to maintain insurance as provided. Attachment Customer shall N
provide a summary of coverage within (thirty) 30 days of its request by the Company. N

f. Attachment Customer shall provide Certificates of Insurance to Company for each policy T/N
of insurance required above and evidence the items noted hereafter: (1) Each Certificate N
shall properly identify the certificate holder as Company; (2) Under no circumstances N
shall Attachment Customer begin any work (or allow any Subcontractor to begin any N
work) prior to submitting Certificate(s) (evidencing the required insurance of Contractor N
or Subcontractor, as applicable) acceptable to Company. Company retains the right to N
waive this requirement at its sole discretion; (3) Certificate shall evidence (thirty) 30 days N
prior notice of cancellation; (4) Certificate shall verify additional insured status on all N

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coverage including the endorsements required by Section 23a.(2); (5) Certificate shall verify Blanket Waiver of subrogation - All policies of insurance shall include waivers of subrogation, under subrogation or otherwise, against Company. Except where not applicable by law; (6) Certificate shall verify Primary/Non-contributory wording in favor of Company; and (7) Certificate shall identify policies which are written on a Claims Made coverage form and state the retro date. N N N N N N

g. Attachment Customer shall notify Company, prior to the commencement of any work pursuant to this rate Schedule or the Contract , of any threatened, pending and/or paid off claims to third parties, individually or in the aggregate, which otherwise affects the availability of the limits of such coverage(s) inuring to Company's benefit. T/N N N N

h. Attachment Customer shall provide notice of any accidents, occurences, or claims involving Attachment Customer's Attachment or Attachment Customer's work under this Schedule and the Contract to the LKS Manager, Risk Management at LG&E and KU Services Company, P.O. Box 32030, Louisville, Kentucky 40232. N N N N

i. Each policy of insurance required to be maintained by Attachment Customer under this Section 23 (except the Workers' Compensation and Employer's Liability Policy) shall cover all losses and claims of Attachment Customer regardless of whether they arise directly to Attachment Customer or indirectly through Subcontractors (e.g., Attachment Customer's CGL policy must cover Attachment Customer and additional insureds against negligent acts of a Subcontractor, etc.). Section 23 only represents minimum insurance requirements; it does not mitigate or reduce liability required by the indemnity provisions in this Schedule or the Contract. Nor should it be deemed to be the full responsibility of the contractor or subcontractor for liability. Attachment Customer is responsible for their subcontractor's insurance meeting the requirements of Section 23 of this Schedule. N N N N N N N N N N N

j. Attachment Customer may elect not to comply with sections (a) through (i) of this Section 23 if it provides proof of equivalent levels of self-insurance and: T T

1. Attachment Customer has been in business at least three (3) years and has a corporate credit rating or a senior unsecured rating of at least Baa2 (Moody's) or BBB (Standard & Poor's); or T

2. Attachment Customer has been in business at least three years, and provides its most recent audited financial statements to Company which demonstrates that Attachment Customer meets standards that are at least equivalent to the standards underlying the credit ratings of Baa2 (Moody's) or BBB (Standard and Poor's); or, T

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P.S.C. Electric No. 12, Original Sheet No. 40.23 N

Standard Rate **PSA** N

Pole and Structure Attachment Charges N

3. A corporate entity affiliated with Attachment Customer ("Guarantor") meets the criteria set out in (1) or (2) above, and Guarantor provides a written guarantee (in a form acceptable to Company, that the corporate affiliate will guarantee all financial obligations associated with Attachment Customer's use of Company's Structures.) T T T T

24. PERFORMANCE ASSURANCE

a. Attachment Customer shall furnish Performance Assurance in the following amounts to guarantee the payment of any sums which may become due for attachment charges, inspections, or work performed by the Company under this Schedule or the Contract, including the removal of attachments upon termination of the Contract by any of its provisions: T/N N N N N

Number of Attachments	Amount per Attachment	Maximum Total	
			N
1-5,000	$20/Attachment	$100,000	I
5,001-10,000	$10/Attachment	$150,000	I
10,001+	$5/Attachment	$1,000,000	I

The above-stated amounts are incremental. By way of example, 7,500 Attachments would require Performance Assurance in the amount of $125,000 ($20 per Attachment for the first 5000 Attachments; $10 per Attachment for the next 2,500 Attachments); 15,000 Attachments would require Performance Assurance in the amount of $175,000 ($20 per Attachment for the first 5000 Attachments; $10 per Attachment the next 5,000 Attachments; and $5 per Attachment for the last 5,000 Attachments). N N N N N N

The amount of the Performance Assurance shall be calculated by the Company annually based on the Attachment Customer's then-existing number of Attachments. Attachment Customer shall provide the Performance Assurance within 30 days of its request by the Company. N N N N

If Attachment Customer proposes to attach a Wireless Facility or Facilities to a Structure, Attachment Customer shall post a Performance Assurance in the amount of $1,500 for each pole to which a wireless attachment is attached. The amount of the Performance Assurance shall not be reduced upon completion of installation or other event. T T T

In the event the Customer provides Performance Assurance in the form of a surety bond or Letter of Credit, each bond or Letter of Credit shall contain the provision that it shall not be terminated prior to six (6) months after Company's receipt of written notice of the desire of the bonding or insurance company, or bank, to terminate such bond or Letter of Credit. Company may waive this requirement if an acceptable replacement is received before the six (6) months has ended. Upon termination of such surety bond or Letter of

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Credit, , Company shall request Attachment Customer to immediately remove its Cables, Wireless Facilities, Attachments and all other facilities from Company Structures. If Attachment Customer should fail to complete the removal of all of its facilities from Company's Structures within thirty (30) days after receipt of such request, then Company may remove Attachment Customer's facilities at Attachment Customer's expense and without liability for any damage to Attachment Customer's facilities. T T

Each surety bond shall be issued by an entity having a minimum A.M. Best rating of A- and/or Letter of Credit shall be issued by an entity having a minimum Credit Rating of A- by S& P or A3 by Moody's at the time of issuance and at all times the relevant bond is outstanding. T T T

b. Attachment Customer may elect not to provide a Performance Assurance if: T

1. Attachment Customer has been in business at least one (1) year and has a corporate credit rating or a senior unsecured rating of at least Baa2 (Moody's) or BBB (S&P's); or T T

2. Attachment Customer has been in business at least one (1) year, and provides its most recent audited financial statements to Company which demonstrates that Attachment Customer meets standards that are at least equivalent to the standards underlying the credit ratings of Baa2 (Moody's) or BBB (S&P's); or, T T

3. A corporate affiliate of Attachment Customer ("Guarantor") meets the criteria set out in (1) or (2) above, and Guarantor provides a written guarantee (in a form acceptable to Company, that the corporate affiliate will guarantee all financial obligations associated with Attachment Customer's use of Company's Structures). T T T

Annually, upon the Company's request, an Attachment Customer electing not to provide Performance Assurance under one of the options in c. above shall provide Company with such information as Company requires to determine whether Attachment Customer remains eligible to make such election. N N N

25. CERTIFICATION OF NOTICE REQUIREMENTS

Attachment Customer's highest ranking officer located in Kentucky shall certify under oath on or before January 31 of each year that the Attachment Customer has complied with all notification requirements of this Schedule. The certification shall be in the form prescribed by Company from time to time, and Company shall provide the current version of such form on or after January 1 of each year. If Attachment Customer does not have an officer located in Kentucky, then the certification shall be provided by the officer with responsibility for Attachment Customer's operations in Kentucky. N N N N N

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P.S.C. No. 12, Original Sheet No. 40.25 N

Standard Rate **PSA** N
Pole and Structure Attachment Charges N

26. NOTICES

Any notice, or request, required by this Schedule or the Attachment Customer Agreement shall be deemed properly given if sent overnight by nationally recognized overnight courier, sent by certified U.S. mail, return receipt requested, postage prepaid, or sent by telecopier with confirmed receipt, to Company's and Attachment Customer's designated representative. The designation of the representative to be notified, his address and/or telecopier number may be changed at any time by similar notice.

27. LIENS

To the extent permitted by law, in the event any construction lien or other encumbrance shall be placed on the Attachments as a result of the actions or omissions of Attachment Customer or its Contractor, Attachment Customer shall promptly, in accordance with applicable laws, discharge such lien or encumbrance without cost or expense to Company. Attachment Customer shall indemnify Company for any and all actual damages that may be suffered or incurred by Company in discharging or releasing said lien or encumbrance.

28. FORCE MAJEURE

In the event Attachment Customer or Company is delayed in or prevented from performing any of its respective obligations under an Attachment Customer Agreement or this Schedule due to acts of God, war, riots, civil insurrection, acts of the public enemy, strikes, lockouts, acts of civil or military authority, government shutdown, fires, floods, earthquakes, storms T
and other major disruptive events, fiber, cable or other material failures, shortages or T
unavailability, delay in delivery not resulting from its failure to timely place orders therefor, lack or delay in transportation, or due to any other causes beyond its reasonable control, then such delay or nonperformance shall be excused.

29. LIMITATION OF LIABILITY

IN NO EVENT SHALL COMPANY OR ANY OF ITS REPRESENTATIVES BE LIABLE
UNDER A CONTRACT OR THIS SCHEDULE TO ATTACHMENT CUSTOMER FOR T
CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, PUNITIVE OR ENHANCED DAMAGES, LOST PROFITS OR REVENUES OR DIMINUTION IN VALUE,
ARISING OUT OF, OR RELATING TO, OR IN CONNECTION WITH ACONTRACT OR THIS T
SCHEDULE, REGARDLESS OF (A) WHETHER SUCH DAMAGES WERE FORESEEABLE, (B) WHETHER OR NOT COMPANY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND (C) THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED. THE LIMITATIONS SET FORTH IN THIS SECTION 29 SHALL NOT APPLY TO DAMAGES OR LIABILITY ARISING FROM THE GROSSLY NEGLIGENT ACTS OR OMISSIONS OR WILLFUL MISCONDUCT OF COMPANY IN PERFORMING ITS OBLIGATIONS UNDER AN ATTACHMENT CUSTOMER AGREEMENT OR THIS SCHEDULE.

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On and After November 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2018-00295 dated ____

Louisville Gas and Electric Company

P.S.C. No. 12, Original Sheet No. 72.1

Standard Rate Rider **SSP**
Solar Share Program Rider

PROGRAM DESCRIPTION

The Solar Share Program is an optional, voluntary program that allows customers to subscribe to capacity in the Solar Share Facilities. Each Solar Share Facility will have an approximate direct-current (DC) capacity of 500 kW and will be available for subscription in nominal 250 W (quarter-kW) DC increments. Each subscribing customer ("Subscriber") may subscribe capacity up to an aggregate amount of 500 kW DC, though no Subscriber may subscribe more than 250 kW DC in any single Solar Share Facility.

There are two mutually exclusive options for subscribing to each increment of capacity. N

Option 1: Capacity Subscribed by Paying Only the One-Time Solar Capacity Charge N

For capacity subscribed by paying the One-Time Solar Capacity Charge, the One-Time Solar Capacity Charge will be included on the Subscriber's bill for the first billing period in which the subscribed capacity achieves commercial operation. N N N

A customer choosing to pay the One-Time Solar Capacity Charge may transfer subscribed capacity between the customer's own accounts or may assign subscribed capacity to another customer. Once assigned, the assigning customer forfeits all rights to the assigned capacity. N N N

A customer who ceases taking service from Company will have 60 calendar days to assign subscribed capacity to another customer within Company's service area. Any capacity such a customer does not assign within 60 days of ceasing to take service will be forfeited and made available to other customers under Option 2: Capacity Subscribed by Paying Only the Monthly Solar Capacity Charge. N N N N N

Option 2: Capacity Subscribed by Paying Only the Monthly Solar Capacity Charge N

For capacity subscribed by paying the Monthly Solar Capacity Charge, the Solar Capacity Charge will be included on the Subscriber's bill beginning with the bill for the first billing period in which the subscribed capacity achieves commercial operation. T T T

Monthly subscriptions of less than 50 kW DC will not require a contract; however, a customer may not reduce or cancel a monthly subscription earlier than 12 months from the date of the customer's most recent change to the customer's monthly subscription level. Therefore, a customer subscribing monthly less than 50 kW has a 12-month commitment from the date of the customer's initial monthly subscription or initial solar facility commercial operation, whichever is later, and may have a longer commitment if the customer subsequently increases monthly subscribed capacity (which a customer may do at any time) or if the customer chooses to decrease but not cancel the monthly subscription after the initial 12 months. Monthly subscriptions of 50 kW DC or more require a 5-year contract with Company. T T T T T T T T

DATE OF ISSUE: September 28, 2018

DATE EFFECTIVE: With Service Rendered
On and After November 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2018-00295 dated ____

Louisville Gas and Electric Company

P.S.C. No. 12, Original Sheet No. 72.2

Standard Rate Rider **SSP**
Solar Share Program Rider

TERMS AND CONDITIONS D

1. Individual subscriptions are available in nominal 250 W DC (quarter-kW) increments.

2. Customer may subscribe as much solar capacity as desired up to an aggregate amount of 500 kW DC (nominal). No customer may subscribe more than 250 kW DC (nominal) in any single Solar Share Facility. T

3. All One-Time Solar Capacity Charges are non-refundable. N

4. Subject to the restrictions above, Company will fill subscriptions as capacity in the Solar Share Facilities becomes available, and will fill subscriptions in the chronological order in which the subscriptions were made. A Subscriber whose subscription the Company can fulfill only partially may either accept the available capacity and await additional capacity, or decline the partial fulfillment, allowing the next awaiting Subscriber(s) to accept the available capacity. Accepting or declining available capacity will not affect a Subscriber's place in the queue of Subscribers awaiting capacity.

5. Customers may not owe any arrearage prior to participating in the Solar Share Program.

6. Subscribers' pro-rata share of the AC electricity produced by the Solar Share Facilities will be determined on a billing-cycle basis. The corresponding Solar Energy Credit will be calculated and appear on the Subscriber's bill. T T

D

7. Unless constrained by contract (see Term of Contract below), Subscriber may decrease or terminate a monthly subscription any time after 12 months following the date of the most recent change to Subscriber's monthly subscription capacity at any time. T T

8. Unless constrained by contract (see Term of Contract below) or condition #2 above, Subscriber may also increase monthly subscribed capacity at any time. T

9. Subscriptions made by paying the One-Time Solar Capacity Charge may be transferred between a Subscriber's accounts no more than once per billing period (Solar Energy Credit values do not transfer between accounts or customers). A subscription transfer between a Subscriber's accounts takes effect in the billing period following the billing period in which the Subscriber requests the transfer. A Subscriber may transfer a subscription at any time prior to or including 60 calendar days after the Subscriber terminated service on the account to which the subscription attached. If the Subscriber whose account has been terminated does not transfer the subscription within 60 calendar days, the Subscriber forfeits the subscription. N N N N N N N N

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Louisville, Kentucky

Issued by Authority of an Order of the
Public Service Commission in Case No.
2018-00295 dated ____

Louisville Gas and Electric Company

P.S.C. No. 12, Original Sheet No. 72.3

Standard Rate Rider **SSP**
Solar Share Program Rider

TERMS AND CONDITIONS (continued)

10. Capacity subscribed by paying the Monthly Solar Capacity Charge is not transferrable or T
assignable between customers. T

11. Capacity subscribed by paying the One-Time Solar Capacity Charge may be assigned N
between customers, but only within the same Company service territory, at any time prior N
to or including 60 calendar days after the assigning Subscriber terminated service on the N
account to which the subscription attached. Once assigned, the assigning customer loses N
all rights regarding future credits and the ability to subsequently assign the capacity; those N
rights become the rights of the assignee upon assignment. Assigned capacity cannot be N
reassigned by the assignee to any other Customer, including the Customer who originally N
subscribed the assigned capacity. For all purposes other than the Solar Energy Credit, all N
capacity assignments become effective immediately upon assignment. For the purpose of N
the Solar Energy Credit, the assignor will receive Solar Energy Credits for the entire billing N
period in which the assignment occurs; the assignee will receive Solar Energy Credits N
beginning in the first billing period following the assignment. N

12. Unused Solar Energy Credit value is not transferrable between customers or customer N
accounts. Therefore, a Subscriber's closing a customer account terminates any unused N
Solar Energy Credit value associated with that account. N

13. Participants in SSP are required to have an advanced meter capable of collecting and N
communicating at least 15 minute interval data. N

14. All Renewable Energy Credits ("RECs") related to energy produced by subscribed portions of the Solar Share Facilities will be retired.

15. Use of any images of the Solar Share Facilities or use any other of Company's intellectual property requires Company licensing prior to use.

16. Service will be furnished under Company's Terms and Conditions except as provided herein.

TERM OF CONTRACT

Subscriptions of 50 kW DC or more will require a five (5) year non-transferrable, non-assignable contract between Subscriber and Company.

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Louisville, Kentucky

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LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 2

Responding Witness: Robert M. Conroy

Q-2. Refer to the Direct Testimony of Robert M. Conroy (Conroy Testimony), page 7, lines 6-18.

a. Provide the Edison Electric Institute's Typical Bills and Average Rates Report Winter 2018.

b. Explain how LG&E's proposed rates will compare to the average residential electric rates of other investor-owned electric utilities.

c. Provide a list of all Kentucky electric utility customer charges and energy rates for the residential class. Include LG&E's current rates and proposed rates.

A-2.

a. The relevant portions of the requested report are attached. The regional comparison includes the states of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, Ohio, Pennsylvania, West Virginia, and Wisconsin.

b. Using Edison Electric Institute's Typical Bills and Average Rates Report Winter 2018 and the Residential Proposed Increase of 8.10% at an average 917 kWh (from Schedule M & N), the LG&E residential average for the 12 month ending 12/31/17 rate of 9.42 cents/kWh will increase to an estimated 9.88 cents/kWh. This estimated residential average rate for LG&E is still well below the Residential Average for USA of 12.54 cents/kWh of all electric utilities.

c. See attached for a compilation of the requested information based on what is available thru the PSC or individual company websites.

Average Rates
(in cents/kilowatthour)

Residential Average Rates

Mid-Atlantic

New Jersey

		12 Months Ending 12/31 2016	2017
Atlantic City Electric Company			
	generation	10.07	9.80
	transmission	1.41	1.43
	delivery	6.20	6.62
	total rate	17.67	17.84
Jersey Central Power & Light Company			
	generation	8.85	8.46
	transmission	0.46	0.46
	delivery	3.64	4.39
	ctc	0.41	0.31
	total rate	13.36	13.62
Public Service Electric & Gas Company			
	generation	11.50	11.17
	delivery	4.80	4.81
	ctc	0.00	-0.01
	total rate	16.30	15.96
Rockland Electric Company			
	total rate	16.98	16.35
Average For New Jersey			
	generation	10.43	10.07
	transmission	0.76	0.76
	delivery	4.61	4.93
	ctc	0.17	0.12
	total rate	15.57	15.47
total for all utilities (IOUs, munis, coops, etc.)		15.74	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
New York			
Central Hudson Gas & Electric Corporation			
	total rate	16.48	17.04
Consolidated Edison Company of New York			
	total rate	24.91	25.34
LIPA			
	generation	7.23	10.14
	delivery	11.77	9.73
	total rate	18.99	19.87
National Grid (Niagara Mohawk Power Corporation)			
	total rate	13.10	13.62
New York State Electric & Gas Corporation			
	total rate	11.39	11.89
Orange & Rockland Utilities, Inc.			
	total rate	19.84	21.01
Rochester Gas & Electric Corporation			
	total rate	12.72	13.52
Average For New York			
	generation	7.23	10.14
	delivery	11.77	9.73
	total rate	17.73	18.26
total for all utilities (IOUs, munis, coops, etc.)		17.40	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
Pennsylvania			
Duquesne Light Company			
	generation	6.05	5.97
	transmission	1.75	1.72
	delivery	7.46	8.17
	total rate	15.26	15.87
Metropolitan Edison Company			
	generation	7.07	6.63
	delivery	5.84	6.91
	ctc	0.10	0.01
	total rate	13.01	13.55
PECO Energy			
	generation	7.17	6.61
	transmission	0.62	0.63
	delivery	5.59	5.69
	total rate	13.37	12.93
Pennsylvania Electric Company			
	generation	7.00	6.27
	delivery	7.24	8.80
	ctc	0.28	0.25
	total rate	14.52	15.32
Pennsylvania Power Company			
	generation	7.98	6.67
	delivery	5.06	6.32
	total rate	13.04	12.99
PPL Utilities Corp.			
	generation	6.20	6.42
	transmission	1.45	1.62
	delivery	6.04	6.31
	total rate	13.69	14.35
UGI Utilities, Inc.			
	generation	6.98	6.41
	transmission	0.37	0.38
	delivery	3.85	4.12
	total rate	11.20	10.91

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
West Penn Power Company			
	generation	6.66	6.40
	delivery	4.46	5.22
	total rate	11.12	11.62
Average For Pennsylvania			
	generation	6.80	6.45
	transmission	1.06	1.12
	delivery	5.85	6.48
	ctc	0.18	0.11
	total rate	13.28	13.61
total for all utilities (IOUs, munis, coops, etc.)		13.87	
Average For Mid-Atlantic			
	generation	8.20	8.32
	transmission	0.94	0.99
	delivery	6.13	6.34
	ctc	0.17	0.12
	total rate	15.59	15.89
total for all utilities (IOUs, munis, coops, etc.)		15.62	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

East North Central

Illinois

		12 Months Ending 12/31 2016	2017
Ameren Illinois Rate Zone I (formerly CIPS)			
	generation	5.60	5.24
	delivery	5.67	5.54
	total rate	11.27	10.77
Ameren Illinois Rate Zone II (formerly CILCO)			
	generation	5.63	5.28
	delivery	5.81	5.68
	total rate	11.44	10.95
Ameren Illinois Rate Zone III (formerly IP)			
	generation	5.66	5.27
	delivery	6.16	6.05
	total rate	11.82	11.33
Commonwealth Edison Company			
	generation	6.27	6.57
	delivery	6.02	6.49
	total rate	12.29	13.06
Commonwealth Edison Company - Unbundled			
	delivery	5.49	6.04
MidAmerican Energy			
	total rate	10.66	11.17
MidAmerican Energy Company (Delivery Service)			
	delivery	5.38	5.37
Average For Illinois			
	generation	6.12	6.29
	delivery	5.83	6.17
	total rate	12.01	12.38
total for all utilities (IOUs, munis, coops, etc.)		12.55	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Indiana			
AEP (Indiana Michigan Power)			
	total rate	11.37	11.81
Duke Energy Indiana			
	total rate	11.02	11.64
Indianapolis Power & Light Company			
	total rate	10.34	11.08
Northern Indiana Public Service Company			
	total rate	13.01	14.44
Southern Indiana Gas & Electric Company			
	total rate	15.06	15.18
Average For Indiana			
	total rate	11.49	12.19
	total for all utilities (IOUs, munis, coops, etc.)	11.79	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Michigan			
AEP (Indiana Michigan Power combined MI rate areas)			
	generation	7.68	8.06
	delivery	3.14	3.22
	total rate	10.82	11.28
Consumers Energy			
	total rate	15.36	15.83
DTE Electric Company			
	total rate	15.60	15.52
Northern States Power Company (WI)			
	total rate	12.27	12.61
Upper Peninsula Power Company			
	total rate		24.50
We Energies (formerly Wisconsin Electric)			
	total rate	15.98	15.71
Wisconsin Public Service Corporation			
	total rate	11.38	12.67
Average For Michigan			
	generation	7.68	8.06
	delivery	3.14	3.22
	total rate	15.30	15.54
total for all utilities (IOUs, munis, coops, etc.)		15.20	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Ohio			
AEP (Columbus Southern Power Rate Area)			
	generation	6.34	6.16
	transmission	1.34	1.50
	delivery	5.69	5.01
	total rate	13.37	12.67
AEP (Ohio Power Rate Area)			
	generation	6.93	6.76
	transmission	1.34	1.50
	delivery	5.62	5.01
	total rate	13.89	13.27
Cleveland Electric Illuminating Company			
	generation	6.46	5.75
	transmission	0.99	1.31
	delivery	4.32	5.10
	total rate	11.98	12.16
Dayton Power & Light Company			
	generation	6.49	5.31
	transmission	0.48	0.52
	delivery	4.63	3.75
	total rate	11.60	9.58
Duke Energy Ohio			
	generation	6.22	5.92
	transmission	0.54	0.67
	delivery	5.06	5.08
	total rate	11.82	11.67
Ohio Edison Company			
	generation	6.19	5.44
	transmission	0.93	1.29
	delivery	4.30	4.98
	total rate	11.40	11.71
Toledo Edison Company			
	generation	6.18	5.50
	transmission	0.93	1.28
	delivery	4.85	5.51
	total rate	12.00	12.29

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Average For Ohio			
	generation	6.45	5.98
	transmission	1.02	1.26
	delivery	4.92	4.89
	total rate	12.45	12.02
total for all utilities (IOUs, munis, coops, etc.)		12.46	
Wisconsin			
Madison Gas & Electric Company	total rate	16.50	17.16
Northern States Power Company (WI)	total rate	13.33	13.75
Northwestern Wisconsin Electric Company	total rate	13.14	13.27
Superior Water, Light & Power Company	total rate	11.30	12.00
We Energies (formerly Wisconsin Electric)	total rate	15.27	15.41
Wisconsin Public Service Corporation	total rate	13.22	13.22
WP&L	total rate	13.20	13.86
Average For Wisconsin	total rate	14.33	14.60
total for all utilities (IOUs, munis, coops, etc.)		14.04	

Average For East North Central

		2016	2017
	generation	6.33	6.19
	transmission	1.02	1.26
	delivery	5.34	5.49
	total rate	13.12	13.30
total for all utilities (IOUs, munis, coops, etc.)		13.05	

Average Rates
(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
South Atlantic			
Delaware			
Delmarva Power			
	generation	7.88	8.41
	transmission	1.02	1.18
	delivery	4.68	4.31
	total rate	13.59	13.90
Average For Delaware			
	generation	7.88	8.41
	transmission	1.02	1.18
	delivery	4.68	4.31
	total rate	13.59	13.90
total for all utilities (IOUs, munis, coops, etc.)		13.42	
District of Columbia			
Potomac Electric Power Company			
	generation	7.48	7.32
	transmission	0.58	0.57
	delivery	4.17	4.30
	total rate	12.23	12.19
Average For District of Columbia			
	generation	7.48	7.32
	transmission	0.58	0.57
	delivery	4.17	4.30
	total rate	12.23	12.19
total for all utilities (IOUs, munis, coops, etc.)		12.29	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Florida			
Duke Energy Florida			
	total rate	11.91	12.54
Florida Power & Light Company			
	total rate	10.22	11.23
Florida Public Utilities Company			
	total rate	15.31	15.13
Gulf Power Company			
	total rate	13.36	13.47
Tampa Electric Company			
	total rate	11.27	11.14
Average For Florida			
	total rate	10.88	11.64
	total for all utilities (IOUs, munis, coops, etc.)	10.98	
Georgia			
Georgia Power Company			
	total rate	12.10	12.10
Average For Georgia			
	total rate	12.10	12.10
	total for all utilities (IOUs, munis, coops, etc.)	11.50	

Average Rates
(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
Maryland			
Baltimore Gas & Electric Company			
	generation	8.54	7.71
	transmission	0.95	1.10
	delivery	5.15	5.06
	total rate	14.63	13.86
Delmarva Power			
	generation	8.08	8.04
	transmission	0.90	0.88
	delivery	6.15	5.99
	total rate	15.14	14.92
Potomac Edison Company			
	generation	6.76	6.62
	transmission	0.40	0.40
	delivery	3.98	4.05
	total rate	11.14	11.07
Potomac Electric Power Company			
	generation	8.08	7.50
	transmission	0.71	0.66
	delivery	5.87	6.53
	total rate	14.66	14.69
Average For Maryland			
	generation	8.11	7.52
	transmission	0.80	0.86
	delivery	5.26	5.36
	total rate	14.18	13.75
total for all utilities (IOUs, munis, coops, etc.)		14.22	

Average Rates
(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
North Carolina			
Dominion North Carolina Power			
	total rate	10.47	10.86
Duke Energy Carolinas			
	total rate	10.36	10.19
Duke Energy Progress, Inc.			
	total rate	10.78	10.37
Average For North Carolina			
	total rate	10.54	10.29
	total for all utilities (IOUs, munis, coops, etc.)	11.05	
South Carolina			
Duke Energy Carolinas			
	total rate	10.93	10.59
Duke Energy Progress, Inc.			
	total rate	10.01	11.20
South Carolina Electric & Gas Company			
	total rate	14.70	14.89
Average For South Carolina			
	total rate	12.61	12.74
	total for all utilities (IOUs, munis, coops, etc.)	12.65	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Virginia			
AEP (Appalachian Power Rate Area)			
	generation	6.87	6.88
	transmission	1.82	1.86
	delivery	2.66	2.70
	total rate	11.34	11.44
Dominion Virginia Power			
	total rate	11.19	11.32
Old Dominion Power Company			
	total rate	10.05	10.43
Average For Virginia			
	generation	6.87	6.88
	transmission	1.82	1.86
	delivery	2.66	2.70
	total rate	11.20	11.33
total for all utilities (IOUs, munis, coops, etc.)		11.35	
West Virginia			
AEP (Appalachian Power Rate Area)			
	total rate	11.36	12.03
AEP (Wheeling Power Rate Area)			
	total rate	11.66	12.33
Monongahela Power Company			
	total rate	11.08	11.42
Potomac Edison Company			
	total rate	10.36	11.21
Average For West Virginia			
	total rate	11.12	11.70
total for all utilities (IOUs, munis, coops, etc.)		11.48	

Average Rates
(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
Average For South Atlantic			
	generation	7.79	7.46
	transmission	1.02	1.08
	delivery	4.68	4.73
	total rate	11.45	11.72
total for all utilities (IOUs, munis, coops, etc.)		11.57	

East South Central

Alabama

		2016	2017
Alabama Power Company			
	total rate	12.66	13.37
Average For Alabama			
	total rate	12.66	13.37
total for all utilities (IOUs, munis, coops, etc.)		11.98	

Kentucky

		2016	2017
AEP (Kentucky Power Rate Area)			
	total rate	11.92	12.02
Duke Energy Kentucky			
	total rate	8.86	8.61
Kentucky Utilities Company			
	total rate	9.87	10.29
Louisville Gas & Electric Company			
	total rate	10.41	10.90
Average For Kentucky			
	total rate	10.24	10.56
total for all utilities (IOUs, munis, coops, etc.)		10.49	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
Mississippi			
Entergy Mississippi, Inc.	total rate	8.16	9.46
Mississippi Power Company	total rate	12.70	13.24
Average For Mississippi	total rate	9.38	10.48
	total for all utilities (IOUs, munis, coops, etc.)	10.47	
Tennessee			
AEP (Kingsport Power Rate Area)	total rate	8.49	9.18
Average For Tennessee	total rate	8.49	9.18
	total for all utilities (IOUs, munis, coops, etc.)	10.41	
Average For East South Central	total rate	11.14	11.79
	total for all utilities (IOUs, munis, coops, etc.)	10.86	

Average Rates

(in cents/kilowatthour)

Residential Average Rates

		12 Months Ending 12/31	
		2016	2017
Hawaii			
Hawaii			
Hawaii Electric Light Company			
	total rate	31.52	34.20
Hawaiian Electric Company			
	total rate	26.07	28.22
Maui Electric Company (Lanai)			
	total rate	33.52	35.87
Maui Electric Company (Maui)			
	total rate	28.49	30.64
Maui Electric Company (Molokai)			
	total rate	32.70	35.57
Average For Hawaii			
	total rate	27.38	29.64
total for all utilities (IOUs, munis, coops, etc.)		27.47	
Average For Hawaii			
	total rate	27.38	29.64
total for all utilities (IOUs, munis, coops, etc.)		27.47	
Average For USA			
	generation	7.65	7.69
	transmission	1.44	1.59
	delivery	5.83	6.02
	ctc	0.25	0.12
	total rate	12.93	13.28
total for all utilities (IOUs, munis, coops, etc.)		12.54	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

Mid-Atlantic

New Jersey

		12 Months Ending 12/31 2016	2017
Atlantic City Electric Company			
	generation	12.81	11.69
	transmission	0.97	0.83
	delivery	4.54	4.60
	total rate	18.32	17.13
Jersey Central Power & Light Company			
	generation	8.16	8.02
	transmission	0.45	0.45
	delivery	2.92	3.61
	ctc	0.41	0.32
	total rate	11.94	12.40
Public Service Electric & Gas Company			
	generation	9.99	9.84
	delivery	3.08	3.05
	ctc	0.00	-0.01
	total rate	13.07	12.88
Rockland Electric Company			
	total rate	14.92	14.85
Average For New Jersey			
	generation	9.88	9.65
	transmission	0.61	0.58
	delivery	3.20	3.36
	ctc	0.11	0.08
	total rate	13.37	13.24
total for all utilities (IOUs, munis, coops, etc.)		12.27	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
New York			
Central Hudson Gas & Electric Corporation			
	total rate	12.60	12.77
Consolidated Edison Company of New York			
	total rate	19.13	19.73
LIPA			
	generation	6.55	9.34
	delivery	8.98	7.38
	total rate	15.53	16.72
National Grid (Niagara Mohawk Power Corporation)			
	total rate	9.20	9.52
New York State Electric & Gas Corporation			
	total rate	10.43	10.37
Orange & Rockland Utilities, Inc.			
	total rate	14.78	14.78
Rochester Gas & Electric Corporation			
	total rate	11.99	12.42
Average For New York			
	generation	6.55	9.34
	delivery	8.98	7.38
	total rate	15.72	16.38
total for all utilities (IOUs, munis, coops, etc.)		14.42	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Pennsylvania			
Duquesne Light Company			
	generation	5.34	5.28
	transmission	0.86	1.15
	delivery	2.72	2.76
	total rate	8.91	9.19
Metropolitan Edison Company			
	generation	7.51	6.65
	delivery	2.62	2.96
	ctc	0.10	0.01
	total rate	10.23	9.62
PECO Energy			
	generation	6.94	5.92
	transmission	0.62	0.54
	delivery	3.19	3.03
	total rate	10.75	9.49
Pennsylvania Electric Company			
	generation	7.24	6.44
	delivery	2.80	3.24
	ctc	0.30	0.27
	total rate	10.34	9.95
Pennsylvania Power Company			
	generation	8.62	7.38
	delivery	1.60	1.97
	total rate	10.22	9.35
PPL Utilities Corp.			
	generation	5.98	5.83
	transmission	1.05	1.49
	delivery	2.13	2.17
	total rate	9.16	9.49
UGI Utilities, Inc.			
	generation	6.63	6.11
	transmission	0.24	0.24
	delivery	3.13	3.27
	total rate	10.00	9.62

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
West Penn Power Company			
	generation	7.71	7.04
	delivery	1.97	2.11
	total rate	9.68	9.15
Average For Pennsylvania			
	generation	6.87	6.18
	transmission	0.78	0.94
	delivery	2.42	2.56
	ctc	0.21	0.14
	total rate	9.74	9.45
total for all utilities (IOUs, munis, coops, etc.)		9.25	
Average For Mid-Atlantic			
	generation	7.97	8.56
	transmission	0.71	0.78
	delivery	3.57	3.50
	ctc	0.13	0.09
	total rate	13.50	13.65
total for all utilities (IOUs, munis, coops, etc.)		12.48	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

East North Central

Illinois

		12 Months Ending 12/31	
		2016	2017
Ameren Illinois Rate Zone I (formerly CIPS)			
	generation	5.72	5.28
	delivery	3.04	3.14
	total rate	8.76	8.42
Ameren Illinois Rate Zone II (formerly CILCO)			
	generation	5.98	5.58
	delivery	3.14	3.17
	total rate	9.12	8.75
Ameren Illinois Rate Zone III (formerly IP)			
	generation	5.79	5.45
	delivery	2.96	3.12
	total rate	8.75	8.57
Commonwealth Edison Company			
	generation	5.58	5.85
	delivery	3.48	3.68
	total rate	9.06	9.53
Commonwealth Edison Company - Unbundled			
	delivery	2.51	2.63
MidAmerican Energy			
	total rate	7.62	8.21
MidAmerican Energy Company (Delivery Service)			
	delivery	2.45	2.27
Average For Illinois			
	generation	5.63	5.74
	delivery	2.82	2.96
	total rate	8.89	9.06
total for all utilities (IOUs, munis, coops, etc.)		9.04	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Indiana			
AEP (Indiana Michigan Power)			
	total rate	8.67	8.99
Duke Energy Indiana			
	total rate	9.06	9.63
Indianapolis Power & Light Company			
	total rate	10.97	11.48
Northern Indiana Public Service Company			
	total rate	11.77	13.21
Southern Indiana Gas & Electric Company			
	total rate	12.18	12.41
Average For Indiana			
	total rate	10.00	10.68
	total for all utilities (IOUs, munis, coops, etc.)	10.04	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Michigan			
AEP (Indiana Michigan Power combined MI rate areas)			
	generation	7.56	8.07
	delivery	2.02	2.03
	total rate	9.58	10.10
Consumers Energy			
	total rate	12.14	12.68
DTE Electric Company			
	total rate	10.01	10.17
Northern States Power Company (WI)			
	total rate	11.04	10.85
Upper Peninsula Power Company			
	total rate		18.04
We Energies (formerly Wisconsin Electric)			
	total rate	14.51	14.57
Wisconsin Public Service Corporation			
	total rate	11.47	12.69
Average For Michigan			
	generation	7.56	8.07
	delivery	2.02	2.03
	total rate	10.82	11.20
	total for all utilities (IOUs, munis, coops, etc.)	10.64	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Ohio			
AEP (Columbus Southern Power Rate Area)			
	generation	5.87	6.25
	transmission	1.08	1.05
	delivery	2.82	2.24
	total rate	9.77	9.54
AEP (Ohio Power Rate Area)			
	generation	6.43	6.81
	transmission	1.18	1.16
	delivery	3.64	3.06
	total rate	11.25	11.03
Cleveland Electric Illuminating Company			
	generation	6.97	5.93
	transmission	1.07	1.15
	delivery	3.32	4.04
	total rate	14.78	11.12
Dayton Power & Light Company			
	generation	6.82	5.86
	transmission	0.58	0.52
	delivery	2.81	2.03
	total rate	10.21	8.41
Duke Energy Ohio			
	generation	6.21	5.70
	transmission	0.48	0.56
	delivery	3.55	3.39
	total rate	10.24	9.66
Ohio Edison Company			
	generation	6.88	5.92
	transmission	1.07	1.19
	delivery	2.66	3.37
	total rate	12.16	10.49
Toledo Edison Company			
	generation	6.65	5.75
	transmission	1.06	1.17
	delivery	3.83	4.12
	total rate	12.37	11.04

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Average For Ohio			
	generation	6.40	6.21
	transmission	1.06	1.10
	delivery	3.09	3.06
	total rate	11.39	10.31
total for all utilities (IOUs, munis, coops, etc.)		9.98	
Wisconsin			
Madison Gas & Electric Company	total rate	11.42	11.85
Northern States Power Company (WI)	total rate	10.03	10.33
Northwestern Wisconsin Electric Company	total rate	13.39	13.39
Superior Water, Light & Power Company	total rate	8.85	9.43
We Energies (formerly Wisconsin Electric)	total rate	11.60	11.64
Wisconsin Public Service Corporation	total rate	9.32	9.32
WP&L	total rate	11.20	11.22
Average For Wisconsin			
	total rate	10.85	10.95
total for all utilities (IOUs, munis, coops, etc.)		10.77	
Average For East North Central			
	generation	6.00	6.02
	transmission	1.06	1.10
	delivery	2.93	2.99
	total rate	10.48	10.59
total for all utilities (IOUs, munis, coops, etc.)		9.97	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

South Atlantic

Delaware

		12 Months Ending 12/31 2016	2017
Delmarva Power			
	generation	7.16	6.46
	transmission	0.75	0.73
	delivery	2.51	2.63
	total rate	10.42	9.82
Average For Delaware			
	generation	7.16	6.46
	transmission	0.75	0.73
	delivery	2.51	2.63
	total rate	10.42	9.82
total for all utilities (IOUs, munis, coops, etc.)		10.09	

District of Columbia

		2016	2017
Potomac Electric Power Company			
	generation	7.44	6.99
	transmission	0.52	0.49
	delivery	4.21	4.47
	total rate	12.17	11.95
Average For District of Columbia			
	generation	7.44	6.99
	transmission	0.52	0.49
	delivery	4.21	4.47
	total rate	12.17	11.95
total for all utilities (IOUs, munis, coops, etc.)		11.72	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Florida			
Duke Energy Florida			
	total rate	8.80	9.44
Florida Power & Light Company			
	total rate	8.19	8.90
Florida Public Utilities Company			
	total rate	13.38	13.35
Gulf Power Company			
	total rate	10.55	10.50
Tampa Electric Company			
	total rate	9.40	9.08
Average For Florida			
	total rate	8.56	9.11
	total for all utilities (IOUs, munis, coops, etc.)	8.91	
Georgia			
Georgia Power Company			
	total rate	9.40	9.40
Average For Georgia			
	total rate	9.40	9.40
	total for all utilities (IOUs, munis, coops, etc.)	9.83	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Maryland			
Baltimore Gas & Electric Company			
	generation	7.33	6.35
	transmission	0.64	0.75
	delivery	3.10	3.19
	total rate	11.07	10.29
Delmarva Power			
	generation	7.05	7.53
	transmission	0.71	0.71
	delivery	4.14	4.55
	total rate	11.91	12.79
Potomac Edison Company			
	generation	6.30	6.95
	transmission	0.32	0.33
	delivery	3.10	3.16
	total rate	9.72	10.44
Potomac Electric Power Company			
	generation	7.16	6.71
	transmission	0.48	0.45
	delivery	4.22	4.45
	total rate	11.86	11.61
Average For Maryland			
	generation	7.15	6.61
	transmission	0.57	0.62
	delivery	3.47	3.62
	total rate	11.25	10.87
total for all utilities (IOUs, munis, coops, etc.)		10.99	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
North Carolina			
Dominion North Carolina Power			
	total rate	8.72	8.55
Duke Energy Carolinas			
	total rate	7.81	7.64
Duke Energy Progress, Inc.			
	total rate	8.80	8.36
Average For North Carolina			
	total rate	8.16	7.90
	total for all utilities (IOUs, munis, coops, etc.)	8.64	
South Carolina			
Duke Energy Carolinas			
	total rate	8.54	8.43
Duke Energy Progress, Inc.			
	total rate	8.79	9.46
South Carolina Electric & Gas Company			
	total rate	11.39	11.50
Average For South Carolina			
	total rate	10.04	10.14
	total for all utilities (IOUs, munis, coops, etc.)	10.28	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Virginia			
AEP (Appalachian Power Rate Area)			
	generation	5.86	5.89
	transmission	1.33	1.37
	delivery	1.73	1.75
	total rate	8.92	9.01
Dominion Virginia Power			
	total rate	7.60	7.55
Old Dominion Power Company			
	total rate	9.35	9.71
Average For Virginia			
	generation	5.86	5.89
	transmission	1.33	1.37
	delivery	1.73	1.75
	total rate	7.74	7.69
total for all utilities (IOUs, munis, coops, etc.)		7.94	
West Virginia			
AEP (Appalachian Power Rate Area)			
	total rate	9.05	9.26
AEP (Wheeling Power Rate Area)			
	total rate	8.97	9.19
Monongahela Power Company			
	total rate	9.40	9.65
Potomac Edison Company			
	total rate	9.12	10.20
Average For West Virginia			
	total rate	9.18	9.51
total for all utilities (IOUs, munis, coops, etc.)		9.37	

Average Rates
(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Average For South Atlantic			
	generation	6.79	6.42
	transmission	0.81	0.85
	delivery	3.41	3.57
	total rate	8.85	8.97
total for all utilities (IOUs, munis, coops, etc.)		9.25	

East South Central

Alabama

		2016	2017
Alabama Power Company	total rate	11.55	12.12
Average For Alabama	total rate	11.55	12.12
total for all utilities (IOUs, munis, coops, etc.)		11.11	

Kentucky

		2016	2017
AEP (Kentucky Power Rate Area)	total rate	11.89	12.10
Duke Energy Kentucky	total rate	7.70	7.36
Kentucky Utilities Company	total rate	9.71	10.13
Louisville Gas & Electric Company	total rate	9.46	9.77
Average For Kentucky	total rate	9.60	9.84
total for all utilities (IOUs, munis, coops, etc.)		9.58	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Mississippi			
Entergy Mississippi, Inc.			
	total rate	7.65	8.84
Mississippi Power Company			
	total rate	9.82	10.32
Average For Mississippi			
	total rate	8.45	9.38
	total for all utilities (IOUs, munis, coops, etc.)	9.58	
Tennessee			
AEP (Kingsport Power Rate Area)			
	total rate	8.57	9.68
Average For Tennessee			
	total rate	8.57	9.68
	total for all utilities (IOUs, munis, coops, etc.)	10.19	
Average For East South Central			
	total rate	10.15	10.70
	total for all utilities (IOUs, munis, coops, etc.)	10.20	

Average Rates

(in cents/kilowatthour)

Commercial Average Rates

		12 Months Ending 12/31	
		2016	2017
Hawaii			
Hawaii			
Hawaii Electric Light Company			
	total rate	29.57	32.29
Hawaiian Electric Company			
	total rate	22.70	25.00
Maui Electric Company (Lanai)			
	total rate	36.32	39.02
Maui Electric Company (Maui)			
	total rate	28.39	30.42
Maui Electric Company (Molokai)			
	total rate	33.91	37.04
Average For Hawaii			
	total rate	24.44	26.74
	total for all utilities (IOUs, munis, coops, etc.)	24.64	
Average For Hawaii			
	total rate	24.44	26.74
	total for all utilities (IOUs, munis, coops, etc.)	24.64	
Average For USA			
	generation	7.00	7.36
	transmission	1.44	1.44
	delivery	3.70	3.76
	ctc	0.30	0.21
	total rate	10.60	10.82
	total for all utilities (IOUs, munis, coops, etc.)	10.44	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

Mid-Atlantic

New Jersey

		12 Months Ending 12/31 2016	2017
Atlantic City Electric Company			
	generation	20.63	16.42
	transmission	1.13	0.94
	delivery	3.13	2.98
	total rate	24.90	20.34
Jersey Central Power & Light Company			
	generation	6.61	6.13
	transmission	0.40	0.35
	delivery	2.12	2.56
	ctc	0.36	0.29
	total rate	9.48	9.33
Public Service Electric & Gas Company			
	generation	8.42	7.93
	delivery	2.31	2.23
	ctc	0.00	-0.01
	total rate	10.73	10.15
Rockland Electric Company			
	total rate	14.82	14.08
Average For New Jersey			
	generation	8.91	8.10
	transmission	0.59	0.49
	delivery	2.33	2.42
	ctc	0.13	0.10
	total rate	11.27	10.60
total for all utilities (IOUs, munis, coops, etc.)		10.17	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

New York		12 Months Ending 12/31 2016	2017
Central Hudson Gas & Electric Corporation	total rate	9.86	10.52
Consolidated Edison Company of New York	total rate	16.68	17.18
National Grid (Niagara Mohawk Power Corporation)	total rate	5.05	5.57
New York State Electric & Gas Corporation	total rate	6.39	6.57
Orange & Rockland Utilities, Inc.	total rate	8.36	7.24
Rochester Gas & Electric Corporation	total rate	9.82	10.90
Average For New York	total rate	6.39	6.76
	total for all utilities (IOUs, munis, coops, etc.)	5.99	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Pennsylvania			
Duquesne Light Company			
	generation	4.99	5.21
	transmission	0.77	1.16
	delivery	1.43	1.33
	total rate	7.18	7.70
Metropolitan Edison Company			
	generation	5.84	6.77
	delivery	0.90	1.00
	ctc	0.10	0.01
	total rate	6.84	7.78
PECO Energy			
	generation	4.87	4.73
	transmission	0.48	0.26
	delivery	1.61	1.75
	total rate	6.96	6.74
Pennsylvania Electric Company			
	generation	6.39	7.13
	delivery	1.04	1.16
	ctc	0.26	0.25
	total rate	7.69	8.54
Pennsylvania Power Company			
	generation	4.21	7.43
	delivery	0.37	0.41
	total rate	4.58	7.84
PPL Utilities Corp.			
	generation	4.10	3.82
	transmission	0.83	1.05
	delivery	0.32	0.37
	total rate	5.25	5.24
UGI Utilities, Inc.			
	generation	5.99	5.62
	transmission	0.22	0.22
	delivery	2.08	2.24
	total rate	8.29	8.08

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
West Penn Power Company			
	generation	4.69	2.69
	delivery	0.56	0.61
	total rate	5.25	3.30
Average For Pennsylvania			
	generation	4.95	4.37
	transmission	0.59	0.55
	delivery	0.70	0.76
	ctc	0.18	0.12
	total rate	6.38	5.94
total for all utilities (IOUs, munis, coops, etc.)		6.94	
Average For Mid-Atlantic			
	generation	6.54	6.00
	transmission	0.59	0.53
	delivery	0.97	1.03
	ctc	0.16	0.11
	total rate	7.64	7.28
total for all utilities (IOUs, munis, coops, etc.)		7.03	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
East North Central			
Illinois			
Ameren Illinois Rate Zone I (formerly CIPS)			
	delivery	0.63	0.77
Ameren Illinois Rate Zone II (formerly CILCO)			
	delivery	0.56	0.69
Ameren Illinois Rate Zone III (formerly IP)			
	delivery	0.60	0.77
Commonwealth Edison Company			
	generation	3.93	4.31
	delivery	1.35	1.42
	total rate	5.28	5.73
Commonwealth Edison Company - Unbundled			
	delivery	1.49	1.52
MidAmerican Energy			
	total rate	5.52	5.82
MidAmerican Energy Company (Delivery Service)			
	delivery	1.93	1.86
Average For Illinois			
	generation	3.93	4.31
	delivery	1.22	1.29
	total rate	5.36	5.76
total for all utilities (IOUs, munis, coops, etc.)		6.53	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Indiana			
AEP (Indiana Michigan Power)			
	total rate	6.36	6.49
Duke Energy Indiana			
	total rate	6.89	7.27
Indianapolis Power & Light Company			
	total rate	8.28	8.73
Northern Indiana Public Service Company			
	total rate	6.80	7.37
Southern Indiana Gas & Electric Company			
	total rate	7.33	7.85
Average For Indiana			
	total rate	7.05	7.45
	total for all utilities (IOUs, munis, coops, etc.)	6.99	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Michigan			
AEP (Indiana Michigan Power combined MI rate areas)			
	generation	7.16	7.38
	delivery	0.99	1.08
	total rate	8.15	8.46
Consumers Energy			
	total rate	8.13	8.17
DTE Electric Company			
	total rate	6.54	6.74
Northern States Power Company (WI)			
	total rate	6.92	8.48
Upper Peninsula Power Company			
	total rate		6.78
We Energies (formerly Wisconsin Electric)			
	total rate	5.76	5.94
Wisconsin Public Service Corporation			
	total rate	6.55	6.16
Average For Michigan			
	generation	7.16	7.38
	delivery	0.99	1.08
	total rate	7.21	7.34
total for all utilities (IOUs, munis, coops, etc.)		6.93	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Ohio			
AEP (Columbus Southern Power Rate Area)			
	generation	5.86	6.17
	transmission	1.48	0.89
	delivery	1.40	1.07
	total rate	8.74	8.13
AEP (Ohio Power Rate Area)			
	generation	5.76	6.30
	transmission	1.03	0.79
	delivery	1.09	0.74
	total rate	7.88	7.83
Cleveland Electric Illuminating Company			
	generation	5.13	3.77
	transmission	0.65	0.63
	delivery	0.45	0.84
	total rate	6.66	5.24
Dayton Power & Light Company			
	generation	6.37	5.51
	transmission	0.51	0.45
	delivery	1.52	0.90
	total rate	8.40	6.86
Duke Energy Ohio			
	generation	4.77	4.87
	transmission	0.05	0.64
	delivery	2.80	3.86
	total rate	8.07	9.37
Ohio Edison Company			
	generation	5.25	5.43
	transmission	0.69	0.71
	delivery	0.50	0.92
	total rate	6.30	7.07
Toledo Edison Company			
	generation	4.40	5.77
	transmission	0.71	0.72
	delivery	0.23	0.59
	total rate	3.78	7.09

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Average For Ohio			
	generation	5.35	5.86
	transmission	0.78	0.74
	delivery	0.81	0.82
	total rate	6.74	7.10
total for all utilities (IOUs, munis, coops, etc.)		7.00	
Wisconsin			
Madison Gas & Electric Company	total rate	7.55	8.23
Northern States Power Company (WI)	total rate	7.59	7.74
Northwestern Wisconsin Electric Company	total rate	9.24	9.39
Superior Water, Light & Power Company	total rate	6.66	7.06
We Energies (formerly Wisconsin Electric)	total rate	8.26	8.25
Wisconsin Public Service Corporation	total rate	6.00	6.00
WP&L	total rate	7.96	7.81
Average For Wisconsin			
	total rate	7.58	7.57
total for all utilities (IOUs, munis, coops, etc.)		7.52	
Average For East North Central			
	generation	5.31	5.77
	transmission	0.78	0.74
	delivery	1.02	1.06
	total rate	7.13	7.38
total for all utilities (IOUs, munis, coops, etc.)		6.95	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

South Atlantic

Delaware

		12 Months Ending 12/31 2016	2017
Delmarva Power			
	generation	6.46	6.96
	transmission	0.62	0.57
	delivery	0.86	0.91
	total rate	7.94	8.44
Average For Delaware			
	generation	6.46	6.96
	transmission	0.62	0.57
	delivery	0.86	0.91
	total rate	7.94	8.44
total for all utilities (IOUs, munis, coops, etc.)		8.10	

District of Columbia

		2016	2017
Potomac Electric Power Company			
	delivery	1.28	1.28
Average For District of Columbia			
	delivery	1.28	1.28
total for all utilities (IOUs, munis, coops, etc.)		8.80	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Florida			
Duke Energy Florida	total rate	6.73	7.25
Florida Power & Light Company	total rate	6.11	6.77
Florida Public Utilities Company	total rate	11.78	13.01
Gulf Power Company	total rate	8.22	7.97
Tampa Electric Company	total rate	8.35	7.81
Average For Florida	total rate	7.14	7.36
	total for all utilities (IOUs, munis, coops, etc.)	7.69	
Georgia			
Georgia Power Company	total rate	5.46	5.46
Average For Georgia	total rate	5.46	5.46
	total for all utilities (IOUs, munis, coops, etc.)	5.85	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Maryland			
Baltimore Gas & Electric Company			
	generation	7.33	6.35
	transmission	0.64	0.75
	delivery	3.10	3.19
	total rate	11.07	10.29
Delmarva Power			
	generation	4.99	5.63
	transmission	0.66	0.67
	delivery	2.44	2.49
	total rate	8.10	8.80
Potomac Edison Company			
	generation	5.76	6.17
	transmission	0.31	0.31
	delivery	1.76	1.83
	total rate	7.83	8.31
Potomac Electric Power Company			
	delivery	2.29	2.29
Average For Maryland			
	generation	7.26	6.34
	transmission	0.62	0.73
	delivery	2.96	3.05
	total rate	10.82	10.15
total for all utilities (IOUs, munis, coops, etc.)		7.90	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
North Carolina			
Dominion North Carolina Power			
	total rate	5.60	5.34
Duke Energy Carolinas			
	total rate	6.12	5.94
Duke Energy Progress, Inc.			
	total rate	6.44	6.05
Average For North Carolina			
	total rate	6.19	5.93
	total for all utilities (IOUs, munis, coops, etc.)	6.32	
South Carolina			
Duke Energy Carolinas			
	total rate	5.50	5.10
Duke Energy Progress, Inc.			
	total rate	5.47	5.80
South Carolina Electric & Gas Company			
	total rate	7.07	7.20
Average For South Carolina			
	total rate	6.05	5.93
	total for all utilities (IOUs, munis, coops, etc.)	6.09	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Virginia			
AEP (Appalachian Power Rate Area)			
	generation	5.23	5.17
	transmission	1.02	1.01
	delivery	0.53	0.53
	total rate	6.78	6.71
Dominion Virginia Power			
	total rate	6.00	5.99
Old Dominion Power Company			
	total rate	9.33	8.95
Average For Virginia			
	generation	5.23	5.17
	transmission	1.02	1.01
	delivery	0.53	0.53
	total rate	6.36	6.33
total for all utilities (IOUs, munis, coops, etc.)		6.56	
West Virginia			
AEP (Appalachian Power Rate Area)			
	total rate	6.66	6.75
AEP (Wheeling Power Rate Area)			
	total rate	5.89	5.88
Monongahela Power Company			
	total rate	6.69	6.86
Potomac Edison Company			
	total rate	6.75	7.68
Average For West Virginia			
	total rate	6.50	6.65
total for all utilities (IOUs, munis, coops, etc.)		6.57	

Average Rates
(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	2017
Average For South Atlantic			
	generation	5.98	5.58
	transmission	0.87	0.91
	delivery	2.36	2.41
	total rate	6.48	6.40
total for all utilities (IOUs, munis, coops, etc.)		6.46	
East South Central			
Alabama			
Alabama Power Company			
	total rate	6.35	6.51
Average For Alabama			
	total rate	6.35	6.51
total for all utilities (IOUs, munis, coops, etc.)		6.07	
Kentucky			
AEP (Kentucky Power Rate Area)			
	total rate	6.65	6.56
Duke Energy Kentucky			
	total rate	6.61	6.28
Kentucky Utilities Company			
	total rate	6.13	6.27
Louisville Gas & Electric Company			
	total rate	6.69	6.83
Average For Kentucky			
	total rate	6.38	6.44
total for all utilities (IOUs, munis, coops, etc.)		5.67	

Average Rates

(in cents/kilowatthour)

Industrial Average Rates

		12 Months Ending 12/31	
		2016	**2017**
Mississippi			
Entergy Mississippi, Inc.	total rate	5.37	6.25
Mississippi Power Company	total rate	6.36	6.63
Average For Mississippi	total rate	6.03	6.50
	total for all utilities (IOUs, munis, coops, etc.)	5.80	
Tennessee			
AEP (Kingsport Power Rate Area)	total rate	5.73	6.17
Average For Tennessee	total rate	5.73	6.17
	total for all utilities (IOUs, munis, coops, etc.)	5.68	
Average For East South Central	total rate	6.29	6.48
	total for all utilities (IOUs, munis, coops, etc.)	5.82	

ELECTRIC UTILITIES IN KENTUCKY

Residential Rates in Effect **September 2018**

	Name	Investor-Owned / Rural Electric Cooperative	Last Rate Impacting Case Numbers	REC (if applicable)	Customer Charge	Residential Rate per kWh
1	American Electric Power (Kentucky Power)	IO	2017-00179		$ 14.00	$ 0.098197 (3)
2	Big Sandy RECC	REC	2017-00374	East Ky.	$ 21.25	$ 0.087560
3	Blue Grass Energy Cooperative	REC	2017-00008	East Ky.	$ 16.50	$ 0.082810
4	Clark Energy Cooperative, Inc.	REC	2017-00009	East Ky.	$ 12.43	$ 0.089920
5	Cumberland Valley Electric, Inc.	REC	2017-00010	East Ky.	$ 12.00	$ 0.085000
6	Duke Energy Kentucky, Inc.	IO	2017-00321		$ 11.00	$ 0.095357 (4)
7	Farmers RECC	REC	2017-00011	East Ky.	$ 14.00	$ 0.086289
8	Fleming-Mason RECC	REC	2017-00012	East Ky.	$ 15.00	$ 0.081830
9	Gibson EMC (formerly Hickman-Fulton Counties)	REC		TVA	$ 23.50	$ 0.079640
10	Grayson RECC	REC	2017-00013	East Ky.	$ 15.00	$ 0.106580
11	Inter-County RECC	REC	2017-00014	East Ky.	$ 8.97	$ 0.091710
12	Jackson Energy Coop. Corp.	REC	2017-00015	East Ky.	$ 16.44	$ 0.095910
13	Jackson Purchase Energy Corporation	REC	2013-00384	Big Rivers	$ 12.45	$ 0.100780
14	Kenergy Corp.	REC	2015-00312	Big Rivers	$ 18.20	$ 0.102038
15	**Kentucky Utilities Company (Current)**	**IO**	**2018-00034**		**$ 12.25**	**$ 0.090470**
16	**Kentucky Utilities Company (Proposed)**	**IO**	**2018-00294**		**$ 16.13**	**$ 0.095520**
17	Licking Valley RECC	REC	2017-00016	East Ky.	$ 14.00	$ 0.092002
18	**Louisville Gas and Electric Company (Current)**	**IO**	**2018-00034**		**$ 12.25**	**$ 0.093820**
19	**Louisville Gas and Electric Company (Proposed)**	**IO**	**2018-00295**		**$ 16.13**	**$ 0.094200**
20	Meade County RECC	REC	2013-00231	Big Rivers	$ 17.40 (2)	$ 0.097665
21	Nolin RECC	REC	2017-00017	East Ky.	$ 13.50	$ 0.090220
22	Owen Electric Cooperative, Inc.	REC	2017-00018	East Ky.	$ 20.00	$ 0.082450
23	Pennyrile Electric	REC		TVA	$ 23.40	$ 0.073480
24	Salt River Electric Coop. Corp.	REC	2017-00019	East Ky.	$ 8.84	$ 0.077040
25	Shelby Energy Cooperative, Inc.	REC	2017-00020	East Ky.	$ 15.00	$ 0.088410
26	South Kentucky RECC	REC	2017-00021	East Ky.	$ 12.82	$ 0.082940
27	Taylor County RECC	REC	2017-00022	East Ky.	$ 9.82	$ 0.079680
28	Tri-County Electric	REC		TVA	$ 18.00	$ 0.099000
29	Warren RECC	REC		TVA	$ 18.80	$ 0.074900
30	West Kentucky RECC	REC		TVA	$ 23.40	$ 0.101100

(1) Typical Bills are based on Customer Charge, Base Rates, FAC, DSM and ECR factors only. No other applicable charges have been included.
(2) Based on Meade County RECC Residential Customer Charge of $0.572 per Day multiplied by 365 days / 12 months (Per Order dated April 25, 2014 in Cas
(3) AEP Rate with combinded Energy and Capacity Charge
(4) Fuel Charge imbeded in Base Res Rate is Combined with Res Tariff Rate

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 3

Responding Witness: Robert M. Conroy / Elizabeth J. McFarland

Q-3. Refer to the Conroy Testimony, page 15, lines 1-5.

a. Explain how LG&E is training customer service representatives to handle customer inquiries about the infrastructure and variable components of the energy charge on the tariff sheets as compared to how the customer is actually billed. Provide all materials and support documents.

b. Confirm that on the customer's monthly bill, the energy charge will be the total kWh charge and not the two components.

A-3.

a. For Customer Representatives, training material will be developed and delivered via the most appropriate channels for this material including but not limited to eLearning, classroom training and the use of references in our online knowledgebase. The training development will begin closer to the implementation of the new rates to incorporate any revisions that may occur. Delivery of the training will be "just in time" and will fully align with the KPSC Order issued in this case.

b. Yes, as discussed in the testimony of Mr. Conroy at page 16, lines 15-18, the energy charge on the monthly bill will reflect the total kWh charge and not the two components.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 4

Responding Witness: Robert M. Conroy

Q-4. Refer to the Conroy Testimony, page 22, lines 1-12.

a. Explain why a customer must have a load of 10 MVA or more.

b. Explain why LG&E is limiting this offering to 50 MW for each company.

A-4.

a. Green Tariff Option #3 is targeted at customers who desire utility scale renewable options (hence 10 MW or more) that will support adding new renewable resources to the grid.

b. As Mr. Conroy states in his testimony on page 22, lines 10-12, "The Companies propose to limit this offering to 50 MW for each of the Companies, i.e., no more than 100 MW total, which should be absorbable in the Companies' system without material integration issues."

LOUISVILLE GAS AND ELECTRIC COMPANY

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Case No. 2018-00295

Question No. 5

Responding Witness: John K. Wolfe

Q-5. Refer to the Conroy Testimony, page 23, lines 20-21.

a. Provide an itemized list of each type of existing fixtures and pole in LG&E's inventory.

b. Provide an estimated date of when LG&E is projecting the inventory to be exhausted.

A-5.

a. See attached.

b. LG&E's inventory of street lights are continually restocked to minimum allowable levels based on historical annual usage. LG&E plans to stop ordering non-LED fixtures that have moved to RLS upon approval of this proceeding. Remaining non-LED lighting inventory will be used to perform repair and maintenance on in-service lights until the inventory is depleted. LG&E estimates it will deplete this inventory in approximately one year. Once the inventory is depleted, LED lighting materials will be used to replace existing in-service lights that fail or need repair.

LG&E Lighting Inventory					
Outdoor Lighting Fixtures	Type	Wattage	Lumens		Outdoor Lighting Poles
ACORN	HPS	70w	5,800		10' Smooth Black Alum Pole
ACORN	HPS	100w	9,500		12' Smooth Black Alum Pole
ACORN	HPS	150w	16,000		10' Fluted Black Alum Pole
COBRA	HPS	150w	16,000		16' Bronze Alum Round Pole
COBRA	HPS	250w	28,500		16' Bronze Al Square Pole
COBRA	HPS	400w	50,000		28' Black Alum Round Pole
COBRA	LED	150w Eq	6,850		30' Bronze Alum Round Pole
COBRA	LED	250w Eq	14,750		30' Alum Davit
COBRA	LED	400w Eq	25,500		35' Wood Pole
COLONIAL	HPS	70w	5,800		
COLONIAL	HPS	100w	9,500		
COLONIAL	HPS	150w	16,000		
COLONIAL	LED	100w Eq	5,500		
CONTEMPORARY	HPS	150w	16,000		
CONTEMPORARY	HPS	250w	28,500		
CONTEMPORARY	HPS	400w	50,000		
CONTEMPORARY	MH	350w	32,000		
DIRECTIONAL	HPS	150w	16,000		
DIRECTIONAL	HPS	400w	50,000		
DIRECTIONAL	MH	350w	32,000		
LONDON	HPS	70w	5,800		
LONDON	HPS	100w	9,500		
OPEN BOTTOM	HPS	100w	9,500		
OPEN BOTTOM	LED	100w Eq	5,250		
VICTORIAN	HPS	70w	5,800		
VICTORIAN	HPS	100w	9,500		

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Question No. 6

Responding Witness: Robert M. Conroy / Counsel

Q-6. Refer to the Conroy Testimony, page 25, lines 20-21. Explain if Rate PSA applies to public and private K-12 schools.

A-6. The current Rate PSA applies only to cable television system operators and certain telecommunication carriers, as defined therein. The Company proposes to expand the applicability of Rate PSA to "Governmental Units" and "Educational Institutions."

As the proposed Rate PSA defines "educational institution" as "a public or private, non-profit university, college or community college," public and private K-12 schools would not qualify as an educational institution and would not be eligible under the proposed Rate PSA for attachment services as an **educational institution.**

County and independent school districts own, operate, and manage Kentucky's public elementary and secondary schools. These districts are political subdivisions or agencies of the state. *See, e.g,, Rose v. Council for Better* Education, 790 S.W.2d 186 (Ky. 1989); *Board of Education v. Board of Education*, 458 S.W.2d 6 (Ky. 1970). As such, they would be eligible for attachment service under the proposed Rate PSA as a **governmental unit**, which the Rate PSA defines as "any agency or department of the Federal Government, a department, agency or other unit of the Commonwealth of Kentucky, a county or city, special district or other political subdivision of the Commonwealth of Kentucky."

As a private elementary or secondary school would not meet the definition of educational institution or government unit, it would not be eligible for attachment service under the proposed Rate PSA. It could, however, request such service through a special contract.

If the Commission determines that attachment service should also be made available to private elementary and secondary schools under Rate PSA, the proposed definition of "educational institution" would require revision.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 7

Responding Witness: John K. Wolfe

Q-7. Refer to the Conroy Testimony, page 26, lines 7-9.

a. Provide a comparison of the average license agreement pole attachment fee with the current pole attachment fee.

b. Provide the number of license agreements.

A-7.

a. LG&E's Governmental Unit and Educational Institution licensees pay attachment fees according to various fee structures. Most paid a one-time fee based on the aerial footage of their attachments, rather than an annual, per-attachment fee. Among licensees who pay an annual attachment fee, the attachment fee is already the same rate as the attachment fee offered under Rate PSA.

b. LG&E has six license agreements with Governmental Units and Educational Institutions

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 8

Responding Witness: Robert M. Conroy / John K. Wolfe

Q-8. Refer to the Conroy Testimony, page 28, lines 17-23 and page 29, lines 1- 4. State whether there is a limit on how many times a specific pole attachment can be audited over a specific amount of time.

A-8. Rate PSA does not limit the number of times a pole attachment may be audited over a specific period of time. LG&E intends to perform such audits not more frequently than every five years for the purposes set forth in Term and Condition No. 14, such that each pole is audited no more than once in a five-year period.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 9

Responding Witness: Robert M. Conroy / John K. Wolfe

Q-9. Refer to the Conroy Testimony, page 29, lines 5-14.

a. Explain how LG&E arrived at the $25 per attachment penalty amount.

b. Explain why it is reasonable for LG&E to presume that the unauthorized attachment period would be two years.

c. State how many times in the last two years LG&E has had to remove an unauthorized attachment.

A-9.

a. LG&E currently has no means to discourage unauthorized attachments. While Rate PSA currently permits LG&E to remove such attachments, that remedy is not practical as it deprives the unauthorized attacher's customers, who are likely to also be LG&E customers, of the service provided by the unauthorized attachment. LG&E sought a penalty amount substantial enough to deter unauthorized attachments without being excessive.

In light of the penalties that other regulatory bodies permit for unauthorized attachments, the proposed penalty, which is approximately 3.5 times the annual attachment fee of $7.25, is not excessive. The Oregon Public Utilities Commission permits pole owners to assess a fee no greater than five times the current annual rental fee per pole if the unauthorized attachment is reported by the attachment owner to the pole owner and is accompanied by a permit application or is discovered through a joint inspection between the pole owner and attachment owner and accompanied by a permit application. If the pole owner discovers an unauthorized attachment during an inspection in which the attachment owner declined to participate, a penalty of $100 per pole plus five times the current annual rental fee per pole is permissible. Or. Admin. R. 860-028-0140 (2018). The Federal Communications Commission has found the Oregon approach to be reasonable. *See Implementation of Section 224 of the Act: A National Broadband Plan for Our Future*, Docket No. 07-245, GN Docket No. 09-51, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240 (2011).

b. In *The Adoption of a Standard Methodology for Establishing Rates for CATV Pole Attachments*, Administrative Case No. 251 (Ky. PSC Sep. 17, 1982), the Commission found that it was appropriate for purposes of determining the amount of a penalty for unauthorized attachments to assume that an unauthorized attachment was made the day after the utility conducted its last inspection. The same assumption can be used to determine how long an unauthorized attachment has been attached to a Company structure for purposes of determining any unpaid attachment charges. Since the Company will not conduct pole audits more frequently than every five years, this assumption would support the use of a five-year period. KRS 278.225, however, limits the assessment of any unbilled charges to two years from the date of discovery of the attachment and would permit LG&E to bill the owner of the unauthorized attachment only for two years of attachment fees or for the period from the date of the last audit to the date of discovery, whichever is less. The presumption is a rebuttable presumption. The attachment owner will be provided the opportunity to produce evidence that the period of unauthorized attachment was less.

c. LG&E has not removed any unauthorized attachments subject to Rate PSA in the last two years.

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Question No. 10

Responding Witness: Robert M. Conroy / John K. Wolfe

Q-10. Refer to the Conroy Testimony, page 29, lines 22 and 23 and page 30, lines 1-3. Explain why an attachment customer should have to pay more than the cost of repairs.

A-10. The 50 percent surcharge contained in Term and Condition No. 8(j) applies to work that LG&E performs to correct an improperly installed attachment. An improperly installed attachment is an attachment that fails to comply with the standards of the National Electrical Safety Code, the Company's published standards, or those established by local or state law. The Company will perform the work only after the Attachment Customer has been provided with written notice of the violation and 30 days from receipt of that notice to correct the noted violations.

The proposed surcharge is intended to provide an incentive for Attachment Customers to install their facilities in accordance with all applicable codes and standards and to timely correct any improper and non-conforming installations. By allowing an Attachment Customer 30 days in which to correct the violation, the Company has sought to strike a reasonable balance between protecting system safety and reliability and providing an Attachment Customer a reasonable opportunity to make the required corrections. It is also intended to deter an Attachment Customer from using KU as a *de facto* contractor for correction of safety violations that would strain limited resources best devoted to LG&E's gas and electric business.

The 50-percent surcharge is consistent with Commission precedent which allows for charges in excess of cost where an Attachment Customer fails to comply with tariff provisions. In *The Adoption of a Standard Methodology for Establishing Rates for CATV Pole Attachments*, Administrative Case No. 251 (Ky. PSC Sep. 17, 1982), for example, the Commission found that tariffs for pole attachments could "provide for 'make-ready' charges for unauthorized attachments not to exceed **twice** the charges which would have been imposed if the attachment had been properly authorized." *Id. at 5.*

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Question No. 11

Responding Witness: Robert M. Conroy

Q-11. Refer to the Conroy Testimony, page 35, line 19.

a. Provide the cost of the advanced meter.

b. Explain if the cost of this meter has been included in the cost for the Solar Share subscription.

A-11.

a. The cost of the meter depends on the type of meter needed by the customer which currently ranges from $117.70 to $307.09. For the Louisville Gas & Electric customers currently expected to enroll in Solar Share the average cost of the AMI meter would be $140.44.

b. No. The cost has not been included for Solar Share as the meter can provide benefits beyond just net billing for Solar Share.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 12

Responding Witness: Robert M. Conroy

Q-12. Refer to the Conroy Testimony, page 41, lines 1-8. Explain why LG&E needs at least six months' notice to process requests for gas transportation service in a timely fashion and ensure that a new customer is placed on the correct rate.

A-12. LG&E is proposing to add the following language to both Rate FT (Sheet No. 30) and Rider TS-2 (Sheet No. 51): "A new customer is responsible for presenting its request to Company for service hereunder at least six (6) months prior to first receiving natural gas from Company under any of Company's rate schedules." The purpose of the additional language is to clarify the current language regarding new customers seeking transportation service under either Rate FT or Rider TS-2. The current language (to which LG&E is not proposing a change) provides that "new customers who have no historical gas consumption" may be allowed "to begin service hereunder prior to the November 1 date specified for existing customers." However, the current tariffs do not specify any notice period or lead time applicable to new customers.

Existing customers must provide notice to LG&E by March 31st to begin taking service the following November 1st. This represents a seven (7) month notice period. Existing customers must also demonstrate that they meet the minimum volume requirement to qualify for service under either Rate FT or Rider TS-2. Those requirements are in place for existing customers in order to prevent cost shifting to non-transportation gas customers (e.g., residential and commercial) and to enable LG&E to ensure that facilities (for example telemetry) and contractual arrangements required to implement transportation service are in place before the customer begins gas transportation service.

LG&E is adding the six month request period for new customers who are not yet taking gas service from LG&E for reasons similar to those discussed above. The six month period for new customers enables LG&E to collect and evaluate information provided by the customer to determine if the customer qualifies for the gas transportation service requested. It allows time to ensure that facilities (for example telemetry) and contractual arrangements required to implement transportation service are in place when the customer begins taking gas service. It allows the Company to more accurately estimate the customer's projected net revenue for application of its Main Extension Rules. Importantly, customers need to know early in their planning process if a contribution towards facilities will be required prior to LG&E's installing facilities. For example, a customer's projected net revenue assuming Rate FT would be different than a customer's projected net revenue assuming Rate IGS.

The proposed notice period ensures that customers are placed on the correct gas service when they initially start service, and the required facilities are installed. Importantly, no existing customer will be affected by the clarification.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 13

Responding Witness: Robert M. Conroy

Q-13. Refer to the Conroy Testimony, page 42, lines 4-7. Explain the reason for the change to require Rate DGGS customers who also are provided service under Rider TS-2 to provide at least two hours' notice of changes in the hourly rates of gas consumption.

A-13. LG&E is proposing to add the following language to Rider TS-2 Sheet 51.4: "Company may require customers served under Rate DGGS and provided with gas transportation service through this rider to provide notice of not less than two (2) hours of changes in the hourly rates of gas consumption."

Customers served under Rate DGGS use natural gas to generate electricity. Customers under Rate DGGS who have a generation load that qualifies for Rider TS-2 are large customers. Gas-fired generation loads can be highly unpredictable. Based on LG&E's experience in providing gas transportation services, it is difficult for customers to anticipate and accurately schedule gas matching their requirements.

Gas transportation services require gas supplies to be scheduled for delivery to LG&E a day in advance -- which may not align with the customer's need for natural gas to generate electricity. Requiring the customer to provide a two hour notice of the change in its hourly rate of gas consumption can help LG&E better manage the daily and hourly imbalances that can be expected to occur when gas deliveries to LG&E by the customer do not match gas consumption by the customer. Adequate notice is designed to help LG&E maintain system reliability.

No customers taking service under Rate DGGS currently have or qualify for Rider TS-2 gas transportation service. Therefore, no existing customer would be affected by this change.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 14

Responding Witness: Robert M. Conroy

Q-14. Refer to the Conroy Testimony, page 43, lines 2-3. Explain who will pay for the stranded costs if the five year contract is not met by the customers.

A-14. Tariff provisions including written contractual arrangements and financial guaranties are provided for in Rider SFC to ensure that qualifying customers will be required to and be able to repay any amounts extended under Rider SFC (Standard Facility Contribution). As a result of these provisions, service under this rider will not give rise to stranded costs. Specifically, any customer qualifying for service under Rider SFC must enter into a written contract with LG&E specifying that the customer shall be contractually obligated to repay amounts extended pursuant to Rider SFC. Additionally, Rider SFC includes provisions in the CREDITWORTHINESS section of Rider SFC to ensure that the qualifying customer will have the financial ability to meet its contractual obligations. These creditworthiness provisions include requirements that the customer must provide at LG&E's request an irrevocable letter of credit or other assurance that will provide for any repayment of customer's obligation under Rider SFC if the customer fails to make the contractually required payments.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 15

Responding Witness: Robert M. Conroy

Q-15. Refer to the Conroy Testimony, page 43, lines 5-10. Explain the rationale behind each of the limitations that would allow LG&E to decline service to a customer.

A-15. The AVAILABILITY section of Rider SFC (Standard Facility Contribution) contains the following limitations regarding the provision of service under that rider:

1. Total main extension costs subject to this rider are limited to $4,000,000 per calendar year. Because LG&E is providing service under this rider for the first time, LG&E is unsure of the response by customers to its availability. As a result, LG&E has limited the amount to be extended per calendar year to $4,000,000. The $4,000,000 cap is approximately 0.5% of the LG&E's gas business rate base.
2. The amount available to an individual customer under Rider SFC is limited to $2,000,000. This limit is designed to ensure that a single customer does not use the full annual cap of $4,000,000 on one extension, thereby providing for the potential for multiple customers to use Rider SFC in a given year.
3. LG&E is not obligated to provide service to customers requiring amounts less than $500,000. The purpose of this threshold is to limit the use of Rider SFC to main extensions large enough in size to provide the potential to significantly extend the gas system. Longer extension provide more opportunity to add additional customers to the extension that would increase throughput and benefit existing customers.
4. Facilities that are likely to become obsolete prior to the end of the five-year contract term are not eligible for service under Rider SFC. This limitation prevents the use of the SFC Rider for "transient" type requests that are not likely to maintain on-going gas use.

These limits are all intended to reduce potential risk under the tariff and to maximize the potential for load growth that would benefit all customers.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 16

Responding Witness: Robert M. Conroy

Q-16. Refer to the Conroy Testimony, page 44, lines 16-19.

a. Explain how the estimated annual net revenue will be guaranteed.

b. Explain what happens if the annual net revenue does not meet the estimated amount.

A-16.

a. In the event that the customer's gas use does not generate the estimated net revenue amount, the customer is contractually obligated to reimburse LG&E for the difference between the actual net revenue and the estimated net revenue.

b. See the response to part a.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 17

Responding Witness: Robert M. Conroy

Q-17. Refer to the Conroy Testimony, page 48, lines 9-16.

a. Provide the terms and conditions of the FLEX Program.

b. Explain why these terms and conditions are not in LG&E's tariff.

A-17.

a. The Fixed and Limited Income Extension ("FLEX") program was included in the Stipulation and Recommendation filed in Case No. 2009-00549. This program was established to effectively allow eligible customers to pay their bills after they receive their monthly Social Security or pension checks. Exhibit 7 of the Stipulation and Recommendation as noted included the objective, proposal, and eligibility and requirements for the FLEX Program.

b. The Commission issued an Order on July 30, 2010 in the case noted in part a above. On page 35 of the Order under the section title Findings on Stipulation, the following was stated:

> As noted above, LG&E's FLEX OPTION, described in detail in Exhibit 7 to the stipulation, will be continued. Upon questioning from the Commission at the hearing on June 8, 2010, LG&E indicated that it preferred that the FLEX OPTION not be made a part of the tariff, so as to enable LG&E the flexibility to make improvements to the program. The Commission will honor this request; however, before any change can be made to the FLEX OPTION, an informal conference with the Commission staff must be held whereby the rationale for the proposed change must be explained and justified to the satisfaction of the staff. The Commission appreciates the willingness of LG&E to develop and implement this plan which benefits its customers and does not want to limit the ability of LG&E to make necessary changes.

Each month the Companies provide an update to the Commission on the number of customers enrolled in the program.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 18

Responding Witness: William Steven Seelye

Q-18. Refer to the Direct Testimony of William Steven Seelye, page 2, lines 7-12. Provide any differences between the current LOLP COSS and the LOLP COSS filed with the 2016 rate case.

A-18. There are no differences between the LOLP methodology that was used to prepare the LOLP COSS filed in 2016 as compared to the LOLP COSS methodology filed in this proceeding.

Any differences in the LOLP allocation factors between the two COSS are a result of differences in the input data for the LOLP calculations such as class loads, system loads, and generating unit characteristics including forced outage rates.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 19

Responding Witness: William Steven Seelye / John K. Wolfe

Q-19. Refer to Seelye Testimony, page 38, line 19.

a. Explain why five years was chosen as the time period to pay the LED Conversion Fee.

b. Explain if the light is replaced, with the old light go back into inventory to be installed later for another customer.

A-19.

a. The Company considered an amortization period from three to five years, which is consistent with the amortization periods that have been used for amortization of regulatory assets of similar magnitude. An amortization period of five years, rather than three years, was chosen to minimize the impact on customers choosing to replace currently functioning non-LED fixtures with LED fixtures. An amortization period of three years would have resulted in a higher Conversion Fee.

b. Because non-LED lights will no longer be offered for new or replacement lighting installations, it is anticipated that non-LED fixtures will be scrapped whenever they are replaced with LED fixtures at the customers' request. The Company does not believe that there is a resale market for non-LED fixtures that have been replaced with LED fixtures.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 20

Responding Witness: William Steven Seelye

Q-20. Refer to the Seelye Testimony, page 17, Table 2. Also refer to Mr. Seelye's Testimony in Case No. 2016-00371, page 12, Table 3. Explain why the percent of customer related fixed costs has decreased from 22.9 percent to 22.2 percent.

A-20. The primary reasons identified for the decrease in the percent of customer related fixed costs are: (i) the impact that the income tax reduction had on fixed-cost components of the rate and (ii) the lower relative increase in customer-related costs compared to the increase in production-related costs, which are demand-related. In general, the lower income tax rate had a downward impact on all fixed-cost components of the rates (including customer-related costs) which are largely driven by carrying costs related to physical assets.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 21

Responding Witness: William Steven Seelye

Q-21. Refer to the Seelye Testimony, page 41, lines 20-22. Provide support for the proposed increase of 2.97 percent for LG&E.

A-21. The 2.97 percent factor was the increase, as applied to the non-LED rate component charges, necessary to produce the targeted 2.65 percent overall increase in revenue for the Lighting Service (LS) and Restricted Lighting Service (RLS) schedules, as shown in Table 1 of Mr. Seelye's testimony at page 8.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 22

Responding Witness: Robert M. Conroy / Elizabeth J. McFarland

Q-22. Refer to the Seelye Testimony, page 45, lines 1-16.

a. Provide support for changing to the net billing compensation mechanism to 15-minute intervals.

b. Explain if a solar share customer must convert to an AMI meter.

A-22.

a. Net billing provides several benefits to the customer beyond the current Buy-All Sell-All (BASA) model used in Solar Share. First, net billing incentivizes customer self-consumption coincident with solar generation. Under net billing when a kWh is self-consumed within the 15-minute interval, it is compensated at the full retail rate versus the current BASA which includes a net export sell rate at less than retail rate. Second net billing economically encourages customers to size their solar subscription to minimize solar generation in excess of their self-consumption. Thus, net billing helps to place solar share on a level playing field with customer-owned solar panels for generation up to the customer's energy usage.

b. Yes, as a condition of service under the SSP a customer must agree to have an advanced meter.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 23

Responding Witness: Robert M. Conroy / William Steven Seelye

Q-23. Refer to the Seelye Testimony, page 46, lines 1-9. Provide the average time it takes to fully charge a car.

A-23. Different vehicles charge at different speeds and have battery sizes that vary widely between 9 and 335 miles of electric range. As such, a vehicle on empty would require roughly 1-15 hours for a full charge. At a Level 2 charging station, like the ones being deployed for the Company's Electric Vehicle Charging program, the average vehicle adds about 11.5 miles of range per hour of charging and spends 1 hour and 46 minutes at a charging station per session.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 24

Responding Witness: Robert M. Conroy / Elizabeth J. McFarland

Q-24. Refer to the Seelye Testimony, page 46, lines 11-15 and page 47, lines 1-7. Confirm that under Rider EVSE-R, the customer will pay for the electric energy in a separate bill.

A-24. The Customer will pay the kWh energy charges on the same bill. Their energy consumption will be an accumulation of their normal kWh and that of the charging station. The EVSE-R monthly fees will be listed as a separate line item on the same bill.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 25

Responding Witness: Robert M. Conroy

Q-25. Refer to the Seelye Testimony, page 57. Provide a comparison of the bill for an LG&E customer taking service under Rate FT at the current rates and at the proposed rates at various usage blocks.

A-25. See Tab 67 (Schedule N – Gas, page 7 of 13) of the Filing Requirements for the typical bill comparison under present and proposed rates at a range of usage levels for a Rate FT customer.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 26

Responding Witness: Robert M. Conroy / William Steven Seelye

Q-26. Refer to the Seelye Testimony, page 62, lines 10-16.

a. Explain why a five-year period was used.

b. Explain who will pay for the stranded costs if the five year contract is not met by the customers

A-26.

a. A five-year payment period was selected to give customers an alternative to making an upfront cash payment while limiting the Company's exposure. The Company considered a payment period of five and ten years but selected a five-year payment period to limit its financial exposure.

b. See the response to Question No. 14.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 27

Responding Witness: Elizabeth J. McFarland / William Steven Seelye

Q-27. Refer to the Seelye Testimony, page 66, lines 8-22 and page 67 lines 1-7.

a. Provide an itemize list of any expenses LG&E incur when processing a late payment.

b. Explain if these expenses will still occur if the late charge is waived.

A-27.

a. There are no incremental expenses incurred when processing a late payment. Late payment charges are automatically processed and applied to customer accounts by the customer billing system.

b. Not applicable. See the response to part a.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 28

Responding Witness: William Steven Seelye

Q-28. Refer to the Seelye Testimony, pages 102-103. Here, Mr. Seelye explains that the cash working capital methodology proposed by LG&E in this case is the same Lead/Lag methodology approved by the Virginia State Corporation Commission.

a. Provide a comparative analysis between the Lead/Lag methodology proposed by LG&E in this proceeding to the methodology proposed by Atmos in Case No. 2015-00343.[1] Include in this analysis detailed explanations for any differences between the two methodologies.

b. Provide a comparative analysis between the Lead/Lag methodology proposed by LG&E in this proceeding to the methodology proposed by Kentucky-American Water and accepted by the Commission in Case No. 2012-00520.[2] Include in this analysis detailed explanations for any differences between the two methodologies.

A-28.

a. Based on a review of the testimony and workpapers filed by Atmos in Case No. 2015-00343, it does not appear that a lead/lag study was submitted in that proceeding. Attachment 1 of Atmos's Filing Requirement (FR_16(8)(b), Attachment 1) indicates that the 1/8th O&M Method for Cash Working Capital was utilized. The Companies reviewed workpapers and responses to data requests submitted by Atmos in Case No. 2015-00343 and could not find where Atmos had submitted a lead/lag study.

In his testimony filed in Case No. 2015-00343, Atmos's witness Gregory K. Waller states: "The components of rate base are: net plant in service, construction work in progress, cash working capital calculated using the 1/8 O&M expense method, plus an allowance for other working capital items consisting of materials and supplies, gas stored underground, and prepayments,

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[1] Case No. 2015-00343, Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications (Ky. PSC Aug. 4, 2016).
[2] Case No. 2012-00520, Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year (Ky. PSC Oct. 25, 2013).

less customer advances for construction and deferred income taxes." (Testimony of Gregory K. Waller, at p. 7.)

b. The Companies reviewed the testimony, exhibits and responses to data requests filed by Kentucky-American Water Company ("KY-Amer") in Case No. 2012-00520 supporting its lead/lag study. Based on the information that was filed by KY-Amer, the Companies could only perform a high-level review of KY-Amer's lead/lag study. However, the methodology for calculating expense lead days, as supported by Exhibit 37, Schedule B-5.2 of KY-Amer's Filing Requirement, and as described in the Direct Testimony submitted by Linda C. Bridwell, generally appears to be the same as used by the Company. Specifically, Schedule B-5.2 breaks out the expense categories similarly to KU and LG&E. Also, similar to LG&E and KU, KY-Amer assumed zero lead days for accrual items such as depreciation expenses, amortization expenses, deferred income taxes. The methodology for calculating revenue lag days also appears to be similar. Differences the Companies observed are potential lead/lag day differences for pension and OPEB, uncollectibles, and net income. The Companies included working capital for pension and OPEB as a balance sheet item in rate base (see Schedule B-5.2 filed with the Companies' Application). The Companies included uncollectibles expense in the determination of lead/lag results but did not include net income in the determination of lead/lag results. Also, the Companies included pass-through items, (i.e., school tax, sales tax, and franchise fees) in their lead/lag studies; however, KY-Amer did not appear to include these pass-through items in its lead/lag study.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information Dated November 13, 2018

Case No. 2018-00295

Question No. 29

Responding Witness: William Steven Seelye

Q-29. Refer to the Seelye Testimony, Exhibit WSS-4. Provide cost support for the following:

a. Total Installed Cost

b. Fixed Carrying Charge

c. Annual Carrying Cost

A-29.

a. See attachment being provided in Excel format. The breakdown of costs for Overhead LED lights can be found in the tab labeled "Overhead Lights", and the costs for Underground LED Lights can be found in the tab labeled "Underground Lights".

b. See attachment being provided in Excel format. The determination of the fixed carrying charges can be found in the tab labeled "Fixed Carrying Cost".

c. Annual Carrying Cost is the product of Total Installed Cost and Fixed Carrying Charge.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 30

Responding Witness: William Steven Seelye

Q-30. Refer to the Seelye Testimony, Exhibit WSS-5. Provide cost support for the following:

a. Pole allocation factor.

b. Depreciation Rate.

A-30.

a. See the Excel attachment to the response to Question No. 29, parts a and b. The pole allocation factor is calculated in the tab labeled "Maintenance & NBV".

b. The depreciation rate is based on recovering the remaining book value of the original light over a 5-year period. Therefore, the depreciation rate would be determined by 100%/5 years = 20%.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information Dated November 13, 2018

Case No. 2018-00295

Question No. 31

Responding Witness: Robert M. Conroy / William Steven Seelye

Q-31. Refer to the Seelye Testimony, Exhibit WSS-6. Also, refer to the Tariff Filing 2018-00372[3] regarding the Revised Solar Share Program Tariff submitted by KU/LG&E pursuant to Case No. 2016-00274.[4] The total cost for LG&E and KU is estimated to be $136,392 in the instant case and $150,988 in Tariff Filing 2018-00372. Reconcile this difference.

A-31. See the testimony of Mr. Seelye at page 44, lines 9-13. WSS-6 reflects the latest estimated cost of the solar facilities. Tariff Filing 2018-00372 maintained the original estimated capital costs and was made specifically to remove the administration fee and update rates to reflect the Tax Cuts and Jobs Act.

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[3] TFS 2018-00372 effective 9/1 /2018.

[4] Case No. 2016-00274 Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Approval of an Optional Solar Share Program Rider (Ky. PSC Nov. 4, 2016).

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 32

Responding Witness: William Steven Seelye

Q-32. Refer to the Seeley Testimony, Exhibit WSS-7.

a. Provide support for the estimated investment per unit.

b. Explain why fixed charges are estimated to be 20.88 percent of the investment.

c. Provide support for the O&M costs.

d. Provide support for the charge point cost.

A-32. See attachment being provided in Excel format. Note that a correction has been made to the spreadsheet to determine the rates for EVSE. In the rates shown in Exhibit WSS-7 for EVSE, the FAC, OSS, and ECR mechanisms were inadvertently included. The rates for EVSE determined in the attached spreadsheet have been revised to exclude these adjustment factors. These rate updates do not impact the revenue deficiency because there are no customers projected to take service under Rate EVSE.

a. The support for the estimated investment per unit is included in the tab labeled "Costs Reference".

b. The fixed charges are calculated in the tab labeled "WACC – Carrying Charges".

c. O&M costs are calculated in the tab labeled "Costs Reference".

d. The support for the Charge Point cost is included in the tab labeled "Costs Reference".

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 33

Responding Witness: Daniel K. Arbough / Elizabeth J. McFarland / William Steven Seelye

Q-33. Refer to WSS-17.

a. Refer to page 1 of 2.

(1) Explain how US Bank/MUFG charges LG&E for returned checks/ACH.

(2) Explain how returned checks/ACH are processed by LG&E.

(3) Also refer to Case No. 2008-00252,[5] application, SLC Exhibit 5. Explain why the labor portion of the returned check/ACH charge has gone from $5.58 in Case No. 2008-00252 to $0.12 in this case.

b. Refer to page 2 of 2. Explain how the "Monthly carrying charge per pulse per meter per month" of $24.55 was calculated.

A-33.

a.

(1) US Bank invoices LG&E monthly for the various bank service fees which include fixed fees for the Monthly Maintenance service of Returned Checks ($2.50 per month) and the electronic ACH Return Report ($1.00 per month), and per-item fees for the following services: Returned Checks ($2.00), Returned Check Email Notice ($2.25), Returned Check Email Images ($2.00), Unauthorized ACH Returns ($6.00), ACH Returned Items ($1.00), and Electronic Notification of ACH Returns ($0.25). Note that not all of these per-item fees apply to every returned check/ACH.

MUFG automatically deducts returned check fees from LG&E's bank account each month and charges LG&E a fixed fee for the Monthly Maintenance service of Web Returned Images ($5.00 per month) and per-item fees for the following services for returned checks: Special Data Entry

[5] Case No. 2008-00252, Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Base Rates.

($0.30), Transmission Base Charge ($5.00), Deposited Items Returned-Chargeback ($2.50), and Web Returned Images ($0.50). MUFG does not process ACHs. Note that not all of these per-item fees apply to every returned check/ACH.

(2) Returned checks/ACH are processed in one of two ways – manually or automated. The majority of returned items are processed automatically.

(3) Labor costs have declined as more returns are processed via automated methods.

b. See attached. The monthly carrying charges used to determine the meter pulse charge are based on the levelized carrying charge rate for property with an Average Service Life (ASL) of 5 years applied to the current and replacement cost of the electronic pulse data collection equipment. The estimated replacement cost is determined using a 5-Year R3 Iowa type survivor curve.

Louisville Gas & Electric Company
Present Value of Replacement Plant as a Percentage of Original Cost

Year (1)	5-Year R3 Iowa Curve Percent Surviving (2)	Annual Replacement Percentage (3)	Cumulative Replacement Percentage (4)	Cost Escalation Factor at a 2.00% Inflation Factor (5)	Nominal Replacement Cost (6)	Present Value Factor at a 7.00% Discount Rate (7)	Present Value of Annual Replacement Cost (8)	Cumulative Present Value of Annual Replaced Cost (9)
					(3) x (5)		(6) x (7)	
0	100.0000							
1	99.2989	0.7011	0.7011	1.0200	0.7152	0.9346	0.6684	0.6684
2	96.8953	2.4035	3.1047	1.0404	2.5006	0.8734	2.1841	2.8525
3	90.7990	6.0963	9.2010	1.0612	6.4695	0.8163	5.2810	8.1335
4	78.0273	12.7718	21.9727	1.0824	13.8246	0.7629	10.5467	18.6802
5	54.7415	23.2857	45.2585	1.1041	25.7093	0.7130	18.3304	37.0106
			Present Value of Replacement Plant as a Percentage of Original Cost					37.0106

Louisville Gas & Electric Company
Meter Pulse Charge

1	Present Value of Replacement Plant as a Percentage of Original Cost			37.01
2	Original Cost Basis (100)			100
3	Total Present Value of Original and Replacement Cost Value as a Percentage of Original Cost			137.01
4	Monthly Carrying Charge Percentage (Levelized Carrying Charge Rate / 12 months)			0.02020
5	Applicable Carrying Charge Charge Percentage (Lines 3 x 5)			2.77%
6	O&M Percentage			0.29%
7	Distribution O&M 12 Months Ended April 30, 2018	$ 46,189,368		
8	Distribution Plant in Service as April 30, 2018	$ 1,307,098,256		
9	Total Monthly Revenue Requirement as Percentage of Original Cost			3.06%
10	Installed Cost of Meter Pulse Equipment			$801.63
11	Monthly Charge		$	24.55

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information Dated November 13, 2018

Case No. 2018-00295

Question No. 34

Responding Witness: David S. Sinclair

Q-34. Refer to the Direct Testimony of David S. Sinclair (Sinclair Testimony), page 8, lines 5-8. Confirm that there is no material difference in what was provided as a result of the final Order in Case No. 2017-00441.[6]

A-34. There is no material difference between the DSM assumptions used to prepare the 2019 load forecast and the final order. While the PSC eliminated the KSBA DSM program from the final ruling, this program was projected to only reduce total load by approximately 7 GWh annually in 2019 and 2020.

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[6] Case No. 2017-00441, Electronic Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Review, Modification, and Continuation of Certain Existing Demand-Side Management and Energy Efficiency Programs (Ky. PSC Oct. 5, 2018).

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 35

Responding Witness: Gregory J. Meiman

Q-35. Refer to the Direct Testimony of Gregory J. Meiman (Meiman Testimony) page 5, lines 17-19. Mr. Meiman states that two independent studies have illustrated that LG&E's compensation and benefits package is competitive in the utility market. Provide any studies comparing LG&E's compensation and benefits package to the general Louisville area.

A-35. As indicated in testimony, LG&E believes it is competitive in compensation and benefits when compared to the utility market. As a general matter, the Company does not attempt to benchmark against specific municipal markets. However, the benefits and compensation studies utilized comparator groups that included a number of Kentucky entities.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 36

Responding Witness: Gregory J. Meiman

Q-36. Refer to the Meiman Testimony, page 12, line 14. Confirm that the TIA plan includes executives.

A-36. Any expense related to executive incentive compensation is excluded from the revenue requirement.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 37

Responding Witness: Gregory J. Meiman

Q-37. Refer to the Meiman Testimony, page 27, lines 19-21. Confirm that LG&E does not contribute to dental insurance.

A-37. Employees and the Company contribute to the cost of dental insurance. See the response to PSC 1-66, Attachment 5.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's Second Request for Information
Dated November 13, 2018**

Case No. 2018-00295

Question No. 38

Responding Witness: Lonnie E. Bellar

Q-38. Refer to the Direct Testimony of Daniel K. Arbough, page 5, lines 3-18.

a. Provide the increase in the number of employees KU/LG&E forecast to hire during the forecast year.

(1) Provide support for each forecasted hire.

(2) Provide the estimated cost for each hire.

A-38.

a. There is not an increase in headcount for KU or LKS during the forecasted period. There is a net increase of 7 employees for LG&E in the forecasted period. Generation will be increasing the number of employees at the Trimble County Generating Station by eight (8) during the forecast year; this is offset by a decrease in a different line of business. We do not allocate headcount between companies; we only allocate dollars. The amounts show in part (2) reflect total estimated costs of hiring which will then be allocated between the companies.

(1) The Trimble County Generating Station (Station) anticipates hiring four (4) Operations Station Helpers in the summer of 2019. There are twelve (12) Operators on each shift (4 shifts), and the Station plans to increase that number to thirteen (13) per shift. The main function of an Operators is to place equipment in and out of service as needed and to monitor all equipment and systems to ensure proper operation. The Operators accomplish this by monitoring the equipment remotely through the use of computers and by periodically checking each piece of equipment locally during their shift for any abnormalities in operation. The addition of new equipment and systems to meet government mandated environmental regulations is making it necessary to increase the number of Operators to ensure that this equipment if being operated correctly and monitored sufficiently. During the past few years, equipment such as the Unit 1 Pulse Jet Fabric Filter, Dry Sorbent Injection system and Mercury Control systems have been added. During 2019, new systems such as Unit's 1&2

Flyash Transfer Stations to support the Coal Combustion Residual Transport (CCRT) System and Process Water Ponds with associated pumping stations to support the Process Water System (PWS) will be placed in service. Additionally, during the past few years, the run time for the six Combustion Turbines at the Station has increased. The additional Operators will be used to perform the necessary functions to safely operate and monitor the additional equipment.

The Station also plans to add four (4) Mechanical Repair Technicians, two in 2019 and two in 2020 to maintain the above mentioned additional equipment. With the CCRT system and PWS being commissioned, a substantial amount of new structures and equipment will need to be maintained by the Station's Maintenance staff. The CCRT system will consist of a gypsum dewatering facility, a gypsum storage building, four storage tanks, two flyash storages silos, four transfer towers and a variety of electrical and mechanical equipment. This system alone will include 25 pumps, 4 blowers, 4 exhausters, 3 air compressors, 10 conveyors, 5 agitators, 2 vacuum belts, 106 motors and a significant amount of other associated equipment. The transport portion of the CCRT system that will convey the CCR materials up to the new landfill includes a 1,200 ton per hour, 1.2 mile long pipe conveyor. This conveyor goes to a new transport building and truck load out system at the new landfill. The PWS includes an additional 48 pumps, 20 agitators, 74 motors, 2 air compressors, 4 filter presses and numerous other tanks, receivers, piping, valves and other associated equipment.

(2)

Position Description	**Anticipated Hire Date**	**Forecast Year Estimated Cost**
Operations Station Helper	6/1/2019	$ 68,993
Operations Station Helper	6/1/2019	$ 68,993
Operations Station Helper	7/1/2019	$ 63,200
Operations Station Helper	7/1/2019	$ 63,200
Mechanical Repair Technician	6/1/2019	$ 82,920
Mechanical Repair Technician	6/1/2019	$ 82,920
Mechanical Repair Technician	4/1/2020	$ 7,716
Mechanical Repair Technician	4/1/2020	$ 7,716

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 39

Responding Witness: Adrien M. McKenzie

Q-39. Refer to the Direct Testimony of Adrien M. McKenzie (McKenzie Testimony), page 7, line 27. Provide examples of unrepresentative financial inputs and describe the possible impact of an unrepresentative financial input on LG&E.

A-39. Based on a series of very restrictive assumptions, DCF theory reduces the actions, opinions, and expectations of all investors down to a dividend yield and growth component, with the only observable parameter being the market price of the stock. This masks the underlying complexities that accompany any attempt to distill every facet of investors' expectations into a single growth estimate. There is no direct link between this model and bond yields (historical, current, or expected), Federal Reserve policies, relative risk perceptions, or any other data input from the capital markets or the economy. As a result, it is not possible to pinpoint the exact mechanism by which capital market conditions or other considerations are translated into unrepresentative inputs. As FERC concluded in Opinion No. 551, "a direct causal analysis linking specific capital market conditions to particular inputs or assumptions of the DCF model is not necessary." *Ass'n of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 551, 156 FERC ¶ 61,234 (2016) at P 125. Nevertheless, one example of an unrepresentative financial input would be a growth rate estimate that is not representative of the expectations that investors have built into the observable prices of utility common stocks. As FERC has concluded, "any DCF analysis may be affected by potentially unrepresentative financial inputs to the DCF formula." *Coakley v. Bangor Hydro-Elec. Co.*, Opinion No. 531, 147 FERC ¶ 61,234 at P 144 (2014) at P 41. As a result, it is crucial to critically evaluate the results of all quantitative methods used to estimate the cost of equity and employ multiple approaches soundly applied.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 40

Responding Witness: Adrien M. McKenzie

Q-40. Refer to the McKenzie Testimony, page 15, lines 7-13. Provide any updates from Moody's regarding utility ratings.

A-40. Mr. McKenzie is not aware of any published updates from Moody's concerning industry-wide ratings in the utility sector.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 41

Responding Witness: Daniel K. Arbough

Q-41. Refer to the McKenzie Testimony, page 18, lines 16-22. Reconcile the 2017-2021 capital expenditure plan of $2.7 billion with the proposed capital expenditures.

A-41. The source of the amount quoted in the McKenzie testimony was the 2016 10-K (the referenced Moody's report is dated October 27, 2017), and is based on the 2017 business plan. The application in this case is based on the 2019 business plan. The amounts shown in the 10-K also include expenditures for jurisdictions other than Kentucky.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 42

Responding Witness: Daniel K. Arbough

Q-42. Refer to the McKenzie Testimony, page 19, lines 6-8. Standard & Poor's characterizes LG&E's capital expenditure programs as a significant financial risk. Explain why LG&E would choose to engage in such an aggressive capital expenditure program instead of a steady, less aggressive plan so as to not risk the company's credit ratings and maintain the ability to attract capital and fund these projects in an effective manner.

A-42. The Company does not agree with the assertion in the data request that its capital program is aggressive. The plan allows the Company to maintain financial ratios consistent with its strong investment grade credit ratings and attract capital at attractive interest rates.

Bond ratings from Standard & Poor's (S&P) take into account many factors with financial risk being one. The most recent S&P report is attached. While the Company does have a "Significant" Financial Risk Profile as shown on page 2, it combines that with an "Excellent" Business Risk Profile. As discussed on pages 4 through 13 of Exhibit DKA-4 to my direct testimony, the Business Risk Profile is a function of risks such as industry risk of competition, cyclicality, operating efficiency, and the regulatory environment. As shown on page 6 of the attachment, if the Company did not have the Excellent Business Risk Profile it could not maintain its Significant Financial Risk Profile and retain its a- anchor rating. The Company also issues secured debt allowing it to achieve a bond rating of A from S&P and issue debt at attractive interest rates.

The ability to retain its strong credit rating with the Significant Financial Risk Profile allows the Company to complete the required environmental capital projects and to upgrade the reliability of its network while keeping rates low. This provides the Company the opportunity to meet the demands of our customers and the environmental regulators.

S&P Global
Ratings

RatingsDirect®

Summary:

Louisville Gas & Electric Co.

Primary Credit Analyst:
Safina Ali, CFA, New York (1) 212-438-1877; safina.ali@spglobal.com

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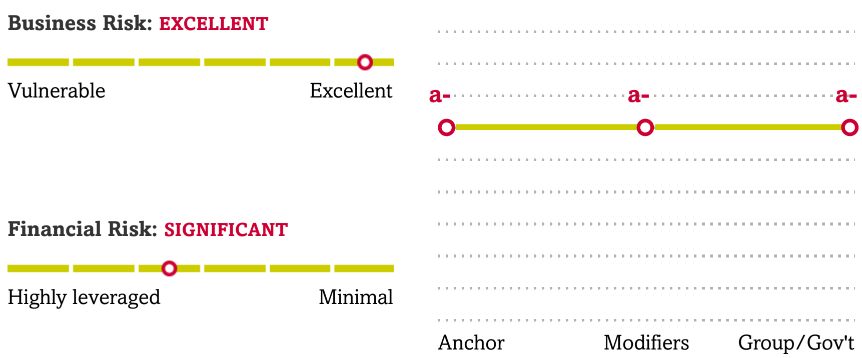
Louisville Gas & Electric Co.



CORPORATE CREDIT RATING

A-/Stable/A-2

Rationale

Business Risk: Excellent	Financial Risk: Significant
• Vertically integrated electric and natural gas distribution utility. • Operates under a generally constructive and credit-supportive regulatory framework in Kentucky. • Limited service territory and midsized customer base.	• Core credit ratios support a significant financial risk profile assessment using moderate financial benchmarks compared to the typical corporate issuer. • Elevated capital expenditure program, with focus on distribution infrastructure investment and environmental compliance spending, leading to negative discretionary cash flow. • Balanced capital structure supports overall credit profile.

Outlook: Stable

The stable rating outlook on Louisville, Ky.-based Louisville Gas & Electric Co. (LG&E) reflects the rating outlook on its parent, PPL Corp. (PPL), because S&P Global Ratings views LG&E as a core subsidiary of its parent.

The stable outlook on PPL is based on the company's excellent business risk profile that we view at the upper end of the range and significant financial risk profile, which is at the lower end of the range. Under our base-case scenario we expect that funds from operations (FFO) to debt will range from 13%-14% while debt to EBITDA will remain elevated at over 5x.

Downside scenario

We could lower the ratings on PPL and its subsidiaries, including LG&E, if core credit ratios weaken such that FFO to debt is below 13% on a consistent basis over the next 12 to 18 months, while maintaining the current level of business risk.

Upside scenario

Given our assessment of business risk and our base-case scenario for financial performance, we do not anticipate higher ratings during the outlook period. However, higher ratings would largely depend on PPL achieving FFO to debt of more than 18% on a consistent basis over the next 12 to 18 months, while maintaining the current level of business risk.

Our Base-Case Scenario

Assumptions

- Gross margin growth is primarily driven by anticipated base rate increases and the timely recovery of planned environmental compliance costs.
- Elevated capital spending of about $600 million annually for the next few years, mainly for distribution infrastructure investment and upgrading generation to comply with environmental regulations.
- Discretionary cash flow to remain negative due to higher capital expenditures and dividends.
- All debt maturities are refinanced.

Key Metrics

	2016A	2017E	2018E
FFO/debt (%)	25.5	21-23	21-23
Debt/EBITDA (x)	3.4	About 3.5	About 3.5

A--Actual. E—Estimate. FFO—Funds from operations.

Company Description

LG&E operates in and around Louisville, Ky., where it provides electricity service to 400,000 customers and natural-gas distribution service to 320,000 customers.

Business Risk: Excellent

We assess LG&E's business risk profile based primarily on the company's regulated integrated electric utility and natural gas distribution operations under the generally constructive regulatory framework in Kentucky.

LG&E has limited scale, scope, and diversity, serving a customer base of about 400,000 electric and about 320,000 natural gas customers in Louisville. The customer base consists largely of residential and commercial customers, insulating the company from fluctuations in demand and providing stability to the company's cash flows. Our assessment also accounts for the modest operating diversity of the company due to its electric and natural gas operations.

The company has about 3,000 megawatts (MW) of generation capacity, which has higher operating risk than transmission and distribution (T&D) operations. The company has been upgrading its coal-fired generation plants to comply with environmental regulations. While the capital costs of these upgrades are significant, spending can be recovered through an environmental cost recovery mechanism, which limits regulatory lag and is supportive of the credit profile. Under the regulation of the Kentucky Public Service Commission (PSC), the company benefits from other mechanisms such as a gas line tracker and a pass-through fuel cost mechanism. These mechanisms increase the stability of the company's returns.

Moreover, the company's low-cost coal-fired generation and efficient operations contribute to overall competitive rates for customers.

Financial Risk: Significant

Under our base-case scenario, we project that LG&E's FFO to debt will range from 21%-23% and debt to EBITDA will remain about 3.5x. Over the next few years, we expect credit measures to benefit from the company's use of regulatory mechanisms to recover its invested capital. Our assessment also includes recently approved rate case outcomes that increased electric rates by about $57 million and gas rates by about $7 million.

We assess LG&E's financial risk profile as significant using moderate financial benchmarks compared to the typical corporate issuer, accounting for the company's low-risk regulated electric T&D and natural gas distribution operations, which are partially offset by relatively higher-risk regulated generation.

Liquidity: Adequate

We assess LG&E's liquidity as adequate to cover its needs over the next 12 months. We expect that the company's liquidity sources will exceed its uses by 1.1x or more, the minimum threshold for this designation under our criteria and that the company will also meet our other requirements for such a designation.

We view LG&E as having well-established and solid bank relationships, the ability to absorb high-impact, low-probability events without the need for refinancing, and a satisfactory standing in credit markets.

Additionally, we expect that LG&E's liquidity will benefit from stable cash flow generation, a $500 million revolving credit facility, sufficient liquidity support provided by the parent to meet ongoing needs, and manageable debt maturities over the next few years.

Principal Liquidity Sources	Principal Liquidity Uses
• Minimal cash balance assumed; • Revolving credit facility of $500 million; and • Cash FFO of about $550 million.	• Debt maturities of about $200 million; • Maintenance capital expenditure of about $550 million; and • Common stock dividends of about $145 million.

Group Influence

We assess LG&E as a core subsidiary of parent PPL Corp. because it is highly unlikely to be sold, is integral to the group's overall strategy, possesses significant management commitment, is a major contributor to the group, and is closely linked to the parent's reputation. Moreover, there are no meaningful insulation measures in place that protect LG&E from its parent. As a result, the issuer credit rating on LG&E is 'A-', in line with the group credit profile of 'a-'.

Ratings Score Snapshot

Corporate Credit Rating

A-/Stable/A-2

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Excellent

Financial risk: Significant

- **Cash flow/Leverage:** Significant

Anchor: a-

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : a-

- **Group credit profile:** a-
- **Entity status within group:** Core (no impact)

Issue Ratings

The short-term rating on LG&E is A-2, based on our issuer credit rating of 'A-'.

Recovery Analysis

LG&E's first-mortgage bonds benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently acquired. Collateral coverage of over 1.5x supports a recovery rating of '1+' and an issue rating one notch above the issuer credit rating.

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, Sept. 21, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	**a-**	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 43

Responding Witness: Adrien M. McKenzie

Q-43. Refer to the McKenzie Testimony, page 26, lines 12-19.

a. According to the October 26, 2018 publication of Value Line, Issue 11, Sempra Energy has announced an acquisition for lnfraREIT. Provide an explanation for including Sempra Energy in the proxy group.

b. Explain why MGE Energy, Inc., was not included in the proxy group.

A-43.

a. While participation in a merger or acquisition transaction may warrant eliminating a firm from a proxy group, this determination should be based on an evaluation of the extent to which the specific transaction leads to distortion in the inputs used to apply the quantitative methods used to estimate the cost of equity. For example, in certain cases securities analysts such as Value Line indicate that their projections will not include the impact of the transaction until after it is finalized, whereas observable stock prices already account for investors' expectations of the transaction's impact on growth expectations. This can lead to a mismatch between the stock prices and growth rates used to apply the DCF model. In the case of InfraREIT, while the acquisition is certainly noteworthy, the $1.275 billion purchase price represents only approximately 4% of Sempra Energy's market capitalization and approximately 3.3% of total capital. Given the relatively small size of the transaction in relation to Sempra Energy, there is no indication that this would warrant excluding Sempra Energy from the proxy group. Investors recognize that utilities are routinely engaged in a variety of transactions, including asset sales and purchases and the spin-off or acquisition of business lines or subsidiaries, and securities analysts' routinely factor such events into their forecasts. Absent evidence that such transactions are undermining the reliability of the quantitative approaches used to estimate the cost of equity, there is no basis to exclude the company at issue from the proxy group.

b. MGE Energy, Inc. was not included in the proxy group because it does not have published corporate credit ratings from S&P or Moody's.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 44

Responding Witness: Adrien M. McKenzie

Q-44. Refer to the McKenzie Testimony, page 33, line 6. Explain the ongoing regulatory risks that utilities are facing.

A-44. Utilities face ongoing regulatory risks related to their ability to recover prudently incurred costs to provide service, on time and in full, and earn investors' required return on the capital employed. Such risks include the degree of transparency, predictability, and consistency of the regulatory process; the degree to which the regulatory framework considers financial integrity and credit quality; the degree of regulatory independence and insulation from political intervention; the ability of tariff-setting procedures to allow timely recovery of operating and capital costs; the degree of flexibility to allow recovery of unexpected costs; and capital support during construction to alleviate funding and cash flow pressure during periods of capital investment.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 45

Responding Witness: Adrien M. McKenzie

Q-45. Refer to the McKenzie Testimony, page 47. Provide an update to the average Moody's monthly yields for Baa utility bonds.

A-45. The most recent average monthly yields on Baa Utility bonds available to Mr. McKenzie are shown in the table below:

	Baa
May	4.71%
Jun.	4.71%
Jul.	4.67%
Aug.	4.64%
Sep.	4.74%
Oct. 2018	4.91%
Average	**4.73%**

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 46

Responding Witness: Adrien M. McKenzie

Q-46. Provide the most current ROE awarded by each respective regulatory agency and the date of the award for the proxy group of gas and electric utilities or for the utility subsidiary if the proxy group member is a holding company.

A-46. Mr. McKenzie did not conduct a study of the ROEs allowed by each respective regulatory agency for the proxy group in the course of preparing his direct testimony in this case; nor was such a study necessary to support his conclusions and recommendations. However, information regarding allowed rates of return for the proxy firms is reported by Value Line, with the Value Line reports relied on in the preparation of Mr. McKenzie's testimony being provided in his workpapers in response to DOD Question 3. Additional information regarding allowed ROEs for the proxy companies is generally reported in their respective SEC Form 10-K reports, which are publicly available at:
https://www.sec.gov/edgar/searchedgar/legacy/companysearch.html.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 47

Responding Witness: Daniel K. Arbough

Q-47. Refer to the McKenzie Testimony, page 63. Provide the most recent awarded ROEs as published by RRA.

A-47. See attached.

S&P Global
Market Intelligence

October 11, 2018
spglobal.com/marketintelligence

RRA Regulatory Focus
Major Rate Case Decisions – January – September 2018

The average ROE authorized electric utilities was 9.64% in rate cases decided in the first three quarters of 2018, somewhat below the 9.74% average for cases decided in calendar-2017. There were 37 electric ROE determinations in the first nine months of 2018 versus 53 in the full year 2017. This data includes several limited-issue rider cases. Excluding these cases from the data, the average authorized ROE was 9.59% in rate cases decided in the first nine months of 2018, somewhat below the 9.68% average for the full year 2017. The difference between the ROE averages including rider cases and those excluding the rider cases is largely driven by ROE premiums of up to 200 basis points approved by the Virginia State Corporation Commission in riders related to certain generation projects (see the Virginia Commission Profile).

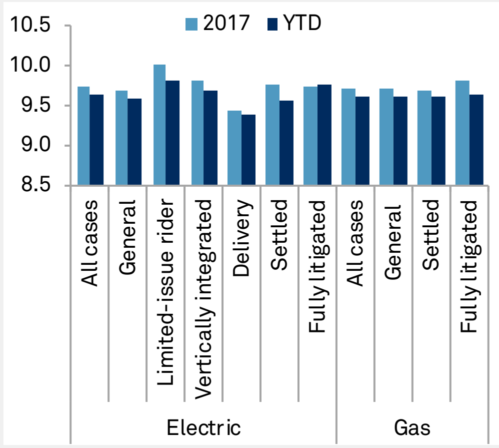
The average ROE authorized gas utilities was 9.62% in cases decided during the first three quarters of 2018 versus 9.72% in full-year 2017. There were 26 gas cases that included an ROE determination in the first nine months of 2018, versus 24 in full-year 2017. RRA notes that the 2017 data includes an 11.88% ROE determination for an Alaska utility. Absent this "outlier," the 2017 gas ROE average is 9.63%.

In the first nine months of 2018, the median authorized ROE in all electric utility rate cases was 9.7%, up from 9.6% from full-year 2017. For gas utilities, the median authorized ROE in cases decided in the first nine months of 2018 was 9.55%, versus 9.6% in 2017.

Over the last several years, the persistently low-interest-rate environment has put downward pressure on authorized ROEs. As shown in the graph below, the annual average ROE has generally declined since 1990 and has been below 10% for electric utilities since 2014 and below 10% for gas utilities since 2011.

After a busy 2017, when more than 130 cases were decided, there were 84 electric and gas cases in which a decision was rendered in the first three quarters of 2018, including cases where no ROEs were specified. With over 85 rate cases pending, 55 of which are likely to be decided by year end, 2018 is shaping up to be another busy year for regulators. Rate case activity has been quite robust, with more than 100 cases decided in several of the last full calendar years.

Authorized return on equity (%)
Dashboard



Electric	2017	YTD
All cases	9.74	9.64 ▼
General rate cases	9.68	9.59 ▼
Limited-issue rider cases	10.01	9.80 ▼
Vertically integrated cases	9.80	9.69 ▼
Delivery cases	9.43	9.38 ▼
Settled cases	9.75	9.55 ▼
Fully litigated cases	9.73	9.75 ▲
Gas	**2017**	**YTD**
All cases	9.72	9.62 ▼
General rate cases	9.72	9.62 ▼
Settled cases	9.68	9.61 ▼
Fully litigated cases	9.82	9.63 ▼

Data compiled Oct. 10, 2018.
YTD = year-to-date, through Sept. 30, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

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Principal Analyst

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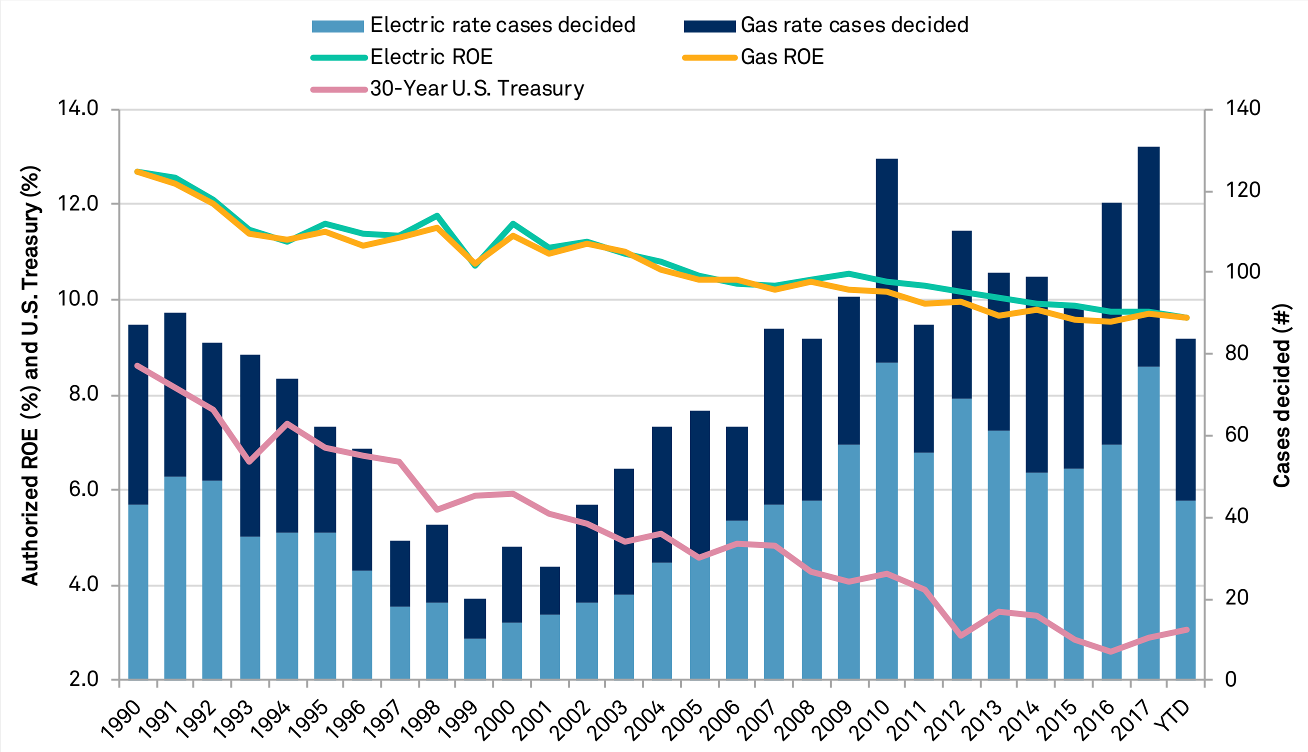
Average electric and gas authorized ROEs and number of rate cases decided



Data compiled Oct. 10, 2018.
YTD = year-to-date, through Sept. 30, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

Increased costs associated with environmental compliance, generation and delivery infrastructure upgrades and expansion, renewable generation mandates and employee benefits argue for the continuation of an active rate case agenda over the next few years. In addition, the need to address the impacts of the federal tax reform is causing rate case agendas to be more active than previously expected.

In addition, rising interest rates could also contribute to increased rate case activity. If the U.S. Federal Reserve, or the Fed, continues its policy initiated in 2015 to gradually raise the federal funds rate, utilities will likely face higher capital costs and need to initiate rate cases to reflect the higher capital costs in rates.

In September 2018, the Fed raised the benchmark federal funds rate by a quarter point, bringing the rate to a target range of 2.00% to 2.25%. The latest hike was the third increase in 2018 and the eighth since the Fed's tightening cycle began in 2015. One more hike is anticipated in December 2018, and as the U.S. economy continues to expand and labor markets remain strong, the Fed is expected to continue to gradually raise the federal fund rates in 2019.

A more granular look at ROE trends

The discussion thus far has looked broadly at trends in authorized ROEs; the sections that follow provide a more granular view based upon the types of proceedings/decisions in which these ROEs were established.

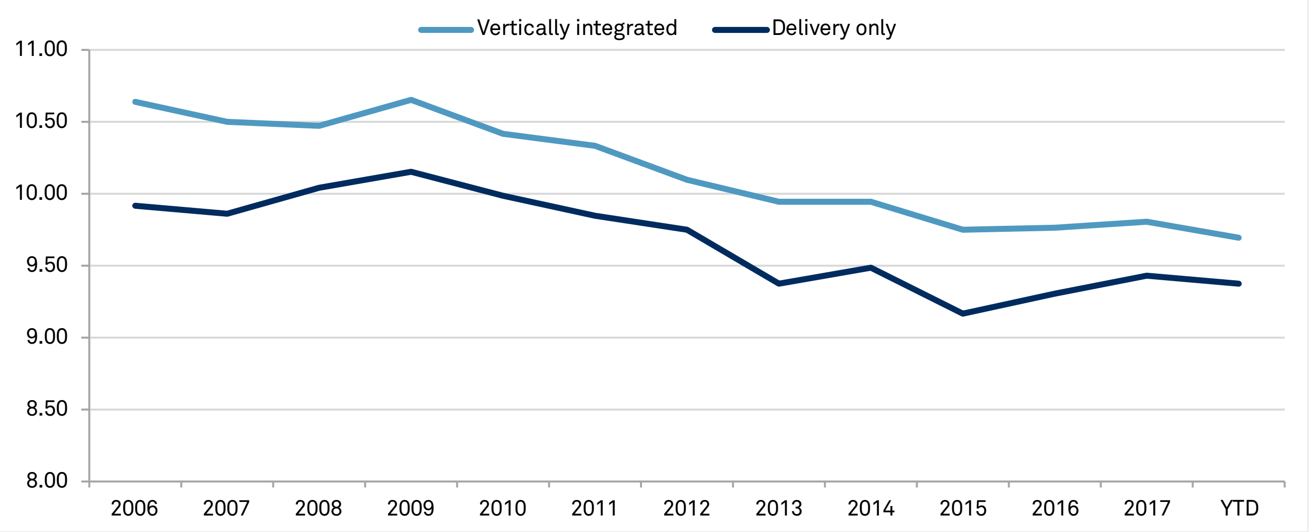
RRA has observed that there can be significant differences between the ROE averages from one subcategory of cases to another.

As a result of electric industry restructuring, certain states unbundled electric rates and implemented retail competition for generation. Commissions in those states now have jurisdiction only over the revenue requirement and return parameters for delivery operations.

Comparing electric vertically integrated cases versus delivery-only proceedings, RRA finds that the annual average authorized ROEs in vertically integrated cases typically are about 30 to 70 basis points higher than in delivery-only cases, arguably reflecting the increased risk associated with ownership and operation of generation assets.

For vertically integrated electric utilities, the average ROE authorized was 9.69% in cases decided during the first three quarters of 2018 versus 9.8% for cases decided in calendar-2017. For electric distribution-only utilities, the average ROE authorized in the first three quarters of 2018 was 9.38% versus 9.43% in all of 2017.

Average authorized electric ROEs



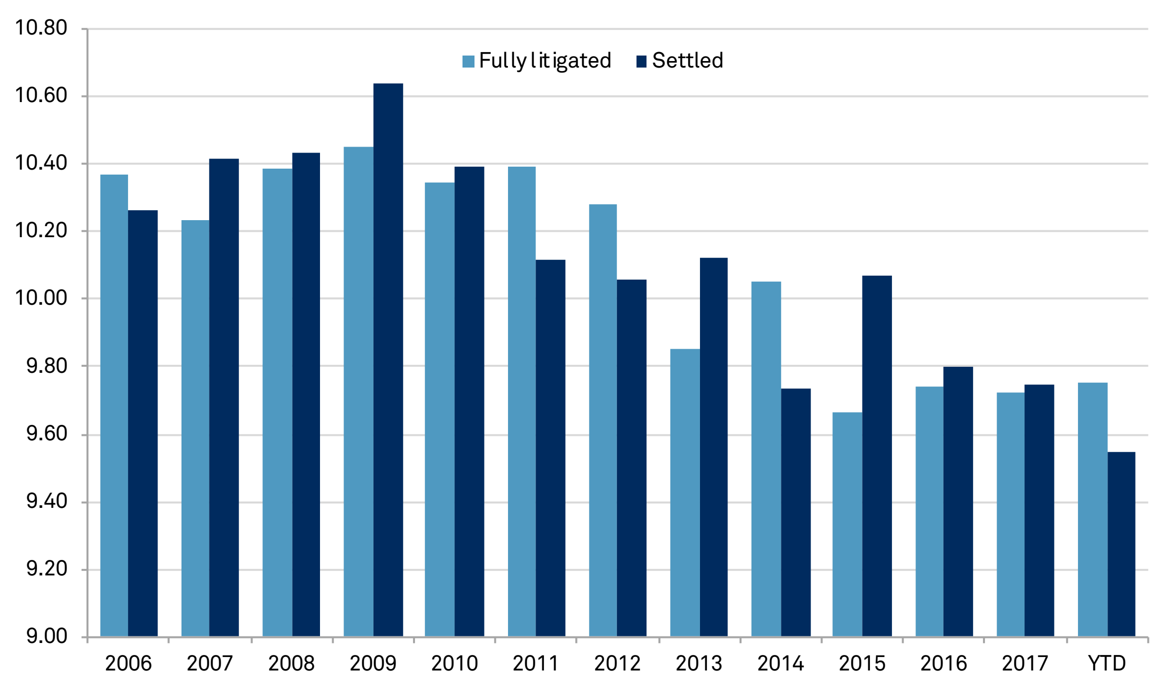
Data compiled Oct. 10, 2018.
YTD = year-to-date, through Sept. 30, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

Settlements have frequently been used to resolve rate cases over the last several years, and in many cases, these settlements are "black box" in nature and do not specify the ROE and other typical rate case parameters underlying the stipulated rate change. However, some states preclude this type of treatment, and so, settlements must specify these values if not the specific adjustments from which these values were derived.

For both electric and gas cases, RRA has found no discernible pattern in the average authorized ROEs in cases that were settled versus those that were fully litigated. In some years, the average authorized ROE was higher for fully litigated cases, in others, it was higher for settled cases, and in a handful of years, the authorized ROE was similar for both fully litigated and settled cases.

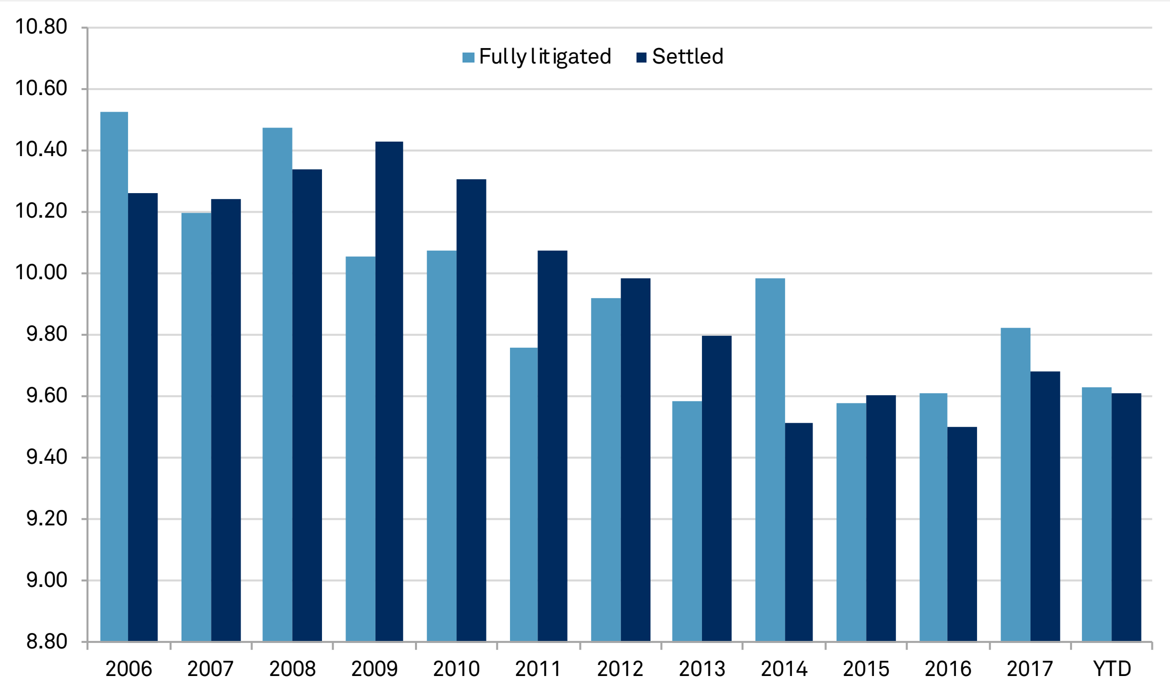
Over the last several years, the annual average authorized ROEs in electric cases that involve limited-issue riders was typically at least 70 basis points higher than in general rate cases, driven by the ROE premiums authorized in Virginia. Limited-issue rider cases in which an ROE is determined have had extremely limited use in the gas industry.

Average authorized electric ROEs, settled versus fully litigated cases



Data compiled Oct. 10, 2018.
YTD = year-to-date, through Sept. 30, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

Average authorized gas ROEs, settled versus fully litigated cases



Data compiled Oct. 10, 2018.
YTD = year-to-date, through Sept. 30, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

The table on page 6 shows the average ROE authorized in major electric and gas rate decisions annually since 1990 and by quarter since 2014, followed by the number of observations in each period. The tables on page 7 indicate the composite electric and gas industry data for all major cases, summarized annually since 2004 and by quarter for the past six quarters.

Included in the tables beginning on page 8 of this report are comparisons, since 2006, of average authorized ROEs for settled versus fully litigated cases, general rate cases versus limited issue rider proceedings and vertically integrated cases versus delivery-only cases.

The individual electric and gas cases decided in 2018 are listed on pages 10 and 11, with the decision date shown first, followed by the company name, the abbreviation for the state issuing the decision, the authorized rate of return, or ROR, the ROE and the percentage of common equity in the adopted capital structure. Next, we indicate the month and year in which the adopted test year ended, whether the commission utilized an average or a year-end rate base and the amount of the permanent rate change authorized. The dollar amounts represent the permanent rate change ordered at the time decisions were rendered. Fuel adjustment clause rate changes are not reflected in this study.

The simple mean is utilized for the return averages. In addition, the average equity returns indicated in this report reflect the ROEs approved in cases that were decided during the specified time periods and are not necessarily representative of either the average currently authorized ROEs for utilities industrywide or the returns actually earned by the utilities.

Please note: In an effort to align data presented in this report with data available in S&P Global Market Intelligence's online database, earlier historical data provided in previous reports may not match historical data in this report due to certain differences in presentation, including the treatment of cases that were withdrawn or dismissed.

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RRA Regulatory Focus: Major Rate Case Decisions

ROEs authorized January 1990 - September 2018

		Electric utilities			Gas utilities		
Year	Period	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
1990	Full year	12.70	12.77	38	12.68	12.75	33
1991	Full year	12.54	12.50	42	12.45	12.50	31
1992	Full year	12.09	12.00	45	12.02	12.00	28
1993	Full year	11.46	11.50	28	11.37	11.50	40
1994	Full year	11.21	11.13	28	11.24	11.27	24
1995	Full year	11.58	11.45	28	11.44	11.30	13
1996	Full year	11.40	11.25	18	11.12	11.25	17
1997	Full year	11.33	11.58	10	11.30	11.25	12
1998	Full year	11.77	12.00	10	11.51	11.40	10
1999	Full year	10.72	10.75	6	10.74	10.65	6
2000	Full year	11.58	11.50	9	11.34	11.16	13
2001	Full year	11.07	11.00	15	10.96	11.00	5
2002	Full year	11.21	11.28	14	11.17	11.00	19
2003	Full year	10.96	10.75	20	10.99	11.00	25
2004	Full year	10.81	10.70	21	10.63	10.50	22
2005	Full year	10.51	10.35	24	10.41	10.40	26
2006	Full year	10.32	10.23	26	10.40	10.50	15
2007	Full year	10.30	10.20	38	10.22	10.20	35
2008	Full year	10.41	10.30	37	10.39	10.45	32
2009	Full year	10.52	10.50	40	10.22	10.26	30
2010	Full year	10.37	10.30	61	10.15	10.10	39
2011	Full year	10.29	10.17	42	9.92	10.03	16
2012	Full year	10.17	10.08	58	9.94	10.00	35
2013	Full year	10.03	9.95	49	9.68	9.72	21
	1st quarter	10.23	9.86	8	9.54	9.60	6
	2nd quarter	9.83	9.70	5	9.84	9.95	8
	3rd quarter	9.87	9.78	12	9.45	9.33	6
	4th quarter	9.78	9.80	13	10.28	10.20	6
2014	Full year	9.91	9.78	38	9.78	9.78	26
	1st quarter	10.37	9.83	9	9.47	9.05	3
	2nd quarter	9.73	9.60	7	9.43	9.50	3
	3rd quarter	9.40	9.40	2	9.75	9.75	1
	4th quarter	9.62	9.55	12	9.68	9.75	9
2015	Full year	9.85	9.65	30	9.60	9.68	16
	1st quarter	10.29	10.50	9	9.48	9.50	6
	2nd quarter	9.60	9.60	7	9.42	9.52	6
	3rd quarter	9.76	9.80	8	9.47	9.50	4
	4th quarter	9.57	9.58	18	9.68	9.73	10
2016	Full year	9.77	9.75	42	9.54	9.50	26
	1st quarter	9.87	9.60	15	9.60	9.25	3
	2nd quarter	9.63	9.50	14	9.47	9.60	7
	3rd quarter	9.66	9.60	5	10.14	9.90	6
	4th quarter	9.73	9.60	19	9.68	9.55	8
2017	Full year	9.74	9.60	53	9.72	9.60	24
	1st quarter	9.75	9.90	13	9.68	9.80	6
	2nd quarter	9.54	9.50	13	9.43	9.50	7
	3rd quarter	9.63	9.70	11	9.69	9.60	13
2018	Year-to-date	9.64	9.70	37	9.62	9.55	26

Year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

S&P Global
Market Intelligence

Electric and gas utilities — summary table

	Period	ROR (%)	Number of observations	ROE (%)	Number of observations	Common equity to total capital (%)	Number of observations	Rate change amount ($M)	Number of observations
Electric utilities									
2004	Full year	8.71	20	10.81	21	46.96	19	1,806.3	29
2005	Full year	8.44	23	10.51	24	47.34	23	936.1	31
2006	Full year	8.32	26	10.32	26	48.54	25	1,318.1	39
2007	Full year	8.18	37	10.30	38	47.88	36	1,405.7	43
2008	Full year	8.21	39	10.41	37	47.94	36	2,823.2	44
2009	Full year	8.24	40	10.52	40	48.57	39	4,191.7	58
2010	Full year	8.01	62	10.37	61	48.63	57	4,921.9	78
2011	Full year	8.00	43	10.29	42	48.26	42	2,595.1	56
2012	Full year	7.95	51	10.17	58	50.69	52	3,080.7	69
2013	Full year	7.66	45	10.03	49	49.25	43	3,328.6	61
2014	Full year	7.60	32	9.91	38	50.28	35	2,053.7	51
2015	Full year	7.38	35	9.85	30	49.54	30	1,891.5	52
2016	Full year	7.28	41	9.77	42	48.91	41	2,332.1	57
	1st quarter	6.97	15	9.87	15	47.95	15	1,028.3	24
	2nd quarter	7.11	9	9.63	14	48.77	9	597.0	19
	3rd quarter	7.43	5	9.66	5	49.63	5	558.6	10
	4th quarter	7.32	19	9.73	19	49.51	19	563.8	24
2017	Full year	7.18	48	9.74	53	48.90	48	2,747.7	77
	1st quarter	6.89	13	9.75	13	48.89	13	592.6	14
	2nd quarter	6.78	13	9.54	13	47.94	13	372.4	18
	3rd quarter	7.10	11	9.63	11	51.15	11	269.2	13
2018	Year-to-date	6.91	37	9.64	37	49.23	37	1,234.2	45
Gas utilities									
2004	Full year	8.51	23	10.63	22	45.81	22	306.0	33
2005	Full year	8.24	29	10.41	26	48.40	24	465.4	35
2006	Full year	8.44	17	10.40	15	47.24	16	392.5	23
2007	Full year	8.11	31	10.22	35	48.47	28	645.3	43
2008	Full year	8.49	33	10.39	32	50.35	32	700.0	40
2009	Full year	8.15	29	10.22	30	48.49	29	438.6	36
2010	Full year	7.99	40	10.15	39	48.70	40	776.5	50
2011	Full year	8.09	18	9.92	16	52.49	14	367.0	31
2012	Full year	7.98	30	9.94	35	51.13	32	264.0	41
2013	Full year	7.43	21	9.68	21	50.60	20	498.7	40
2014	Full year	7.65	27	9.78	26	51.11	28	544.2	48
2015	Full year	7.34	16	9.60	16	49.93	16	494.1	40
2016	Full year	7.08	28	9.54	26	50.06	26	1,263.8	59
	1st quarter	7.20	2	9.60	3	51.57	3	71.0	9
	2nd quarter	7.27	5	9.47	7	49.15	5	85.3	13
	3rd quarter	7.07	8	10.14	6	46.58	7	128.6	17
	4th quarter	7.43	9	9.68	8	52.30	9	125.8	15
2017	Full year	7.26	24	9.72	24	49.88	24	410.7	54
	1st quarter	7.14	5	9.68	6	51.05	6	198.0	9
	2nd quarter	7.08	7	9.43	7	50.83	6	73.8	11
	3rd quarter	6.86	15	9.69	13	48.55	15	272.8	20
2018	Year-to-date	6.97	27	9.62	26	49.61	27	544.6	40

Year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

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Electric authorized ROEs: 2006 - September 2018

Settled versus fully litigated cases

	All cases			Settled cases			Fully litigated cases		
Year	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
2006	10.32	10.23	26	10.26	10.25	11	10.37	10.12	15
2007	10.30	10.20	38	10.42	10.33	14	10.23	10.15	24
2008	10.41	10.30	37	10.43	10.25	17	10.39	10.54	20
2009	10.52	10.50	40	10.64	10.62	16	10.45	10.50	24
2010	10.37	10.30	61	10.39	10.30	34	10.35	10.10	27
2011	10.29	10.17	42	10.12	10.07	16	10.39	10.25	26
2012	10.17	10.08	58	10.06	10.00	29	10.28	10.25	29
2013	10.03	9.95	49	10.12	9.98	32	9.85	9.75	17
2014	9.91	9.78	38	9.73	9.75	17	10.05	9.83	21
2015	9.85	9.65	30	10.07	9.72	14	9.66	9.62	16
2016	9.77	9.75	42	9.80	9.85	17	9.74	9.60	25
2017	9.74	9.60	53	9.75	9.60	29	9.73	9.56	24
2018 YTD	9.64	9.70	37	9.55	9.62	20	9.75	9.73	17

General rate cases versus limited-issue riders

	All cases			General rate cases			Limited issue riders		
Year	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
2006	10.32	10.23	26	10.34	10.25	25	9.80	9.80	1
2007	10.30	10.20	38	10.32	10.23	36	9.90	9.90	1
2008	10.41	10.30	37	10.37	10.30	35	11.11	11.11	2
2009	10.52	10.50	40	10.52	10.50	38	10.55	10.55	2
2010	10.37	10.30	61	10.29	10.26	58	11.87	12.30	3
2011	10.29	10.17	42	10.19	10.14	40	12.30	12.30	2
2012	10.17	10.08	58	10.02	10.00	51	11.57	11.40	6
2013	10.03	9.95	49	9.82	9.82	40	11.34	11.40	7
2014	9.91	9.78	38	9.76	9.75	32	10.96	11.00	5
2015	9.85	9.65	30	9.60	9.53	23	10.87	11.00	6
2016	9.77	9.75	42	9.60	9.60	32	10.31	10.55	10
2017	9.74	9.60	53	9.68	9.60	42	10.01	9.95	10
2018 YTD	9.64	9.70	37	9.59	9.62	28	9.80	10.20	9

Vertically integrated cases versus delivery-only cases

	All cases			Vertically integrated cases			Delivery only cases		
Year	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
2006	10.32	10.23	26	10.63	10.54	15	9.91	10.03	10
2007	10.30	10.20	38	10.50	10.45	26	9.86	9.98	10
2008	10.41	10.30	37	10.48	10.47	26	10.04	10.25	9
2009	10.52	10.50	40	10.66	10.66	28	10.15	10.30	10
2010	10.37	10.30	61	10.42	10.40	41	9.98	10.00	17
2011	10.29	10.17	42	10.33	10.20	28	9.85	10.00	12
2012	10.17	10.08	58	10.10	10.20	39	9.75	9.73	12
2013	10.03	9.95	49	9.95	10.00	31	9.37	9.36	9
2014	9.91	9.78	38	9.94	9.90	19	9.49	9.55	13
2015	9.85	9.65	30	9.75	9.70	17	9.17	9.07	6
2016	9.77	9.75	42	9.77	9.78	20	9.31	9.33	12
2017	9.74	9.60	53	9.80	9.65	28	9.43	9.55	14
2018 YTD	9.64	9.70	37	9.69	9.77	19	9.38	9.35	9

YTD = year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

Gas average authorized ROEs: 2006 - September 2018

Settled versus fully litigated cases

	All cases			Settled cases			Fully litigated cases		
Year	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
2006	10.40	10.50	15	10.26	10.20	7	10.53	10.80	8
2007	10.22	10.20	35	10.24	10.18	22	10.20	10.40	13
2008	10.39	10.45	32	10.34	10.28	20	10.47	10.68	12
2009	10.22	10.26	30	10.43	10.40	13	10.05	10.15	17
2010	10.15	10.10	39	10.30	10.15	12	10.08	10.10	27
2011	9.92	10.03	16	10.08	10.08	8	9.76	9.80	8
2012	9.94	10.00	35	9.99	10.00	14	9.92	9.90	21
2013	9.68	9.72	21	9.80	9.80	9	9.59	9.60	12
2014	9.78	9.78	26	9.51	9.50	11	9.98	10.10	15
2015	9.60	9.68	16	9.60	9.60	11	9.58	9.80	5
2016	9.54	9.50	26	9.50	9.50	16	9.61	9.58	10
2017	9.72	9.60	24	9.68	9.60	17	9.82	9.50	7
2018 YTD	9.62	9.55	26	9.61	9.60	15	9.63	9.50	11

General rate cases versus limited issue riders

	All cases			General rate cases			Limited issue riders		
Year	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations	Average ROE (%)	Median ROE (%)	Number of observations
2006	10.40	10.50	15	10.40	10.50	15	—	—	0
2007	10.22	10.20	35	10.22	10.20	35	—	—	0
2008	10.39	10.45	32	10.39	10.45	32	—	—	0
2009	10.22	10.26	30	10.22	10.26	30	—	—	0
2010	10.15	10.10	39	10.15	10.10	39	—	—	0
2011	9.92	10.03	16	9.91	10.05	15	10.00	10.00	1
2012	9.94	10.00	35	9.93	10.00	34	10.40	10.40	1
2013	9.68	9.72	21	9.68	9.72	21	—	—	0
2014	9.78	9.78	26	9.78	9.78	26	—	—	0
2015	9.60	9.68	16	9.60	9.68	16	—	—	0
2016	9.54	9.50	26	9.53	9.50	25	9.70	9.70	1
2017	9.72	9.60	24	9.72	9.60	24	—	—	0
2018 YTD	9.62	9.55	26	9.62	9.60	25	9.50	9.50	1

YTD = year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

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RRA Regulatory Focus: Major Rate Case Decisions

Electric utility decisions

Date	Company	State	ROR (%)	ROE (%)	Common equity as % of capital	Test year	Rate base	Rate change amount ($)	Footnotes
1/18/18	Kentucky Power Company	KY	6.44	9.70	41.68	2/17	Year-end	12.3	B
1/31/18	Public Service Company of Oklahoma	OK	6.88	9.30	48.51	12/16	Year-end	75.5	R
2/2/18	Interstate Power and Light Company	IA	7.49	9.98	49.02	12/16	Average	130.0	B, I
2/6/18	Mississippi Power Company	MS	6.62	8.58	50.45	12/18	Average	—	B, LIR, 1
2/9/18	Delmarva Power & Light Company	MD	—	—	—	9/17	—	13.4	B, D
2/9/18	Virginia Electric and Power Company	VA	7.21	10.20	50.23	3/19	Average	-6.0	LIR,2
2/14/18	Virginia Electric and Power Company	VA	7.21	10.20	50.23	3/19	Average	-11.5	LIR,3
2/20/18	Virginia Electric and Power Company	VA	7.21	10.20	50.23	3/19	Average	-24.6	LIR,4
2/21/18	Virginia Electric and Power Company	VA	6.71	9.20	50.23	3/19	Average	0.2	LIR,5
2/23/18	Duke Energy Progress, LLC	NC	7.09	9.90	52.00	12/16	Year-end	194.0	B
2/27/18	Virginia Electric and Power Company	VA	7.20	11.20	50.23	3/19	Average	14.9	LIR,6
3/12/18	ALLETE (Minnesota Power)	MN	7.06	9.25	53.81	12/17	Average	12.0	I
3/15/18	Niagara Mohawk Power Corporation	NY	6.53	9.00	48.00	3/19	Average	160.0	B, D, Z
3/20/18	Georgia Power Company	GA	—	—	—	12/18	—	-50.0	LIR,7
3/29/18	Consumers Energy Company	MI	5.89	10.00	40.89	9/18	Average	72.3	I,R,*
2018	**1st quarter: averages/total**		**6.89**	**9.75**	**48.89**			**592.6**	
	Observations		**13**	**13**	**13**			**14**	
4/2/18	Appalachian Power Company	VA	—	—	—	—	—	—	LIR,8
4/12/18	Indiana Michigan Power Company	MI	5.76	9.90	36.38	12/18	Average	49.1	*
4/13/18	Duke Energy Kentucky, Inc.	KY	6.83	9.73	49.25	3/19	Average	8.4	
4/18/18	Connecticut Light and Power Company	CT	7.09	9.25	53.00	12/16	Average	124.7	B, D, Z
4/18/18	DTE Electric Company	MI	5.34	10.00	36.84	10/18	Average	74.4	I, R, *
4/26/18	Public Service Company of Colorado	CO	—	—	—	—	—	—	9
4/26/18	Avista Corporation	WA	7.50	9.50	48.50	12/16	Average	10.8	
5/8/18	Kentucky Utilities Company	VA	—	—	—	12/16	—	1.8	B
5/10/18	Virginia Electric and Power Company	VA	6.71	9.20	50.23	6/18	—	2.8	LIR,10
5/16/18	Appalachian Power Company	VA	—	—	—	6/19	—	1.0	LIR,11
5/23/18	Southern Indiana Gas and Electric Company, Inc.	IN	—	—	—	10/17	Year-end	1.9	LIR
5/30/18	Indiana Michigan Power Company	IN	5.51	9.95	35.73	12/18	Year-end	153.4	B,Z
5/30/18	Northern Indiana Public Service Company	IN	—	—	—	11/17	Year-end	12.6	LIR
5/31/18	Potomac Electric Power Company	MD	7.03	9.50	50.44	12/17	—	-15.0	B, D
6/14/18	Central Hudson Gas & Electric Corporation	NY	6.44	8.80	48.00	6/19	Average	19.7	B, D, Z
6/19/18	Oklahoma Gas and Electric Company	OK	—	—	—	9/17	—	-64.0	B,12
6/22/18	Hawaiian Electric Company, Inc.	HI	7.57	9.50	57.10	12/17	Average	-0.6	B, I
6/22/18	Duke Energy Carolinas, LLC	NC	7.35	9.90	52.00	12/16	Year-end	-13.0	B,R
6/28/18	Emera Maine	ME	7.18	9.35	49.00	12/16	Average	4.5	D
6/29/18	Hawaii Electric Light Company, Inc.	HI	7.80	9.50	56.69	12/16	Average	-0.1	B, I
	2nd quarter: averages/total		**6.78**	**9.54**	**47.94**			**372.4**	
	Observations		**13**	**13**	**13**			**18**	
7/3/18	Virginia Electric and Power Company	VA	6.71	9.20	50.23	8/19	Average	3.3	LIR,13
7/3/18	Virginia Electric and Power Company	VA	7.21	10.20	50.23	8/19	Average	-11.1	LIR,14
7/10/18	Duke Energy Florida, LLC	FL	—	—	—	—	—	200.5	B, LIR, Z,15
7/25/18	Atlantic City Electric Company	NJ	—	—	—	12/18	—	—	D,16
8/8/18	Potomac Electric Power Company	DC	7.45	9.53	50.44	12/17	—	-24.1	B, D
8/21/18	Delmarva Power & Light Company	DE	6.78	9.70	50.52	12/17	—	-6.9	B, D, I
8/24/18	Narragansett Electric Company	RI	6.97	9.28	50.95	6/17	Average	28.9	B, D, Z,
8/31/18	Appalachian Power Company	WV	—	—	—	12/17	—	91.6	B, LIR, 17
9/5/18	Southwestern Public Service Company	NM	6.85	9.10	51.00	6/18	Year-end	8.1	
9/14/18	Wisconsin Power and Light Company	WI	7.09	10.00	52.00	12/20	Average	0.0	B,18
9/20/18	Madison Gas and Electric Company	WI	7.10	9.80	56.06	12/20	Average	-8.0	B
9/26/18	Otter Tail Power Company	ND	7.64	9.77	52.50	12/18	Average	7.4	B, I
9/26/18	Dayton Power and Light Company	OH	7.27	10.00	47.52	5/16	Date Certain	29.8	B, D
9/27/18	Westar Energy, Inc.	KS	7.06	9.30	51.24	6/17	Year-end	-50.3	B
2018	**3rd quarter: averages/total**		**7.10**	**9.63**	**51.15**			**269.2**	
	Observations		**11**	**11**	**11**			**13**	
2018	**YTD: averages/total**		**6.91**	**9.64**	**49.23**			**1,234.2**	
	Observations		**37**	**37**	**37**			**45**	

YTD = year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

S&P Global
Market Intelligence

Gas utility decisions

Date	Company	State	ROR (%)	ROE (%)	Common equity as % of capital	Test year	Rate base	Rate change amount ($)	Footnotes
1/24/18	Indiana Gas Company, Inc.	IN	—	—	—	6/17	Year-end	8.4	LIR,19
1/24/18	Southern Indiana Gas and Electric Company, Inc.	IN	—	—	—	6/17	Year-end	1.3	LIR,19
1/31/18	Northern Illinois Gas Company	IL	7.26	9.80	52.00	12/18	Average	93.5	R
2/21/18	Missouri Gas Energy	MO	7.20	9.80	54.16	12/16	Year-end	15.2	
2/21/18	Spire Missouri Inc.	MO	7.20	9.80	54.16	12/16	Year-end	18.0	
2/27/18	Atmos Energy Corporation	KS	—	—	—	9/17	—	0.8	LIR,20
2/28/18	Northern Utilities, Inc.	ME	7.53	9.50	50.00	12/16	Average	-0.1	
3/15/18	Niagara Mohawk Power Corporation	NY	6.53	9.00	48.00	3/19	Average	45.5	B, Z
3/26/18	Pivotal Utility Holdings, Inc.	FL	—	10.19	48.00	12/18	—	15.3	B, Z, I
2018	**1st quarter: averages/total**		**7.14**	**9.68**	**51.05**			**198.0**	
	Observations		**5**	**6**	**6**			**9**	
4/26/18	Avista Corporation	WA	7.50	9.50	48.50	12/16	Average	-2.1	
4/27/18	Liberty Utilities (EnergyNorth Natural Gas) Corp.	NH	6.80	9.30	49.21	12/16	Year-end	8.1	Z, I
5/2/18	Northern Utilities, Inc.	NH	7.59	9.50	51.70	12/16	Year-end	0.9	B, Z, I
5/3/18	Atmos Energy Corporation	KY	7.41	9.70	52.57	3/19	Average	-1.9	
5/10/18	CenterPoint Energy Resources Corp.	MN	7.12	—	—	9/18	Average	3.9	B, I
5/15/18	Atlanta Gas Light Company	GA	—	—	55.00	12/18	—	-16.0	B
5/29/18	MDU Resources Group, Inc.	MT	—	9.40	—	—	—	1.0	B
5/30/18	Baltimore Gas and Electric Company	MD	6.69	—	—	12/23	—	68.0	LIR, Z,21
6/6/18	Liberty Utilities (Midstates Natural Gas) Corp	MO	—	9.80	—	6/17	Year-end	4.6	B
6/14/18	Central Hudson Gas & Electric Corporation	NY	6.44	8.80	48.00	6/19	Average	6.7	B, Z
6/19/18	Black Hills Kansas Gas Utility Company, LLC	KS	—	—	—	2/18	Year-end	0.6	LIR
	2nd quarter: averages/total		**7.08**	**9.43**	**50.83**			**73.8**	
	Observations		**7**	**7**	**6**			**11**	
7/16/18	Black Hills Northwest Wyoming Gas Utility Company, LLC	WY	7.75	9.60	54.00	6/17	Year-end	1.0	B
7/20/18	Cascade Natural Gas Corporation	WA	7.31	9.40	49.00	12/16	Average	-2.9	B
8/15/18	Virginia Natural Gas, Inc.	VA	6.86	9.50	48.74	8/19	Average	3.2	LIR,22
8/21/18	Delta Natural Gas Company, Inc.	KY	—	—	—	12/17	Year-end	2.2	LIR,23
8/22/18	Northern Indiana Public Service Company	IN	—	—	—	12/17	Year-end	14.2	LIR,24
8/24/18	Narragansett Electric Company	RI	7.15	9.28	50.95	6/17	Average	17.4	B, Z
8/28/18	Consumers Energy Company	MI	5.86	10.00	40.91	6/19	Average	10.6	B,*
9/5/18	Indiana Gas Company, Inc.	IN	—	—	—	12/17	Year-end	9.8	LIR,25
9/5/18	Southern Indiana Gas and Electric Company, Inc.	IN	—	—	—	12/17	Year-end	2.2	LIR,26
9/11/18	CenterPoint Energy Resources Corp.	AR	4.69	—	31.52	9/19	Year-end	5.1	B,*
9/13/18	DTE Gas Company	MI	5.56	10.00	38.30	9/19	Average	9.0	*
9/14/18	Wisconsin Power and Light Company	WI	6.97	10.00	52.00	12/18	Average	0.0	B,27
9/19/18	Northern Indiana Public Service Company	IN	6.50	9.85	46.88	12/18	Year-end	107.3	B, Z
9/19/18	Bay State Gas Company	MA	—	—	—	—	—	—	28
9/20/18	Madison Gas and Electric Company	WI	7.10	9.80	56.06	12/20	Average	4.1	B,Z
9/26/18	MDU Resources Group, Inc.	ND	7.24	9.40	51.00	12/18	Average	2.5	B, I
9/26/18	Piedmont Natural Gas Company, Inc.	SC	7.60	10.20	53.00	3/18	Year-end	-13.9	B,M
9/26/18	South Carolina Electric & Gas Co.	SC	8.05	—	49.83	3/18	Year-end	-19.7	M
9/28/18	Boston Gas Company	MA	7.01	9.50	53.04	12/16	Year-end	100.8	
9/28/18	Colonial Gas Company	MA	7.18	9.50	53.04	12/16	Year-end	17.8	
9/28/18	Columbia Gas of Maryland, Incorporated	MD	—	—	—	12/19	Average	2.0	B, LIR,29
2018	**3rd quarter: averages/total**		**6.86**	**9.69**	**48.55**			**272.8**	
	Observations		**15**	**13**	**15**			**20**	
2018	**YTD: averages/total**		**6.97**	**9.62**	**49.61**			**544.6**	
	Observations		**27**	**26**	**27**			**40**	

YTD = year-to-date, through Sept. 30, 2018.
Data compiled Oct. 10, 2018.
Source: Regulatory Research Associates, an offering of S&P Global Market Intelligence

Footnotes

A Average.

B Order followed stipulation or settlement by the parties. Decision particulars not necessarily precedent-setting or specifically adopted by the regulatory body.

CWIP Construction work in progress.

D Applies to electric delivery only.

DCt Date-certain rate base valuation.

E Estimated.

F Return on fair value rate base.

Hy Hypothetical capital structure utilized.

I Interim rates implemented prior to the issuance of final order, normally under bond and subject to refund.

LIR Limited-issue rider proceeding.

M "Make-whole" rate change based on return on equity or overall return authorized in previous case.

R Revised.

Te Temporary rates implemented prior to the issuance of final order.

Tr Applies to transmission service.

U Double leverage capital structure utilized.

YE Year-end.

Z Rate change implemented in multiple steps.

* Capital structure includes cost-free items or tax credit balances at the overall rate of return.

1 Decision adopted a company filing specifying a $99.3 million plant-specific retail revenue requirement. According to the company, this results in an annual rate reduction of approximately $26.8 million.

2 Rate change was approved under Rider R, which is the mechanism through which the company recovers its investment in the Bear Garden power plant.

3 Rate change was approved under Rider W, which is the mechanism through which the company recovers its investment in the Warren County generation facility.

4 Rate change was approved under Rider S, which is the mechanism through which the company recovers its investment in the Virginia City Hybrid Energy Center.

5 Rate change was approved under Rider GV, which is the mechanism through which the company recovers its investment in the Greensville County generation facility.

6 Rate change was approved under Rider B, which is the mechanism through which the company recovers the costs associated with the conversion of the Altavista, Hopewell and Southampton Power Stations to burn biomass fuels.

7 Reduction ordered to the nuclear construction cost recovery tariff associated with the company's two new units being built at its Vogtle plant.

8 Proposed acquisition of the Beech Ridge II and Hardin wind generation facilities, and an associated rider was rejected. No initial revenue requirement had been proposed.

9 Rate case dismissed.

10 Rate change was approved under Rider DSM, which is the mechanism through which the company is permitted to collect a cash return on demand-side management program costs.

11 Rate change was approved under Rider RAC-EE, which is the mechanism through which the company recovers its investment in energy efficiency programs.

12 ROE to be used for certain riders and AFUDC purposes is 9.5%.

13 Rate change was approved under Rider US-2, which is the mechanism through which the company recovers its investment in three utility-scale solar facilities: Scott Solar, Whitehouse Solar and Woodland Solar.

14 Rate change was approved under Rider BW, which is the mechanism through which the company recovers its investment in the Brunswick Power Station.

15 Rate change pertains to the company's Citrus County CC natural gas plant that is nearing completion.

16 Case was dismissed without prejudice.

17 Rate change was approved under the company's joint expanded net energy cost proceeding.

18 Decision freezes electric rates at 2017 levels for 2018 and 2019.

19 Case established the rates to be charged to customers under the company's compliance and system improvement adjustment, or CSIA, mechanism, which includes both federally mandated pipeline-safety initiatives and projects that are permitted under the state's transmission, distribution and storage system improvement charge, or TDSIC, statute.

20 Reflects updates to the company's gas system reliability surcharge rider since its most recent base rate case.

21 Rate change was approved under the company's Strategic Infrastructure Development and Enhancement, or STRIDE, rider.

22 Case involves the company's investment made under Virginia Steps to Advance Virginia Energy infrastructure program.

23 Case involves the company's pipe replacement program rider.

24 Case involves company's TDSIC rate adjustment mechanism.

25 Case involves the company's CSIA mechanism and projects that are permitted under the state's TDSIC statute.

26 Pertains to investments made under the company's CSIA mechanism and projects that are permitted under the state's TDSIC statute.

27 Freezes gas rates at 2017 levels for 2018 and 2019.

28 Rate case withdrawn.

29 Case relates to the company's investment in its STRIDE program.

30 Rate change was approved under the company's infrastructure replacement and improvement surcharge, or IRIS, rider through which the company recovers costs associated with its STRIDE plan.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 48

Responding Witness: Adrien M. McKenzie

Q-48. Provide any updates to the ROE models.

A-48. Mr. McKenzie has not performed any updates to the application of the quantitative analyses included in his direct testimony.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 49

Responding Witness: Daniel K. Arbough

Q-49. Refer to Schedule B-2.2 Electric, page 1, line 10 and page 2, line 10, and Exhibit LEB-6. Explain how meters removed from rate base for DSM is the same amount in the base and forecast period if LG&E projects additions during the forecast period.

A-49. The additions during the forecasted period were inadvertently included in the DSM communication account instead of the DSM meters account. The additions can be seen in the DSM communication account that is also excluded from base rates.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 50

Responding Witness: Christopher M. Garrett

Q-50. Refer to Schedule B-5.2 Electric, page 4 of 6, lines 13 and 20. Confirm that "Major Storm Damage Expense" does not include amounts proposed to be included in a regulatory asset.

A-50. Confirmed.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 51

Responding Witness: Christopher M. Garrett

Q-51. Refer to Schedule B-6 Electric, page 2 of 2, line 3. Provide monthly account balances for the accounts included in Deferred Income Taxes.

A-51. See attached. The Company utilized the pro rata method for its rate base calculation.

LOUISVILLE GAS AND ELECTRIC COMPANY
ELECTRIC
Accumulated Deferred Taxes on Income
As of April 30, 2020
Reg 1.167(l)-(h)(6)ii
(Dollars)

Line No.		Monthly Increase/Decrease	Proration	Amount
1	Projected Accumulated Deferred Taxes at April 30, 2019			$ 964,044,343
2	Projected Accumulated Deferred Taxes at April 30, 2020			999,295,240
3	Increase in Accumulated Deferred Taxes for the forward year			$ 35,250,896
4	Balance April 30, 2019			$ 964,044,343
5	May 1-31, 2019	$ 2,937,575	335/365	2,696,130
6	June 1-30, 2019	2,937,575	304/365	2,446,638
7	July 1-31, 2019	2,937,575	274/365	2,205,193
8	August 1-31, 2019	2,937,575	243/365	1,955,700
9	September 1-30, 2019	2,937,575	213/365	1,714,256
10	October 1-31, 2019	2,937,575	182/365	1,464,763
11	November 1-30, 2019	2,937,575	151/365	1,215,271
12	December 1-31, 2019	2,937,575	123/365	989,922
13	January 1-31, 2020	2,937,575	92/365	740,430
14	February 1-28, 2020	2,937,575	62/365	498,985
15	March 1-31, 2020	2,937,575	31/365	249,493
16	April 1-30, 2020	2,937,575	1/365	8,048
17	Pro rata Balance April 30, 2020			$ 980,229,172

LOUISVILLE GAS AND ELECTRIC COMPANY

DEFERRED TAX BALANCES

	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Total Accumulated Deferred Income Taxes	1,194,344,951	1,194,356,136	1,208,638,411	1,208,649,596	1,208,660,782	1,221,015,610	1,221,026,795	1,221,037,981	1,233,983,276	1,233,994,462	1,234,005,647	1,235,514,832	1,234,934,506
Electric	964,044,343	964,055,529	976,723,573	976,734,759	976,745,944	987,651,736	987,662,922	987,674,107	999,170,367	999,181,552	999,192,738	999,699,402	999,295,240
Gas	230,300,607	230,300,607	231,914,838	231,914,838	231,914,838	233,363,874	233,363,874	233,363,874	234,812,910	234,812,910	234,812,910	235,815,429	235,639,266
Summary													
Electric Above the Line Deferred Taxes	964,044,343	964,055,529	976,723,573	976,734,759	976,745,944	987,651,736	987,662,922	987,674,107	999,170,367	999,181,552	999,192,738	999,699,402	999,295,240
Gas Above the Line Deferred Taxes	230,300,607	230,300,607	231,914,838	231,914,838	231,914,838	233,363,874	233,363,874	233,363,874	234,812,910	234,812,910	234,812,910	235,815,429	235,639,266
Electric Below the Line Deferred Taxes	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)
Gas Below the Line Deferred Taxes	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)
Electric - Regulatory Assets & Liabilities	(442,978,602)	(442,978,602)	(440,858,001)	(440,858,001)	(440,858,001)	(437,826,570)	(437,826,570)	(437,826,570)	(434,795,138)	(434,795,138)	(434,795,138)	(431,582,136)	(430,613,557)
Gas - Regulatory Assets & Liabilities	(108,607,193)	(108,607,193)	(108,103,059)	(108,103,059)	(108,103,059)	(107,378,813)	(107,378,813)	(107,378,813)	(106,654,567)	(106,654,567)	(106,654,567)	(105,883,447)	(105,648,719)

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 52

Responding Witness: Christopher M. Garrett

Q-52. Refer to Schedule B-6 Gas, page 2 of 2, line 3. Provide monthly account balances for the accounts included in Deferred Income Taxes.

A-52. See attached. The Company utilized the pro rata method for its rate base calculation.

LOUISVILLE GAS AND ELECTRIC COMPANY
GAS
Accumulated Deferred Taxes on Income
As of April 30, 2020
Reg 1.167(l)-(h)(6)ii
(Dollars)

Line No.		Monthly Increase/Decrease	Proration	Amount
1	Projected Accumulated Deferred Taxes at April 30, 2019			$ 230,300,607
2	Projected Accumulated Deferred Taxes at April 30, 2020			235,639,266
3	Increase in Accumulated Deferred Taxes for the forward year			$ 5,338,659
4	Balance April 30, 2019			$ 230,300,607
5	May 1-31, 2019	$ 444,888	335/365	408,322
6	June 1-30, 2019	444,888	304/365	370,537
7	July 1-31, 2019	444,888	274/365	333,971
8	August 1-31, 2019	444,888	243/365	296,186
9	September 1-30, 2019	444,888	213/365	259,620
10	October 1-31, 2019	444,888	182/365	221,835
11	November 1-30, 2019	444,888	151/365	184,050
12	December 1-31, 2019	444,888	123/365	149,921
13	January 1-31, 2020	444,888	92/365	112,136
14	February 1-28, 2020	444,888	62/365	75,570
15	March 1-31, 2020	444,888	31/365	37,785
16	April 1-30, 2020	444,888	1/365	1,219
17	Pro rata Balance April 30, 2020			$ 232,751,759

LOUISVILLE GAS AND ELECTRIC COMPANY

DEFERRED TAX BALANCES

	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Total Accumulated Deferred Income Taxes	1,194,344,951	1,194,356,136	1,208,638,411	1,208,649,596	1,208,660,782	1,221,015,610	1,221,026,795	1,221,037,981	1,233,983,276	1,233,994,462	1,234,005,647	1,235,514,832	1,234,934,506
Electric	964,044,343	964,055,529	976,723,573	976,734,759	976,745,944	987,651,736	987,662,922	987,674,107	999,170,367	999,181,552	999,192,738	999,699,402	999,295,240
Gas	230,300,607	230,300,607	231,914,838	231,914,838	231,914,838	233,363,874	233,363,874	233,363,874	234,812,910	234,812,910	234,812,910	235,815,429	235,639,266
Summary													
Electric Above the Line Deferred Taxes	964,044,343	964,055,529	976,723,573	976,734,759	976,745,944	987,651,736	987,662,922	987,674,107	999,170,367	999,181,552	999,192,738	999,699,402	999,295,240
Gas Above the Line Deferred Taxes	230,300,607	230,300,607	231,914,838	231,914,838	231,914,838	233,363,874	233,363,874	233,363,874	234,812,910	234,812,910	234,812,910	235,815,429	235,639,266
Electric Below the Line Deferred Taxes	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)	(40,994)
Gas Below the Line Deferred Taxes	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)	(10,197)
Electric - Regulatory Assets & Liabilities	(442,978,602)	(442,978,602)	(440,858,001)	(440,858,001)	(440,858,001)	(437,826,570)	(437,826,570)	(437,826,570)	(434,795,138)	(434,795,138)	(434,795,138)	(431,582,136)	(430,613,557)
Gas - Regulatory Assets & Liabilities	(108,607,193)	(108,607,193)	(108,103,059)	(108,103,059)	(108,103,059)	(107,378,813)	(107,378,813)	(107,378,813)	(106,654,567)	(106,654,567)	(106,654,567)	(105,883,447)	(105,648,719)

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 53

Responding Witness: Daniel K. Arbough

Q-53. Refer to Schedule D-1 Electric, page 2 of 9, lines 32-33 and page 3 of 9, line 58. Provide the eight-year average of major planned overhauls for the base period and the forecast period.

A-53. The eight-year average of major planned overhauls for the base period and the forecast period are as follows:

FERC	**Base Year Eight-Year Average**	**Test Year Eight-Year Average**
512	$ 7,236,559	$ 7,450,878
513	$ 5,454,144	$ 5,788,495
554	$ 150,142	$ 302,193

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 54

Responding Witness: Daniel K. Arbough / Lonnie E. Bellar

Q-54. Refer to Schedule D-1 Electric, page 4 of 9.

a. Refer to line 61. Provide intercompany purchased power and OVEC costs for the base period and the forecast period.

b. Refer to line 73. Explain the term "depancaking expense."

A-54.

a.

	Base Period	Forecast Period
	$	$
Intercompany purchased power	5,579,300	7,337,483
OVEC - Energy Charges	13,296,040	13,534,023
OVEC - Demand Charges	21,503,975	27,272,357
Bluegrass Generation Co., LLC [1)] - Energy Charges	1,299,981	-
Bluegrass Generation Co., LLC [1)] - Demand Charges	10,482,608	-
Market Purchases	10,988	919,112
Purchased Power SCH D-1	52,172,892	49,062,975

[1)] a.k.a East Kentucky Power Cooperative, Inc., tolling agreement ends April 30, 2019

b. "Depancaking costs" are expenses resulting from the application of the Merger Mitigation Depancaking ("MMD") mechanism in LG&E and KU's FERC-filed Rate Schedule 402. Under MMD, transmission charges for the combined transmission system of LG&E and KU for exports to MISO are waived for certain municipalities, reducing transmission revenues paid by those municipal customers. For imports of electricity from a source in MISO for delivery to load interconnected to the LG&E and KU transmission system, certain municipalities are billed for LG&E and KU transmission charges but LG&E and KU are obligated to credit to those municipal customers the MISO transmission charges associated with the delivery of the electricity to the MISO-LG&E/KU border. This typically results in a net payment to those municipal customers because the MISO transmission charges exceed the LG&E and KU transmission charges.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 55

Responding Witness: Daniel K. Arbough / Elizabeth J. McFarland

Q-55. Refer to Schedule D-1 Electric, page 6 of 9, line 90.

a. Provide a monthly breakdown of this account for the forecast period.

b. Explain if LG&E has executed new contracts to replace those expiring in May 2019. If so, provide the contract terms. If not, state when contracts are expected to be executed.

A-55.

a. See Attachment to Tab 56 Sch. C-2.2: Electric Sheet 4 of 4 Line 73 of the Filing Requirement.

b. A new contract has not been executed. A new contract is expected to be executed by June 1, 2019.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 56

Responding Witness: Elizabeth J. McFarland

Q-56. Refer to Schedule D-1 Electric, page 7 of 9, line 114.

a. Describe LG&E's current practice for "educating customers on their energy choices and ways to reduce their usage through energy efficiency" and how that differs from the forecast period.

b. Explain why Informational and Instructional Advertising for energy efficiency and customer conservation is not included in the "Customer Education and Public Information" portion of LG&E's Demand Side Management program.

A-56.

a. The Companies educate customers on ways to reduce their usage through energy efficiency with mass media campaigns in the Customer Education and Public Information Program (CEPI) as part of the current Demand Side Management Program (DSM). The CEPI program under DSM is designed to drive customer engagement and participation in the approved DSM programs to achieve DSM goals. In the forecast period, although the DSM programs are reduced, the Companies are maintaining their commitment to educate customers on their energy choices and ways to reduce their energy usage through energy efficiency tips that they can self-implement.

b. The Customer Education and Public Information portion of the Company's Demand Side Management program is set to expire on December 31, 2018 in accordance with the Companies' application in Case No. 2017-00441 and the Commission's Order issued October 5, 2018. Therefore, future costs associated with customer education on energy efficiency and conservation will be included in base rates.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 57

Responding Witness: Elizabeth J. McFarland

Q-57. Refer to Schedule D-1 Gas, page 5 of 7, line 86.

a. Describe LG&E's current practice for "educating customers on their energy choices and ways to reduce their usage through energy efficiency" and how that differs from the forecast period.

b. Explain why Informational and Instructional Advertising for energy efficiency and customer conservation is not included in the "Customer Education and Public Information" portion of LG&E's Demand-Side Management program.

A-57.

a. The Companies educate customers on ways to reduce their usage through energy efficiency with mass media campaigns in the Customer Education and Public Information Program (CEPI) as part of the current Demand Side Management Program (DSM). The CEPI program under DSM is designed to drive customer engagement and participation in the approved DSM programs to achieve DSM goals. In the forecast period, although the DSM programs are reduced, the Companies are maintaining their commitment to educate customers on their energy choices, ways to reduce their energy usage through energy efficiency tips that they can self-implement, and natural gas public awareness.

b. The Customer Education and Public Information portion of the Company's Demand Side Management program is set to expire on December 31, 2018 in accordance with the Companies' application in Case No. 2017-00441 and the Commission's Order issued October 5, 2018. Therefore, future costs associated with customer education on energy efficiency and conservation will be included in base rates

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 58

Responding Witness: Daniel K. Arbough / Robert M. Conroy

Q-58. Refer to Schedule J-1 Electric. The jurisdictional adjusted capital increases approximately $164.5 million from the base period to the forecasted period. Provide an itemized list of each adjustment that comprises the increase, justification of the adjustment, and reference to the application supporting this adjustment. For increases associated with a capital project, include whether or not a Certificate of Public Convenience has been or will be filed and the case number or expected filing date, as applicable.

A-58. Changes in capitalization cannot be tracked to individual items as capitalization is impacted by normal operating activities, capital expenditures, and financing activities. The Company does not project finance individual projects and does not assign specific financing transactions to individual projects. Each source of capital (i.e. debt and equity) is used to fund all projects. The Company has obtained the necessary Certificates of Public Convenience and Necessity ("CPCN"s) required for the construction of its facilities except those considered to be ordinary extensions of its existing systems in the usual course of business and do not require a CPCN in compliance with 807 KAR 5:001 Section 15(3) .

The Companies have reviewed all of the new projects contained in the Companies' applications. All appear to be ordinary extensions. There are no known certificates or service of other utilities with which the proposed projects could interfere. Any replacement of existing facilities or equipment due to a facility's obsolesce or deterioration, for safety or reliability reasons, or which is part of an ongoing replacement program was not considered a wasteful duplication of facilities. This position is consistent with prior Commission decisions that have permitted the replacement of existing equipment and facilities without requiring a CPCN.[7] It is also consistent the Commission's position that individual replacements and

[7] *See, e.g., Application of Atmos Energy Corporation for an Adjustment of Rates*, Case No. 2009-00354, (Ky. PSC Mar. 12, 2010) (approving a 15-year pipe replacement program to replace all existing bare steel mains, service lines, curb valves, meter loops, and mandated pipe relocations); *Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates*, Case No. 2010-00116 (Ky. PSC Oct. 21, 2010) (approving a pipe replacement program to replace bare steel pipe, service lines, curb valves, meter loops and complete mandated pipe relocations).

improvement projects should be assessed individually and not collectively or cumulatively.[8] The Companies did not find any of the proposed capital expenditures to constitute a material capital outlay.

[8] *Northern Kentucky Water District*, Case No. 2000-481, Order of Oct. 8, 2001; PSC Staff Opinion 2012-0014 (July 16, 2012).

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 59

Responding Witness: Daniel K. Arbough / Robert M. Conroy

Q-59. Refer to Schedule J-1 Gas. The jurisdictional adjusted capital increases approximately $44.6 million from the base period to the forecasted period. Provide an itemized list of each adjustment that comprises the increase, justification of the adjustment, and reference to the application supporting this adjustment. For increases associated with a capital project, include whether or not a Certificate of Public Convenience and Necessity has been or will be filed and the case number or expected filing date, as applicable.

A-59. See the response to Question No. 58.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 60

Responding Witness: Daniel K. Arbough

Q-60. Refer to the application, Exhibit J, Schedule J-2 Electric. Provide support for the forecasted short-term interest rates.

A-60. The short-term interest rate projections are based on the one-month LIBOR forward curve as of June 30, 2018. The Company has assumed a .10% spread above LIBOR comprised of a .05% credit spread and a commercial paper dealer fee of .05%. See attached for the further detail.

REFORECAST

	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
1 Month Libor	2.09%	2.18%	2.21%	2.33%	2.40%	2.49%	2.60%	2.68%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	2.19%	2.28%	2.31%	2.43%	2.50%	2.59%	2.70%	2.78%

REFORECAST

	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019
1 Month Libor	2.75%	2.84%	2.91%	2.98%	3.04%	3.10%	3.15%	3.20%	3.26%	3.30%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	2.85%	2.94%	3.01%	3.08%	3.14%	3.20%	3.25%	3.30%	3.36%	3.40%

REFORECAST

	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
1 Month Libor	3.34%	3.38%	3.38%	3.39%	3.43%	3.46%	3.42%	3.45%	3.48%	3.50%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	3.44%	3.48%	3.48%	3.49%	3.53%	3.56%	3.52%	3.55%	3.58%	3.60%

REFORECAST

	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021
1 Month Libor	3.53%	3.56%	3.59%	3.62%	3.65%	3.68%	3.71%	3.74%	3.68%	3.69%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	3.63%	3.66%	3.69%	3.72%	3.75%	3.78%	3.81%	3.84%	3.78%	3.79%

REFORECAST

	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
1 Month Libor	3.71%	3.74%	3.76%	3.79%	3.81%	3.83%	3.86%	3.88%	3.91%	3.93%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	3.81%	3.84%	3.86%	3.89%	3.91%	3.93%	3.96%	3.98%	4.01%	4.03%

REFORECAST

	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
1 Month Libor	3.92%	3.93%	3.96%	3.98%	4.00%	4.02%
CP Spread	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Commercial Paper	4.02%	4.03%	4.06%	4.08%	4.10%	4.12%

2019-2023 Plan Interest Rate Assumptions - Based off of June 30, 2018 Forward Rates

Short-Term Rates	Calculation	Explanation
LIBOR	Based on 1 Mo	LIBOR based on Forward Curve at 06/30/2018 date
Commercial Paper	LIBOR + 10bps	5bps is base on an estimate of the bid/ask spread (5bps for market and 5bps broker fee

Short-term finance Interest & Rollover

	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	2.19%	2.28%	2.31%	2.43%	2.50%	2.59%	2.70%	2.78%

Short-term finance Interest & Rollover

	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	2.85%	2.94%	3.01%	3.08%	3.14%	3.20%	3.25%	3.30%

Short-term finance Interest & Rollover

	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	3.36%	3.40%	3.44%	3.48%	3.48%	3.49%	3.53%	3.56%

Short-term finance Interest & Rollover

	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	3.52%	3.55%	3.58%	3.60%	3.63%	3.66%	3.69%	3.72%

Short-term finance Interest & Rollover

	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	3.75%	3.78%	3.81%	3.84%	3.78%	3.79%	3.81%	3.84%

Short-term finance Interest & Rollover

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
KY Base Data								
LG&E								
Interest Rate - STD (Commercial Paper)	3.86%	3.89%	3.91%	3.93%	3.96%	3.98%	4.01%	4.03%

Short-term finance Interest & Rollover

	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
KY Base Data						
LG&E						
Interest Rate - STD (Commercial Paper)	4.02%	4.03%	4.06%	4.08%	4.10%	4.12%

	1m LIBOR
LIBOR Spread (%)	
Jul-18	*2.09%*
Aug-18	*2.18%*
Sep-18	*2.21%*
Oct-18	*2.33%*
Nov-18	*2.40%*
Dec-18	*2.49%*
Jan-19	*2.60%*
Feb-19	*2.68%*
Mar-19	*2.75%*
Apr-19	*2.84%*
May-19	*2.91%*
Jun-19	*2.98%*
Jul-19	*3.04%*
Aug-19	*3.10%*
Sep-19	*3.15%*
Oct-19	*3.20%*
Nov-19	*3.26%*
Dec-19	*3.30%*
Jan-20	*3.34%*
Feb-20	*3.38%*
Mar-20	*3.38%*
Apr-20	*3.39%*
May-20	*3.43%*
Jun-20	*3.46%*
Jul-20	*3.42%*
Aug-20	*3.45%*
Sep-20	*3.48%*
Oct-20	*3.50%*
Nov-20	*3.53%*

	1m LIBOR
LIBOR Spread (%)	
Dec-20	*3.56%*
Jan-21	*3.59%*
Feb-21	*3.62%*
Mar-21	*3.65%*
Apr-21	*3.68%*
May-21	*3.71%*
Jun-21	*3.74%*
Jul-21	*3.68%*
Aug-21	*3.69%*
Sep-21	*3.71%*
Oct-21	*3.74%*
Nov-21	*3.76%*
Dec-21	*3.79%*
Jan-22	*3.81%*
Feb-22	*3.83%*
Mar-22	*3.86%*
Apr-22	*3.88%*
May-22	*3.91%*
Jun-22	*3.93%*
Jul-22	*3.92%*
Aug-22	*3.93%*
Sep-22	*3.96%*
Oct-22	*3.98%*
Nov-22	*4.00%*
Dec-22	*4.02%*

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 61

Responding Witness: Daniel K. Arbough

Q-61. Refer to the application, Exhibit J, Schedule J-2 Gas. Provide support for the forecasted short-term interest rates.

A-61. See the response to Question No. 60.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 62

Responding Witness: Christopher M. Garrett

Q-62. Refer to Att_LGE_PSC_1-53_Sch_8_Electric at tab "DEFTAX B" produced in response to Staff's First Request, Item 53.

a. Describe how the values in Column B for the ADIT (cells B7, B8, and B9) were projected and calculated.

b. Describe how the values in Column B for the Investment Tax Credit (cells B1, B12, and B13) were projected and calculated.

c. Provide workpapers and spreadsheets with all formulas intact demonstrating how the amounts in tab "DEFTAXB" were calculated.

A-62.

a. The values in column B (cells B7, B8, and B9) represent the ending "above-the-line" net ADIT balance inclusive of the net regulatory tax liability for deferred taxes primarily attributable to excess ADIT as of 12/31/2018. Refer to the "Taxes" section in Filing Requirement Section 16(7)(c), Item A, pages 13-14, for a description of how deferred taxes are projected and calculated.

b. The values in column B (cells B11, B12, and B13) represent the ending unamortized investment tax credit balances as of 12/31/2018. These amounts are projected and calculated based on amortization schedules for existing investment tax credits.

c. See attachment being provided in Excel format.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 63

Responding Witness: Christopher M. Garrett

Q-63. Refer to Att_LGE_PSC_1-53_Sch_B_Electric at tab "DEFTAX F" produced in response to Staff's First Request, Item 53.

a. State whether the amounts included in tab "DEFTAX F" for "Total Accumulated Deferred Income Taxes" represents the net of all of LG&E's deferred tax assets and deferred tax liabilities and, if not, explain what those amounts represent..

b. Describe how the starting values in Column 8 for the ADIT (cells B7, B8, and B9) were projected and calculated.

c. State whether the monthly amounts of ADIT shown on the spreadsheet for May 2019 through April 2020 were calculated using the pro rata method described in 26 C.F. R. § 1.167(1)-1(h)(6), and if so describe how the pro rata calculation was applied (e.g., was the pro rata method applied to the sum of the monthly changes, was it applied to the monthly changes for each account represented in the totals, was it applied to some accounts but not others, what ratios were used for each month).

d. If the pro rata method described in 26 C.F.R. § 1.167(1)-1(h)(6) was not used to calculate the monthly amounts of ADIT shown on the spreadsheet for May 2019 through April 2020, then describe how those amounts were projected and calculated.

e. Provide a spreadsheet identifying every deferred tax asset account and every deferred tax liability account for April 2019 included in the totals in cells B7, B8, and B9 and providing the projected amount in each account for April 2019. If the sum of the projected amounts in those accounts does not equal the values represented in cells B7, B8, and B9, explain the discrepancy.

f. Provide a spreadsheet identifying and providing the projected amount of every deferred tax asset account and every deferred tax liability account for May 2019 through April 2020 if any amounts in those accounts were included in the amounts of ADIT shown for May 2019 through April 2020 in lines 7 through

9. If the sum of the projected amounts in those accounts does not equal the values for each month in lines 7, 8, and 9, explain the discrepancy.

g. Explain how the "13 month Average" values for ADIT in Column O were projected and calculated. If the pro rata method was used, describe how the pro rata calculation was applied (e.g., was the pro rata method applied to the sum of the monthly changes for all accounts, was it applied to the monthly changes for each account represented in the totals, was it applied to some accounts but not others, what ratios were used for each month).

h. Explain how the monthly amounts for the Investment Tax Credit were projected and calculated.

i. Provide workpapers and spreadsheets with all formulas intact demonstrating how the amounts in tab "DEFTAX F" were calculated.

A-63.

a. Yes. The amounts in tab “DEFTAX F” for “Total Accumulated Deferred Income Taxes” represent the net of all “above-the-line” deferred tax assets and liabilities inclusive of the net regulatory tax liability for deferred taxes primarily attributable to excess ADIT.

b. The starting values in row 8 (cells B7, B8, and B9) represent the ending “above-the-line” ADIT balance inclusive of the net regulatory tax liability for deferred taxes primarily attributable to excess ADIT as of 4/30/2019. Refer to the “Taxes” section in Filing Requirement Section 16(7)(c), Item A, pages 13-14, for a description of how deferred taxes are projected and calculated.

c. The monthly amounts of ADIT shown on the spreadsheet for May 2019 through April 2020 represent the projected ending ADIT balances inclusive of the net regulatory tax liability for deferred taxes primarily attributable to excess ADIT. The pro rata method was applied to the beginning and ending net ADIT balance in aggregate, not by individual account. See attachment to responses to Question Nos. 51 and 52.

d. See response to Question No. 63(c).

e. See attachment to response to Question No. 62(c). No discrepancies exist.

f. See attachment to response to Question No. 62(c). No discrepancies exist.

g. The “13 month Average” values for ADIT in Column O represent the pro rata ADIT balance as of 4/30/2020. See response to Question No. 63(c).

h. These amounts represent unamortized investment tax credit balances. They are projected and calculated based on amortization schedules for existing investment tax credits.

i. See attachment to response to Question No. 62(c).

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
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Case No. 2018-00295

Question No. 64

Responding Witness: Christopher M. Garrett

Q-64. Refer to Att_LGE_PSC_1-53_Sch_B_Electric at tab "Sch-B-6" produced in response to Staff's First Request, Item 53.

a. State whether the phrase "Forecast Period Total Company" is referring to total electric or total electric and gas (note that it corresponds to the "13 month Average" value in tab "DEFTAX F" for electric only).

b. Explain LG&E's justification for the adjustment to deferred income taxes in tab "Sch-B-6".

A-64.

a. The amounts are total electric.

b. As noted in footnote (a), the Adjustments amount on Schedule B-6 for Line No. 3 Deferred Income Taxes reflects the ECR and DSM deferred income tax amounts. Other rate mechanism amounts not included in base rates are removed.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 65

Responding Witness: Christopher M. Garrett

Q-65. Refer to Att_LGE_PSC_1-53_Sch_B_Electric at tab "ECR DEFTAX" produced in response to Staff's First Request, Item 53.

a. Describe what the values in row 2 represent.

b. Describe how the values in row 2 were projected and calculated for the period from April 2019 through April 2020.

c. Explain why the "13MOAVG" value in tab "ECR DEFTAX" was calculated by adding the values for each month beginning April 2019 and ending April 2020 and dividing the sum of those values by 13 but the "13 month Average" values in tab "DEFTAX F" were not calculated in that manner.

A-65.

a. The values in row 2 represent monthly ADIT balances related to ECR projects which are eliminated from base rates through a pro forma adjustment.

b. The values in row 2 were projected and calculated based on book versus tax depreciation differences on ECR assets.

c. The ECR mechanism does not utilize the pro rata method as monthly ending balances are utilized. The "13MOAVG" value in tab "DEFTAX F" was calculated using the pro rata method.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 66

Responding Witness: Christopher M. Garrett

Q-66. Refer to Att_LGE_PSC_1-53_Sch_B_Electric at tab "DSM DEFTAX" produced in response to Staff's First Request, Item 53.

a. Describe what the values in row 10 represent.

b. Describe how the values in row 10 were projected and calculated for the period from April 2019 through April 2020.

c. Explain why the "13MOAVG" value in tab "DSM DEFTAX" was calculated by adding the values for each month beginning April 2019 and ending April 2020 and dividing the sum of those values by 13 but the "13 month Average" values in tab "DEFTAX F" were not calculated in that manner.

A-66.

a. The values in row 10 represent monthly ADIT balances related to DSM projects which are eliminated from base rates through a pro forma adjustment.

b. The values in row 10 were projected and calculated based on book versus tax depreciation differences on DSM assets.

c. The DSM mechanism does not utilize the pro rata method as monthly ending balances are utilized. The "13MOAVG" value in tab "DEFTAX F" was calculated using the pro rata method.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 67

Responding Witness: Christopher M. Garrett

Q-67. Refer to Att_LGE_PSC_1-53_Sch_B_Gas at tab "GLT DEFTAX" produced in response to Staff's First Request, Item 53.

a. Describe what the values in row 3 represent.

b. Describe how the values in row 3 were projected and calculated for the period from April 2019 through April 2020.

c. Explain why the "13MOAVG" value in tab "GLT DEFT AX" was calculated by adding the values for each month beginning April 2019 and ending April 2020 and dividing the sum of those values by 13, but the "13 month Average" values in tab "DefTax F" of Att_LGE_PSC_1-53_Sch_B_Gas were not calculated in that manner.

A-67.

a. The values in row 3 represent monthly ADIT balances related to GLT projects which are eliminated from base rates through a pro forma adjustment.

b. The values in row 3 were projected and calculated based on book versus tax depreciation differences on GLT assets.

c. The GLT mechanism does not utilize the pro rata method as monthly ending balances are utilized. The "13MOAVG" value in tab "DEFTAX F" was calculated using the pro rata method.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 68

Responding Witness: Christopher M. Garrett

Q-68. Refer to the Federal Energy Regulatory Commission (FERC) order issued on April 27, 2018, in the matter involving Midcontinent Independent System Operator, Inc.,[12] and others in which FERC determined that the "two-step averaging methodology" used to calculate ADIT in a future test period for ratemaking purposes resulted in unfair and unreasonable rates.

a. State whether LG&E used the "two-step averaging methodology" referred to by FERC or any similar method in which a second averaging step was applied to ADIT balances calculated using the pro rata method to calculate its ADIT balance or any portion thereof in the future test year.

b. If LG&E did use a "two-step averaging methodology" to calculate its ADIT balance for the future test period, explain how LG&E applied the methodology and why LG&E contends that the methodology it used is reasonable.

A-68.

a. The Company did not use the two-step averaging methodology.

b. Not applicable.

[12] In Re Midcontinent Independent System Operator, Inc., et. al., 163 FERC P 61, 061, 2018 WL 201 7529 (FERC Apr. 27, 2018).

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 69

Responding Witness: Christopher M. Garrett

Q-69. State whether LG&E used the "with or without" method to determine the extent to which net operating loss carryforwards (NOL carryforwards) should be attributed to accelerated depreciation of utility property in a given tax year. If so, describe how LG&E applies the "with or without" method. If not, describe how LG&E determines the extent to which NOL carryforwards are attributable to accelerated tax depreciation of utility property in a given tax year.

A-69. The Company used the "with or without" method to determine the extent to which net operating loss carryforwards (NOL carryforwards) should be attributed to accelerated depreciation of utility property in a given tax year.

The Company calculated the NOL carryforward amount by removing the accelerated tax depreciation (Bonus depreciation and Modified Accelerated Cost Recovery System depreciation) deduction for the year and replacing it with the straight-line (book) depreciation deduction. The Company then compared the federal taxable income without accelerated depreciation to with accelerated depreciation.

The result of using the "with or without" method was the NOL carryforward was caused by accelerated depreciation.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 70

Responding Witness: Christopher M. Garrett

Q-70. State whether and, if so, describe how LG&E allocates NOL carryforwards generated in a particular tax year amongst specific utility properties that were depreciated in an accelerated manner for tax purposes during that year.

A-70. The Company does not allocate NOLs to specific utility properties.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 71

Responding Witness: Christopher M. Garrett

Q-71. If NOL carryforwards are generated in a particular tax year by the accelerated depreciation of multiple public utility properties, describe how LG&E allocates the use of any portion of those NOL carryforwards to reduce tax expense in future years amongst those properties to determine the extent to which the remaining NOL carryforwards should be attributed to the accelerated depreciation of each such property.

A-71. The Company does not allocate the NOL carryforwards among properties.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 72

Responding Witness: Christopher M. Garrett

Q-72. If LG&E generated $500,000 in NOL carryforwards in Year 1 and $500,000 in NOL carryforwards in Year 2 (both arising from accelerated tax depreciation of utility property) and used $400,000 in NOL carryforwards in Year 3 to reduce tax expense, describe how LG&E would al locate the use of the NOL carryforwards amongst the NOL carryforwards generated in Year 1 and Year 2. State whether LG&E's allocation of the NOL carryforwards would be different if the NOL carryforwards generated in Year 1 did not arise from accelerated tax depreciation.

A-72. In this hypothetical example the Company would utilize $400,000 of NOL carryforwards arising from Year 1 to offset the taxable income in Year 3. The Company's NOL carryforward utilization is solely dependent on taxable income and all excess ADIT attributable to NOL carryforwards are considered protected.

The Company however projects that the remaining NOL carryforward will be entirely utilized in the forward period.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 73

Responding Witness: Christopher M. Garrett

Q-73. Describe how LG&E treats ADIT and excess ADIT arising from accelerated tax depreciation of public utility property for ratemaking purposes when the property that gave rise to the ADIT or excess ADIT is removed from service before the ADIT or excess ADIT is amortized (i.e., before the property is fully depreciated), and explain the bases for that treatment. State whether LG&E treats deferred tax assets and deferred tax liabilities arising from accelerated tax depreciation of public utility property in the same manner for ratemaking purposes when public utility property, the depreciation of which generated the assets and liabilities, is taken out of service. If LG&E does not treat them in the same manner, explain how and why the deferred tax assets and deferred tax liabilities are treated differently.

A-73. The Company removes both the ADIT and excess ADIT balances in the year that the assets are retired. The Company recognizes either a tax gain or loss at the time of retirement resulting in the associated temporary difference attributable to the asset fully reversing.

The Company treats deferred tax assets and deferred tax liabilities in the same manner.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 74

Responding Witness: Daniel K. Arbough

Q-74. State whether LG&E included any penalties or fines pursuant to KRS 367.4917 in the base or forecasted period. If so, provide the location of these amounts.

A-74. There are no penalties/fines pursuant to KRS 367.4917 included in the base or forecasted period. There have been actual penalties in July – October of the forecasted based period; however, all penalties and fines are located in account 426.3 and, therefore, excluded from the revenue requirement calculation.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 75

Responding Witness: Daniel K. Arbough / Christopher M. Garrett / William Steven Seelye

Q-75. Refer to LG&E's Responses to Staff's First Request, Item 13.b. The 10-year average ratio of actual to budgeted capital construction (slippage factors) for 2008 through 2017 is 97.153 percent for the Non-Mechanism Capital Construction Projects.

a. Assuming all other factors are unchanged, recalculate LG&E Electric's forecasted revenue requirement, rate base, capital structure and cost-of-service study to take into account the use of a slippage factor of 97.153 for all monthly Non-Mechanism Capital Construction Projects expenditures beginning July 1, 2018, through the end of the forecasted period, April 30, 2020.

b. Assuming all other factors are unchanged, recalculate LG&E-Gas's forecasted revenue requirement, rate base, capital structure, and cost-of-service study to take into account the use of a slippage factor of 97.153 for all monthly Non-Mechanism Capital Construction Projects expenditures beginning July 1, 2018, through the end of the forecasted period, April 30, 2020.

c. Provide copies of all workpapers, state all assumptions, and show all calculations used to determine the effect of the slippage factor to each forecasted element of revenue requirement, rate base, and cost-of-service study.

d. Provide copies of all schedules, supporting calculations, and documentation requested in Item 1.c in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.

A-75. As stated in the response to PSC 1-13, LG&E did not recognize a Slippage Factor for capital additions in either the base period or the forecasted test period. The requested calculations of the slippage factor of 97.153% for LG&E on capital projects that are recovered in base rates demonstrate the reasonableness of LG&E's accuracy in projecting capital additions. Given the reasonable accuracy demonstrated with years of being both over and under budget, the need to apply a Slippage Factor does not exist and the Commission should decline to do so for the reasons identified in LG&E's response to PSC 1-13.

a. The impact on the LG&E Electric revenue requirement for the forecasted test year is a reduction of $1,304,937.

b. The impact on the LG&E Gas revenue requirement for the forecasted test year is a reduction of $432,475.

c. The assumptions used, except for the application of the slippage factor requested, have not changed from those contained in the written direct testimony of Daniel K. Arbough and David S. Sinclair and provided in the Filing Requirement Section 16(7)(c). For copies of all workpapers see the attachments being provided in Excel format in part d.

d. See the attachments being provided in Excel format.

The attachments are being provided in separate files in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 76

Responding Witness: Daniel K. Arbough

Q-76. Refer to LG&E's Responses to Staff's First Request, Item 17.

a. For each construction project that is projected to be completed and placed into service during the forecasted period beginning January 1, 2019, through the beginning of the forecasted test period provide the information requested in the table below separately for electric and gas operations.

Line No	Project No.	Description of Project	Estimated Date Projected to be Placed In Service	Estimated Cost at Completion

b. For each construction project that is projected to be completed and placed into service during the forecasted test period ending April 30, 2020, provide the information requested in the table below separately for electric and gas operations.

Line No	Project No.	Description of Project	Estimated Date Projected to be Placed In Service	Estimated Cost at Completion	13-Month Average Cost at Completion

c. Provide copies of the schedules requested in Items 2.a and 2.b in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.

A-76.

a. See attachment being provided in Excel format.

b. See attachment being provided in Excel format.

c. See the response to parts a. and b.

The attachments are being provided in separate files in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 77

Responding Witness: Daniel K. Arbough

Q-77. Refer to LG&E's Responses to Staff's First Request, Item 18.

a. For each construction project that is projected to be included in the Construction Work In Progress as of the forecasted test period ending April 30, 2020, provide the information requested in the table below separately for electric and gas operations.

Line No	Project No.	Description of Project	Date Construction Began	Estimated Completition Date	Original Total Estimate Project Cost	Estimated Cost at Completion	13-Month Average Cost in Rate Base

b. Provide copies of the schedule requested in Items 3.a in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.

A-77.

a. See attachment being provided in Excel format.

b. See the response to part a.

The attachments are being provided in separate files in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 78

Responding Witness: Daniel K. Arbough

Q-78. Provide a comparison of LG&E's monthly gas and electric operating budgets to the actual results, by account, for each of the following calendar years: 2013 through 2017. The response shall include comparisons for the following major expense categories. Provide, for each yearly account variance that exceeds five percent, a detailed explanation for the variance.

a. Production Expense;

b. Transmission Expense;

c. Distribution Expense;

d. Customer Accounts Expense;

e. Customer Service and Informational Expense; and

f. Administrative and General Expense.

A-78. LG&E and KU are operated as a single system and there are some periods where one of the companies is over budget in an account while the other company is under budget as the needs of the system are balanced.

While the response compares actuals to budget, it is important to note that on a combined basis over the five-year period from 2013 to 2017 actual O&M spent is $10 million above what has been collected in rates from customers.

The attached file provides the budgeted and actual amounts by FERC account and variances exceeding 5% of the budget and $1 million are explained. Totals are provided for the major expense categories as well.

a-f. See attached.

Account	Actuals					Budget					Inc / (Decr)				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Production Expense	**127,459,677**	**126,517,392**	**117,278,724**	**96,853,143**	**95,323,883**	**138,479,158**	**141,497,084**	**121,453,969**	**108,420,082**	**106,173,069**	**11,019,481**	**14,979,692**	**4,175,245**	**11,566,939**	**10,849,187**
500	3,598,199	4,111,669	7,778,894	5,202,523	4,953,655	5,158,665	3,970,104	8,572,109	5,780,955	4,772,010	1,560,465	(141,565)	793,215	578,431	(181,645)
501	6,546,721	6,471,675	5,842,722	5,594,794	5,534,995	8,068,195	8,140,865	6,740,115	5,405,386	5,696,897	1,521,473	1,669,189	897,393	(189,409)	161,902
502	33,761,854	35,112,421	22,744,853	16,716,947	16,461,543	30,542,457	30,637,374	24,809,336	19,799,532	18,593,309	(3,219,398)	(4,475,047)	2,064,483	3,082,586	2,131,765
504			(5,774)								-	-	5,774	-	-
505	858,520	812,391	1,656,803	2,565,759	2,617,433	126,652	129,172	824,580	2,239,923	2,641,045	(731,868)	(683,219)	(832,223)	(325,835)	23,612
506	17,393,278	17,775,255	13,690,471	9,654,808	9,961,424	24,759,926	28,794,769	15,090,988	10,220,268	9,696,474	7,366,648	11,019,514	1,400,517	565,460	(264,950)
507	54,405	46,200	41,154	36,000	36,000			3,344			(54,405)	(46,200)	(37,810)	(36,000)	(36,000)
509	134,455	22,939	-	69		1,229	1,228	82,228	15,000		(133,226)	(21,711)	82,228	14,931	-
510	2,873,217	2,157,291	3,346,838	4,791,858	4,861,558	3,738,504	2,521,293	1,808,913	4,615,997	4,764,725	865,287	364,002	(1,537,925)	(175,861)	(96,834)
511	2,153,540	2,770,754	2,753,377	3,611,593	2,488,939	3,082,299	3,488,998	2,934,077	2,753,908	4,080,973	928,759	718,244	180,700	(857,685)	1,592,035
512	43,161,485	40,881,774	37,141,866	30,557,413	29,015,178	43,307,616	43,693,104	32,995,952	32,975,662	32,642,979	146,131	2,811,330	(4,145,914)	2,418,250	3,627,801
513	10,465,693	9,454,232	5,973,295	7,528,966	6,941,782	7,564,521	8,398,666	10,266,941	13,499,473	12,736,676	(2,901,172)	(1,055,566)	4,293,646	5,970,507	5,794,894
514	1,688,779	1,762,911	9,599,668	2,524,165	2,397,858	6,013,310	5,706,736	10,078,961	2,238,214	1,067,101	4,324,531	3,943,826	479,293	(285,951)	(1,330,757)
535	116,451	128,162	124,513	126,199	130,252			119,482	122,957	123,825	(116,451)	(128,162)	(5,031)	(3,242)	(6,427)
536	38,914	39,019	39,039	39,092	39,136	40,620	41,436	39,420	40,212	40,212	1,706	2,417	381	1,120	1,076
538	250,173	273,236	267,947	304,697	370,671			302,841		181,141	(250,173)	(273,236)	34,894	(304,697)	(189,529)
539	120,692	157,807	199,153	127,472	140,113	732,041	803,568	166,000	908,450	349,208	611,349	645,761	(33,153)	780,977	209,095
540	341,326	430,474	477,265	588,213	524,198	461,484	470,712	412,800	445,056	540,000	120,158	40,238	(64,465)	(143,157)	15,802
542	282,571	407,273	317,142	255,450	282,081	196,360	334,260	425,005	277,636	243,349	(86,211)	(73,013)	107,863	22,186	(38,732)
543	552,874	123,800	200,701	96,840	262,909			156,171	164,064	189,708	(552,874)	(123,800)	(44,531)	67,224	(73,201)
544	318,172	357,056	337,879	354,203	314,546	763,400	451,568	340,120	229,863	362,075	445,228	94,512	2,240	(124,340)	47,529
545	2,040		35,117	56,922	64,377				10,900	58,110	(2,040)	-	(35,117)	(46,022)	(6,267)
546	55,723	57,904	187,899	343,577	322,194			8,014	95,486	600,430	(55,723)	(57,904)	(179,885)	(248,091)	278,235
548	201,025	183,061	182,717	213,926	239,454			181,490	110,717	261,508	(201,025)	(183,061)	(1,227)	(103,209)	22,055
549	30,935	63,538	811,542	1,131,762	3,111,829			802,142	1,378,704	1,093,063	(30,935)	(63,538)	(9,400)	246,943	(2,018,766)
550	14,948	14,381	21,165	18,193	18,292				5,533	5,648	(14,948)	(14,381)	(21,165)	(12,659)	(12,645)
551	20,611	19,742	33,920	127,494	135,066			416	25,944	257,022	(20,611)	(19,742)	(33,504)	(101,550)	121,956
552	99,485	82,675	110,714	298,357	296,867	85,841	87,558	122,524	133,726	555,376	(13,644)	4,883	11,810	(164,630)	258,509
553	812,094	1,292,339	1,410,206	1,768,527	1,543,469	2,196,715	2,364,166	1,250,218	2,119,910	2,266,380	1,384,622	1,071,827	(159,988)	351,383	722,912
554	78,970	104,575	682,039	1,111,910	1,099,464			1,581,885	1,641,320	1,098,925	(78,970)	(104,575)	899,845	529,410	(539)
556	1,418,728	1,388,439	1,266,897	1,105,413	1,158,600	1,639,325	1,461,507	1,337,898	1,165,286	1,254,901	220,597	73,068	71,002	59,873	96,301
557	13,800	14,400	8,700	-	-						(13,800)	(14,400)	(8,700)	-	-

Account	Comments/Description 2013	2014	2015	2016	2017
Production Expense					
500	Generation Support Services labor favorable due to reorganization.		Cane Run favorable due to plant closure.	Generation Services labor favorable driven by lower headcount.	
501	Favorable on fuel unloading expense (Cane Run and Trimble County) due to generation demand.	Cane Run and Trimble County favorable on fuel unloading expense	Trimble County favorable on fuel handling expenses. Mill Creek lower due to less than anticipated coal combustion residual expenses		
502	Generation labor unfavorable due to budgeting labor to FERC 506; offset by favorable limestone expenses driven by the following: Trimble County Unit 2 cost of sales not being allocated between companies in the budget and generation demand.	Generation labor (primarily at Mill Creek and Cane Run) unfavorable due to budgeting labor to FERC 506; offset by favorable limestone expenses due to Trimble County Unit 2 cost of sales not being allocated between companies in the budget .	Mill Creek commodities budgeted to non-mechanism, actual expenses charged to ECR mechanism.	Commodities favorable due to lower Mill Creek limestone and sodium formate usage.	Commodities favorable driven by lower Flue Gas Desulphurization reactant usage. Lower labor costs driven by headcount variances.
504					
505	Trimble County labor unfavorable due to budgeting labor to FERC 506.	Trimble County labor unfavorable due to budgeting labor to FERC 506.	Labor budgeted to boiler operations; expenses charged as incurred between boiler and electric FERCs.		
506	Favorable ammonia, sorbent reactant and activated carbon, driven by the following: Trimble County Unit 2 cost of sales not being allocated between companies in the budget and generation demand. Labor favorable, due to actuals allocated to FERC 502 and 505 and headcount variances.	Favorable ammonia, sorbent reactant and activated carbon due to Trimble County Unit 2 cost of sales not being allocated between companies in the budget. Mill Creek and Cane Run labor favorable due to actuals allocated to other FERC accounts. . Cane Run favorable due to Title V fees less than budgeted.	Mill Creek Selective Catalytic Reduction and laboratory operations favorable	Favorable mercury control at Mill Creek primarily driven installation of new equipment.	
507					
509					
510	Favorable outage including corrosion fatigue and high energy piping scope less than anticipated at time of budget.		Mill Creek maintenance supervision labor unfavorable, budgeted to FERC 512.		
511	Deferred building and grounds maintenance.	Required building and grounds keeping maintenance expenditures lower than expected.		Mill Creek unfavorable due to unbudgeted maintenance on control systems, warehouse, and pipe rack.	Deferred building and grounds keeping maintenance expenditures at Mill Creek and Trimble County plants.
512		Mill Creek labor favorable due to actual expenses in other FERCs as a result of deferred boiler maintenance.	Boiler expenses, primarily at Mill Creek, unfavorable due to more extensive outage repairs than expected	Lower Coal Combustion Residual removal system maintenance.	Favorable due to deferred fleet boiler maintenance and Trimble County water system maintenance
513	More extensive outage scope, including generator repairs, than anticipated at Mill Creek, Trimble County and Cane Run, and outage expense budgeted on FERC 514.	Outage expense budgeted to FERC 514. Outage electrical scope more than anticipated.	Fleet wide electric outage repairs favorable. Partially offset by FERC 512 increased boiler outage expenses.	Mill Creek outage expenses charged to FERC 512 due to higher than expected boiler outage expense; covered by FERC 513 budget.	Favorable due to outage expenses due to normalization of actuals, not budgeted. Lower labor costs driven by headcount variances.
514	Deferred maintenance and Mill Creek outage budgeted to FERC 514 but actuals incurred on FERC 513.	Mill Creek outage budgeted to FERC 514 but actuals expenses incurred on FERC 513.			Trimble County unfavorable due to increased consumables used on plant maintenance. Mill Creek unfavorable due to obsolete inventory write off.
535					
536					
538					
539	Labor budgeted to FERC 539 but hit other Hydro FERC accounts (538-546)	Labor budgeted to FERC 539 but hit other Hydro FERC accounts(538-546)		Labor budgeted to FERC 539 but hit other Hydro FERC accounts(538-546)	
540					
542					
543	Hydro labor budgeted to FERC 538				
544					
545					
546					
548					
549					Unfavorable due to write off of NGCC costs.
550					
551					
552					
553	Less than anticipated maintenance expenses of Trimble County combustion turbines (less run time).	Less than anticipated maintenance expenses of Trimble County combustion turbines.			Less than anticipated maintenance expenses of Trimble County and Cane Run combustion turbines.
554			Due to lack of historical data, first Cane Run 7 maintenance budget higher than actuals.	CR7 water treatment and Paddys Run general site maintenance favorable to budget.	
556					
557					

	Actuals					Budget					Inc / (Decr)				
Account	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Transmission Expense	**12,877,251**	**12,817,117**	**13,395,053**	**13,973,811**	**14,283,269**	**13,586,194**	**13,790,478**	**13,776,669**	**14,477,212**	**15,717,954**	**708,943**	**973,361**	**381,616**	**503,402**	**1,434,685**
560	908,744	915,783	947,956	889,517	892,859	1,109,939	974,332	909,778	955,971	953,436	201,195	58,549	(38,177)	66,454	60,577
561	2,331,934	2,200,472	2,138,813	2,174,054	2,089,560	2,822,691	2,397,034	1,954,284	2,374,960	2,300,794	490,757	196,562	(184,529)	200,906	211,235
562	1,487,980	1,632,632	1,574,738	857,977	800,907	748,869	515,217	1,385,765	1,980,127	908,291	(739,112)	(1,117,415)	(188,973)	1,122,150	107,383
563	209,101	260,852	287,353	336,947	191,250	332,466	381,750	474,499	194,460	215,280	123,365	120,898	187,146	(142,487)	24,030
565	(321,004)	(390,616)	(22,915)	(118,485)	(304,913)	178,184	87,510	138,878	21,780	47,689	499,188	478,126	161,793	140,265	352,602
566	5,643,897	5,529,819	5,887,745	6,259,347	6,522,066	6,021,685	5,694,037	5,720,350	6,025,577	6,863,784	377,788	164,218	(167,396)	(233,770)	341,718
567	24,757	49,743	15,721	51,412	46,826	26,253	26,779		78,952	62,552	1,496	(22,964)	(15,721)	27,540	15,726
569	1,930	-									(1,930)	-	-	-	-
570	1,515,641	1,782,405	1,639,818	1,636,156	1,481,214	906,463	2,022,665	1,302,918	1,559,295	1,526,910	(609,178)	240,259	(336,900)	(76,861)	45,696
571	1,259,237	999,313	932,134	1,945,145	2,496,853	1,112,562	2,048,764	2,109,194	1,415,750	2,744,494	(146,675)	1,049,451	1,177,060	(529,395)	247,641
573	106,330	123,305	266,398	198,928	190,202	621,435	54,885	62,933	131,113	225,111	515,105	(68,420)	(203,466)	(67,814)	34,909
575	(291,297)	(286,591)	(272,709)	(257,187)	(123,555)	(294,354)	(412,495)	(281,929)	(260,772)	(130,386)	(3,056)	(125,904)	(9,221)	(3,585)	(6,831)

	Comments/Description				
Account	2013	2014	2015	2016	2017
Transmission Expense					
560					
561					
562	Transmission substation actual expenses were higher in FERC 562, but budgeted within FERC 560, 562, 566, 570 and 573 accounts	Transmission substation actual expenses were higher in FERC 562, but budgeted within FERC 560, 562, 566, 570 and 573 accounts		Transmission substation actual expenses were lower in FERC 562 as actual expense was charged to 560, 562, 566, 570, and 573.	
563					
565					
566					
567					
569					
570	Transmission substation actual expenses were higher in FERC 570, but budgeted within FERC 560, 562, 566, and 573 accounts.				
571		Lower vegetation management expense performed as more vegetation management was needed on the KU system, partially offset by higher storm expense.	Lower vegetation management expense performed as more vegetation management was needed on the KU system.	Higher vegetaion management expense perfomed on the LG&E system, including 345kV widening, partially offset by lower LiDAR expense.	
573	Transmission substation actual expenses were lower in FERC 573 as actual expense was charged to 560, 562, 566, and 570.				
575					

Account	Actuals					Budget					Inc / (Decr)				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Distribution Expense	**75,590,374**	**83,891,455**	**83,457,646**	**81,513,871**	**82,561,683**	**81,731,510**	**79,201,873**	**82,000,815**	**84,601,060**	**90,298,574**	**6,141,136**	**(4,689,581)**	**(1,456,831)**	**3,087,189**	**7,736,890**
580	1,775,521	1,936,840	1,580,294	1,469,807	1,712,305	2,415,089	2,258,731	1,706,286	1,528,820	1,791,232	639,568	321,891	125,992	59,013	78,927
581	754,508	779,844	745,703	687,246	638,892			563,148	861,851	813,126	(754,508)	(779,844)	(182,555)	174,605	174,234
582	1,202,910	1,319,675	1,534,124	1,948,015	1,887,389	1,085,553	1,237,023	1,209,978	535,001	1,967,913	(117,357)	(82,652)	(324,146)	(1,413,014)	80,524
583	4,812,185	6,671,394	5,512,561	5,588,737	5,498,580	3,019,542	3,116,458	4,918,555	4,669,388	5,764,830	(1,792,643)	(3,554,936)	(594,007)	(919,350)	266,250
584	516,787	391,082	683,338	457,354	464,917	75,006	-	181,019	456,250	524,164	(441,780)	(391,082)	(502,319)	(1,104)	59,247
585						-	-	-	-	-	-	-	-	-	-
586	6,360,835	6,424,056	6,397,771	6,675,900	6,363,705	7,242,061	7,189,039	7,060,269	7,271,400	7,854,941	881,226	764,983	662,498	595,500	1,491,236
587	(183,095)	(125,549)	(183,127)	(136,418)	(26,361)		(89,000)	(88,002)	(92,400)	(79,200)	183,095	36,549	95,125	44,018	(52,839)
588	3,340,086	3,464,167	4,034,065	4,748,413	5,037,045	6,481,671	2,817,937	3,634,755	3,954,759	5,293,383	3,141,584	(646,230)	(399,310)	(793,654)	256,338
589	16,708	9,916	20,070	12,204	24,987	18,326	18,691		8,165	8,165	1,618	8,775	(20,070)	(4,039)	(16,822)
590	75,828	168,619	70,302	10,072	71,359	-		50,969	67,619	76,518	(75,828)	(168,619)	(19,332)	57,546	5,159
591	751,679	(2,401)	2,286	696	7,951						(751,679)	2,401	(2,286)	(696)	(7,951)
592	991,783	895,074	1,084,361	1,130,593	1,028,738	1,008,701	1,021,534	1,009,064	1,762,905	1,163,776	16,918	126,460	(75,296)	632,312	135,039
593	22,008,878	24,896,772	23,934,983	21,330,734	20,139,853	23,743,406	23,350,325	22,274,483	24,541,762	24,369,568	1,734,528	(1,546,447)	(1,660,500)	3,211,028	4,229,715
594	1,756,547	1,717,452	1,212,304	1,294,339	1,171,348	2,105,404	2,007,694	2,013,129	2,036,484	1,592,925	348,858	290,242	800,826	742,145	421,577
595	187,301	157,309	199,399	157,116	160,778	236,601	240,104	409,969	225,226	331,651	49,300	82,794	210,570	68,111	170,873
596	318,493	308,874	403,750	418,544	411,185	-	391,502	416,811	408,102	355,142	(318,493)	82,628	13,061	(10,442)	(56,043)
597										388,855	-	-	-	-	388,855
598	388,656	1,228,434	752,563	588,179	616,090	56,249	2,300,892	729,875	672,077	664,093	(332,406)	1,072,458	(22,688)	83,898	48,003
807	666,908	768,929	807,714	844,631	848,373	(3)	767,515	848,191	825,586	834,268	(666,911)	(1,415)	40,477	(19,045)	(14,105)
810	(532,095)	(504,154)	(646,000)	(472,852)	(461,582)		(778,000)	(917,000)	(621,000)	(455,398)	532,095	(273,846)	(271,000)	(148,148)	6,184
813	-	-	-	-	-						-	-	-	-	-
814	480,443	542,293	678,309	832,314	1,092,080	81,230	84,075	548,643	537,414	668,632	(399,213)	(458,218)	(129,666)	(294,900)	(423,448)
816	418,565	352,513	357,834	73,159	66,890			446,000	40,178	38,457	(418,565)	(352,513)	88,166	(32,981)	(28,433)

Account	Comments/Description 2013	2014	2015	2016	2017
Distribution Expense					
580	Budget for Operation Supervision and Engineering in 580, actuals recorded in 588.				
581	System Operations budgeted to FERC 561	System Operations budgeted to FERC 562			
582				Offset between FERCs 582, 562 and 592 based on differences in actual and budgeted charging.	
583	Budget for Louisville Distribution Operations in 593, actuals recorded in 583.	Storm Restoration was over budget due to higher than anticipated storm restoration costs. Budget for Louisville Distribution Operations in 593, actuals recorded in 583.	Budget for Louisville Distribution Operations in 593, actuals recorded in 583.	Budget for Louisville Distribution Operations in 593, actuals recorded in 583. Storm restoration expenses were lower than budget.	
584			Budget for Louisville Distribution Operations and Downtown Network were budgeted to 594 and actuals were recorded to 584.		
585					
586	Field Service and Meter Shop - lower outside services in Field Services & the Meter Shop due to open contractor positions.	Field Service and Meter Shop - lower outside services due to open contractor positions. Also, there was a shift between FERC 586 and 903 between actual and budget.	Field Service - Lower outside services (vacant contractor positions) and lower labor (lower overtime, higher off-duty & open positions).	Field Service - Lower outside services (vacant contractor positions, lower incentives & fuel price adjustments) and lower labor (lower overtime, higher off-duty & open positions).	Field Service - Lower outside services (vacant contractor positions, lower incentives & fuel price adjustments). AMS - Budgeted AMS Meter Base Repairs starting in July 2017, project was deferred as a result of the 2016 Rate Case Settlement.
587					
588	The budget includes costs for the Facilities clearing charges in this FERC. Actuals for the Facilities clearing are handled through a mass allocation, which allocated the costs to various FERCs.	The Facilities clearing charges mass allocation was budgeted to various other FERCs and the actual have a portion of the allocation charged to FERC 588.		Prior to 2016 we charged almost all IT hardware/software maintenance costs to account 923. During calendar year 2016, these costs were changed to be charged to the various line of business FERCs (588 for Distribution), so it was not previously budgeted here.	
589					
590					
591	The Facilities clearing charges mass allocation was budgeted to various other FERCs and the actual have a portion of the allocation charged to FERC 591.				
592				Offset between FERCs 582, 562 and 592 based on differences in actual and budgeted charging.	
593	Vegetation Management actuals less than original budget estimates in order to address hazard trees as appropriate. Budget for Louisville Distribution Operations in 593, actuals recorded in 583. Partially offset by Storm Restoration costs that were higher than budget due to higher storms than anticipated.	Vegetation Management actuals more than original budget estimates in order to maintain the appropriate trimming cycles and to address hazard trees as appropriate. Storm Restoration costs higher than budget due to more storms than anticipated. Partially offset due to the budget for Louisville Distribution Operations being in 593, actuals recorded in 583.	Vegetation Management actuals more than original budget estimates in order to maintain the appropriate trimming cycles and to address hazard trees as appropriate. Storm Restoration costs higher than budget due to more storms than anticipated. Partially offset due to the budget for Louisville Distribution Operations being in 593, actuals recorded in 583.	Vegetation Management actuals less than original budget estimates in order to maintain the appropriate trimming cycles and to address hazard trees as appropriate. Storm Restoration costs lower than budget due to less storms than anticipated. Budget for Louisville Distribution Operations in 593, actuals recorded in 583.	Vegetation Management actuals less than original budget estimates in order to maintain the appropriate trimming cycles and to address hazard trees as appropriate. Storm Restoration costs lower than budget due to less storms than anticipated. Budget for Louisville Distribution Operations in 593, actuals recorded in 583.
594			Budget for Louisville Distribution Operations and Downtown Network were budgeted to 594 and actuals were recorded to 584.	Budget for Louisville Distribution Operations and Downtown Network were budgeted to 594 and actuals were recorded to 584.	
595					
596					
597					
598		The budget includes costs for the Facilities clearing charges in this FERC. Actuals for the Facilities clearing are handled through a mass allocation, which allocated the costs to various FERCs.			
807	Budget includes $750k credit at Corporate that completely offsets Gas Purchases budgeted for LOB.	NA	NA	NA	NA
810	Budget included in FERC 819 while actuals were recorded to FERC 810.	NA	NA	NA	NA
813					
814					
816					

Account	Actuals 2013	Actuals 2014	Actuals 2015	Actuals 2016	Actuals 2017	Budget 2013	Budget 2014	Budget 2015	Budget 2016	Budget 2017	Inc / (Decr) 2013	Inc / (Decr) 2014	Inc / (Decr) 2015	Inc / (Decr) 2016	Inc / (Decr) 2017
817	642,361	746,336	770,193	409,636	412,394	940,999	960,769	687,096	1,080,493	918,906	298,637	214,433	(83,097)	670,857	506,512
818	1,762,219	1,966,817	2,393,159	2,232,439	2,140,562	6,513,347	6,584,731	1,799,009	3,484,042	3,007,350	4,751,128	4,617,914	(594,150)	1,251,603	866,788
819	537,379	507,291	646,000	472,852	461,582	-	781,000	591,500	628,000	580,000	(537,379)	273,709	(54,500)	155,148	118,418
821	1,320,130	1,327,834	1,449,442	1,484,683	1,929,253	514,000	551,000	1,414,347	1,210,695	1,310,939	(806,130)	(776,834)	(35,095)	(273,988)	(618,314)
824	9,750	12,128	14,508	23,537	25,814						(9,750)	(12,128)	(14,508)	(23,537)	(25,814)
825	88,659	97,347	237,295	141,179	164,524	86,027	76,255	203,000	161,130	136,735	(2,632)	(21,092)	(34,295)	19,951	(27,789)
826	32,301	(359)				56,702	57,838				24,401	58,197	-	-	-
830	388,977	433,740	463,550	584,222	621,220			450,000	210,080	477,126	(388,977)	(433,740)	(13,550)	(374,142)	(144,093)
832	825,739	724,453	862,913	321,659	453,720	333,000	342,000	969,000	561,266	525,881	(492,739)	(382,453)	106,087	239,607	72,161
833	155,842	154,144	129,836	526,433	427,868			191,000	156,433	147,074	(155,842)	(154,144)	61,164	(370,000)	(280,794)
834	839,617	689,147	841,137	550,513	581,459			1,121,930	188,737	477,305	(839,617)	(689,147)	280,793	(361,776)	(104,154)
835	20,840	23,393	51,355	40,257	56,195	73,899	75,592	66,325	28,377	27,425	53,060	52,199	14,969	(11,881)	(28,769)
836	873,840	870,717	979,489	850,338	842,605			937,000	518,413	655,114	(873,840)	(870,717)	(42,489)	(331,924)	(187,491)
837	36,132	91,597	91,905	334,665	355,604	145,991	134,657	185,922	332,577	343,135	109,860	43,060	94,016	(2,089)	(12,468)
850	19,833	328,917	496,722	897,670	766,822			519,727	645,417	747,763	(19,833)	(328,917)	23,005	(252,252)	(19,059)
851	320,654	351,277	402,193	388,326	415,652	443,873	443,606	549,339	429,508	418,100	123,219	92,329	147,147	41,181	2,448
852		1,000									-	(1,000)	-	-	-
856	474,874	396,888	648,586	613,787	686,484	3,832,000		520,000	754,017	634,688	3,357,126	(396,888)	(128,586)	140,231	(51,796)
860	6,978	10,080	30,565	17,922	38,392	8,071	8,233		9,030	9,030	1,093	(1,847)	(30,565)	(8,892)	(29,362)
863	523,964	991,883	1,852,204	1,557,301	1,916,931	534,784	664,000	1,396,000	2,128,469	1,899,426	10,819	(327,883)	(456,204)	571,167	(17,506)
870		-									-	-	-	-	-
871	464,858	509,873	586,498	578,496	661,608	458,161	454,543	564,045	563,451	761,895	(6,697)	(55,331)	(22,453)	(15,045)	100,287
874	2,828,013	2,533,173	3,043,518	3,395,075	3,908,810	3,176,917	2,901,733	2,944,338	3,036,412	3,528,449	348,904	368,560	(99,180)	(358,663)	(380,361)
875	1,077,454	963,851	1,194,476	1,110,188	1,291,939	820,502	732,487	922,050	1,193,964	1,140,349	(256,952)	(231,363)	(272,426)	83,776	(151,590)
876	264,091	322,953	399,444	329,012	397,917	316,700	389,784	508,744	497,678	491,887	52,609	66,831	109,301	168,667	93,971
877	180,087	197,272	173,993	170,454	176,408	519,206	545,821	584,115	222,197	255,236	339,119	348,549	410,122	51,743	78,828
878	706,696	1,933,911	1,055,291	1,083,215	1,135,370	406,835	506,921	1,181,403	1,731,610	1,304,775	(299,860)	(1,426,990)	126,112	648,396	169,404
879	302,064	340,330	349,194	358,278	422,228			116,000	290,531	161,957	(302,064)	(340,330)	(233,194)	(67,748)	(260,271)
880	2,900,465	1,972,301	2,924,884	3,508,344	3,790,352	1,868,600	2,992,606	2,152,094	3,519,439	4,046,010	(1,031,866)	1,020,305	(772,790)	11,096	255,658
881	10,098	10,787	15,573	6,663	28,796	8,226	8,390		6,755	6,755	(1,872)	(2,397)	(15,573)	92	(22,041)
886	600,207	29,457	8,537			28,125	29,448	63,443			(572,082)	(10)	54,906	-	-
887	9,282,731	10,942,102	9,945,491	9,613,224	9,210,548	10,743,686	11,299,016	11,711,444	9,135,532	9,811,534	1,460,956	356,915	1,765,952	(477,692)	600,985
889	63,592	132,725	126,349	67,232	107,341	257,496	346,291	299,756	130,349	182,753	193,904	213,567	173,407	63,117	75,412
890	217,909	310,452	313,324	293,221	216,510	214,374	394,489	205,656	238,912	289,469	(3,535)	84,037	(107,669)	(54,309)	72,959
891	603,338	560,117	415,461	364,108	493,952	363,749	428,296	370,432	399,568	414,706	(239,590)	(131,820)	(45,028)	35,461	(79,246)
892	960,293	1,861,284	1,203,309	1,086,407	1,273,558	1,393,720	1,455,427	1,652,136	1,185,127	1,052,804	433,428	(405,857)	448,827	98,719	(220,755)
893										7,517	-	-	-	-	7,517
894	138,959	145,101	158,649	443,751	394,741	103,684	102,423	107,821	233,264	559,439	(35,275)	(42,678)	(50,828)	(210,488)	164,697

	Comments/Description				
Account	2013	2014	2015	2016	2017
817	NA	NA	NA	Budget included in FERC 817 while actuals hit FERC 818 and 833.	Budget included in FERC 817 while actuals hit FERC 818 and 833.
818	Budget for Magnolia and Muldraugh went to FERC 818, but actuals are offset in various FERC Accounts (814, 816, 821, 830, 832, 834, 836, and 856-excluding $3.8m for Pressure Testing).	Budget for Magnolia and Muldraugh went to FERC 818, but actuals are offset in various FERC Accounts (814, 816, 821, 830, 832, 834, 836, and 856).	Budget for Magnolia and Muldraugh went to FERC 818, but actuals are offset in various FERC Accounts (814, 816, 821, 830, 832, 834, 836, and 856).	Budget for Magnolia and Muldraugh went to FERC 818, but actuals are offset in various FERC Accounts (814, 816, 817, 821, 830, 832, 834, 836, and 856).	Budget for Magnolia and Muldraugh went to FERC 818, but actuals are offset in various FERC Accounts (814, 816, 817, 821, 830, 832, 834, 836, and 856).
819	Budget included in FERC 819 while actuals were recorded to FERC 810.	NA	NA	NA	NA
821	Budget included in FERC 818 but actuals went to FERC 821.	Budget included in FERC 818 but actuals went to FERC 821.	NA	NA	Budget included in FERC 818 but actuals went to FERC 821.
824					
825					
826					
830					
832					
833					
834	Budget included in FERC 818 but actuals went to FERC 834.	Budget included in FERC 818 but actuals went to FERC 834.	NA	NA	NA
835					
836	Budget included in FERC 818 but actuals went to FERC 836.	Budget included in FERC 818 but actuals went to FERC 836.	NA	NA	NA
837					
850					
851					
852					
856	Project 135292 for Pressure Testing was included in the BP, but was cancelled due to changes in regulations.	NA	NA	NA	NA
860					
863	NA	NA	NA	Calvary in-line inspection budgeted but deferred to 2017. Lower contractor costs than budgeted for compliance within the Pipeline Integrity Group.	NA
870					
871					
874					
875					
876					
877					
878	NA	Higher costs due to the September 2014 Gas Line Break in Goshen, KY and a change in the allocation of operating and capital expenses for the gas meter blankets.	NA	Primarily offset in FERC 892.	NA
879					
880	Actuals higher than budget due to System Uprates for MAOP Initiative and higher labor and training expenses for Gas Construction and Muldraugh. Partially offset in FERC 588 due to the budget for the Facilities mass allocation being included in FERC 588 while actuals were charged to FERC 880.	The variance is related to Facilities clearing costs (partially offset in other FERC accounts) and also due to lower Facilities spend.	Budget included in FERC 887 but actuals were charged to FERC 880.	NA	NA
881					
886	Variance is due to actuals being recorded to FERC 886 from the Facilities clearing mass allocation. These costs were budgeted in FERC 588.	NA	NA	NA	NA
887	Partially offset in FERC 863. Pipeline Integrity and in-line inspections, emergency response, and gas trouble order costs less than anticipated.	NA	Partially offset in FERC 863 and 880. Pipeline Integrity costs less than anticipated, partially due to more capitalized labor.	NA	Corrosion Control, Gas Trouble Orders were less than anticipated.
889					
890					
891					
892					
893					
894					

	Actuals					Budget					Inc / (Decr)				
Account	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Customer Accounts Expense	**17,734,692**	**20,936,923**	**19,420,584**	**20,226,946**	**21,471,482**	**23,063,864**	**18,973,985**	**20,997,742**	**20,724,529**	**23,210,448**	**5,329,172**	**(1,962,938)**	**1,577,157**	**497,583**	**1,738,966**
901	1,966,345	1,969,592	2,210,573	2,020,813	2,195,901	1,642,175	1,676,247	1,835,696	2,157,750	2,204,670	(324,170)	(293,345)	(374,876)	136,937	8,769
902	4,118,140	4,325,256	4,350,516	4,250,539	4,304,292	4,347,949	4,256,142	4,504,320	4,398,843	4,539,034	229,809	(69,114)	153,805	148,304	234,742
903	9,777,398	10,094,566	10,702,183	11,901,457	12,580,632	11,230,297	10,472,917	11,149,748	11,009,040	13,470,628	1,452,899	378,352	447,565	(892,417)	889,996
904	1,606,387	4,502,269	2,158,583	2,039,855	2,384,747	5,114,600	2,172,100	3,434,000	3,158,895	2,993,817	3,508,213	(2,330,169)	1,275,417	1,119,041	609,070
905	266,421	45,240	(1,270)	14,281	5,910	728,842	396,579	73,977		2,300	462,421	351,338	75,247	(14,281)	(3,610)

	Comments/Description				
Account	2013	2014	2015	2016	2017
Customer Accounts Expense					
901					
902					
903	Labor costs were lower than budget (primarily in the Residential Service Center) due mainly to open positions. Outside services are also lower than budget (primarily in the Business Offices which had lower payment processing fees).			Higher spend is the result of prepaid IT maintenance contracts, transferred from FERC 923 beginning in 2016.	Due primarily to software maintenance fees which were lower than budget associated with AMS, as the project was deferred as a result of the 2016 Rate Case Settlement. In addition, postage and bill print costs were lower than budget.
904	Actual bad debt costs were lower than the originally estimated calculations. The actual ratio of bad debt expense to revenue was 0.142% versus the budgeted rate of 0.300%.	Actual bad debt costs were higher than the originally estimated calculations. The actual ratio of bad debt expense to revenue was 0.258% versus the budgeted rate of 0.230%.	Actual bad debt costs were lower than the originally estimated calculations. The actual ratio of bad debt expense to revenue was 0.193% versus the budgeted rate of 0.320%.	Actual bad debt costs were lower than the 5-year average used in the budget. The actual ratio of bad debt expense to revenue was 0.152% versus the budgeted rate of 0.240%, which was based on an average of the previuos 4 years (2011-2014).	Actual bad debt costs were lower than the 5-year average used in the budget. The actual ratio of bad debt expense to revenue was 0.165% versus the budgeted rate of 0.226%, which was based on an average of the previous 5 years (2011-2015).
905					

	Actuals					Budget					Inc / (Decr)				
Account	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
Customer Service and Informational Expense	**1,697,036**	**1,708,384**	**2,769,582**	**3,310,081**	**3,503,037**	**881,775**	**1,585,625**	**1,698,138**	**3,003,443**	**3,375,108**	**(815,262)**	**(122,759)**	**(1,071,445)**	**(306,638)**	**(127,929)**
907	257,220	276,698	245,374	387,854	418,121	259,140	349,167	277,283	311,688	462,232	1,920	72,468	31,909	(76,167)	44,112
908	494,161	360,794	377,198	419,268	376,989	278,435	265,610	597,477	271,495	367,245	(215,726)	(95,184)	220,279	(147,773)	(9,744)
909	471,564	452,605	802,418	518,755	580,466		190,200	260,026	428,880	329,060	(471,564)	(262,405)	(542,392)	(89,875)	(251,405)
910	432,121	555,850	531,455	804,526	837,684	344,200	780,649	313,352	825,240	1,013,163	(87,921)	224,799	(218,103)	20,714	175,479
912	41,970										(41,970)	-	-	-	-
913		62,437	813,137	1,179,678	1,289,778			250,000	1,166,140	1,203,408	-	(62,437)	(563,137)	(13,538)	(86,371)

	Comments/Description				
Account	2013	2014	2015	2016	2017
Customer Service and Informational Expense					
907					
908					
909			Customer Info adv higher than budgeted		
910					
912					
913			Sponsorships higher than budget		

LGE

Account	Actuals 2013	Actuals 2014	Actuals 2015	Actuals 2016	Actuals 2017	Budget 2013	Budget 2014	Budget 2015	Budget 2016	Budget 2017	Variance Inc / (Decr) 2013	Variance Inc / (Decr) 2014	Variance Inc / (Decr) 2015	Variance Inc / (Decr) 2016	Variance Inc / (Decr) 2017
Administrative and General Expense	**116,543,004**	**110,408,939**	**114,099,534**	**109,398,801**	**105,398,800**	**121,537,170**	**126,407,123**	**127,991,769**	**115,894,611**	**117,735,872**	**4,994,166**	**15,998,184**	**13,892,235**	**6,495,810**	**12,337,072**
408	8,832,283	8,543,809	8,833,193	8,323,775	8,364,644	9,271,703	11,159,274	10,419,561	9,502,903	9,458,877	439,420	2,615,465	1,586,368	1,179,128	1,094,233
421	(4,538)	210,564	(150,698)	(60,859)	(21,814)						4,538	(210,564)	150,698	60,859	21,814
431	609	1,637	2,040	4,350	3,218						(609)	(1,637)	(2,040)	(4,350)	(3,218)
920	25,394,413	30,521,687	32,434,222	32,973,407	32,915,122	29,189,544	32,666,223	32,977,579	34,163,585	34,251,191	3,795,130	2,144,535	543,357	1,190,178	1,336,069
921	6,489,583	7,188,967	6,912,651	6,568,146	7,571,438	8,250,958	15,436,776	7,957,097	7,816,515	7,624,872	1,761,376	8,247,808	1,044,445	1,248,369	53,434
922	(3,427,406)	(4,475,984)	(4,975,174)	(5,409,257)	(5,212,038)	(3,774,816)	(3,671,468)	(4,737,902)	(4,987,230)	(5,438,734)	(347,410)	804,516	237,272	422,027	(226,696)
923	14,516,140	19,043,349	19,558,978	21,008,098	15,845,013	8,780,165	9,638,900	20,259,707	22,062,727	19,912,457	(5,735,975)	(9,404,449)	700,730	1,054,629	4,067,445
924	5,357,969	4,559,821	4,225,171	4,748,843	4,461,622			5,017,468	4,978,788	4,546,483	(5,357,969)	(4,559,821)	792,297	229,946	84,861
925	2,897,638	4,026,070	3,692,092	3,368,371	3,249,185	8,157,175	8,311,749	3,951,118	4,343,265	3,712,427	5,259,537	4,285,678	259,026	974,894	463,242
926	43,851,783	32,752,735	37,418,310	31,710,926	30,770,879	46,567,031	45,268,526	45,415,448	32,208,801	37,073,943	2,715,247	12,515,792	7,997,138	497,874	6,303,064
927	620,457	507,522	32,327	29,577	29,436	564,000	572,583				(56,457)	65,061	(32,327)	(29,577)	(29,436)
928	1,214,436	900,208	1,209,878	1,100,531	1,327,693	1,243,620	642,048	1,228,386	927,071	1,361,678	29,184	(258,160)	18,508	(173,460)	33,984
929	(770,976)	(729,344)	(767,649)	(700,045)	(740,132)	(520,000)	(551,000)	(637,000)	(508,000)	(786,024)	250,976	178,344	130,649	192,045	(45,892)
930	3,951,754	4,350,685	3,383,954	3,655,277	4,002,200	4,479,803	4,135,470	3,600,918	3,987,611	4,117,423	528,049	(215,215)	216,964	332,335	115,223
931	2,360,407	1,732,450	1,223,672	1,099,873	1,603,270	2,291,541	2,217,305	1,373,565	1,126,322	1,024,181	(68,866)	484,855	149,893	26,449	(579,089)
935	5,258,452	1,274,763	1,066,566	977,788	1,229,063	7,036,446	580,738	1,165,825	272,253	877,098	1,777,993	(694,025)	99,259	(705,535)	(351,966)

LGE

Account	2013	2014	2015	2016	2017
	Comments/Description				
Administrative and General Expense					
408		Lower payroll taxes due to open positions	Lower payroll taxes due to open positions	Lower payroll taxes due to open positions	Lower payroll taxes due to open positions
421					
431					
920	IT labor was budgeted to 920 but Actuals went to 935 due to a reclassifcation of telecommunications expense and 107 due to additional labor required on capital projects. There was also a shortage of IT resources.	IT labor was budgeted to 920 but Actuals went 107 to primarily due to 4 large projects; actuals were also charged to 935 due to a reclassification of telecommunications expense. There was also a shortage of IT resources.			
921	Insurance and bank fee savings; IT telecommunication/Outside Svc/Training	Hardware and software maintenance was budgeted to 921 as operational expenses but actuals went to 923 for charges related to outside services.	Main driver for the variance is due to an Unbudgeted Vendor rebate and retirement of the Chief Adminstrative officer.	Main driver for the variance is due to an Unbudgeted Vendor rebate, lower bank svc fees and a change in facilities allocation offset in 931	
922		Increase in A&G rate			
923	Hardware and software maintenance was budgeted to 935 as telecommunication expenses but actuals went to 923 for charges related to outside services.	Hardware and software maintenance was budgeted to 921 as operational expenses but actuals went to 923 for charges related to outside services.			Facilities/IT/Legal contractors less than budget
924	Property insurance was budgeted to 925 but actuals went to 924	Property insurance was budgeted to 925 but actuals went to 924	Claims accrual true-up		
925	Property insurance was budgeted to 925 but actuals went to 924	Property insurance was budgeted to 925 but actuals went to 924		Insurance from PPL budgeted but nothing booked	
926	Main drivers are Pension and Medical	Favorable medical claims, lower pension expense and lower post employment	Main drivers are Pension and Medical		pension and medical due to lower claims and rebate on prescription purchases.
927					
928					
929					
930	Brand adv less than budget				
931					Rent/Parkng higher than budget
935	HW/SW Mtce for IT was budgeted to 935 but actuals went to 923 due to a reclassification of telecommunications expense.	HW/SW Mtch budgeted to 921 but actuals went to 923 due to reclassification of telecommunications expense.			

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 79

Responding Witness: Daniel K. Arbough / Elizabeth J. McFarland

Q-79. Refer to LG&E_PSC_ 1-53_Sch_B_Electric at tab "PIS B" produced in response to Staff's First Request, Item 53. In the base period LG&E added $1,064,876 to account E370.00 Meters. Provide an itemized schedule describing each type of meter purchased, the number of meters purchased, the purpose of the meters purchased, and the total cost of each meter type.

A-79. See itemized schedule of meter purchases below. KU and LG&E purchase a variety of meters with a wide range of unit costs. The table below is a summary level of types of meters and the associated average costs.

LG&E Base Year

Purpose	Item	Avg. Unit Cost	Count	Total $
Normal Business	Single Phase Meters	$19	3,240	$62,280
Replace retired	Three Phase Meters	$92	888	$81,720
meters, address	Time of Day Meters	n/a	-	$0
new business and	AMR (drive by) Meters	$40	800	$32,000
support meter	Transformers	$145	170	$24,650
testing programs.	Meter equipment, test boards, scanners, other	n/a	n/a	$459,069
	Labor	n/a	n/a	$403,717
AMS Opt-In	Advanced Meters	$1	1,440	$1,440
			TOTAL	**$1,064,876**

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Second Request for Information
Dated November 13, 2018

Case No. 2018-00295

Question No. 80

Responding Witness: Daniel K. Arbough / Elizabeth J. McFarland

Q-80. Refer to LG&E_PSC_ 1-53_Sch_B_Electric at tab "SCH B-2.3 F" produced in response to Staff's First Request, Item 53. In the forecasted test period LG&E added $1,385,540 to account E370.00 Meters. Provide an itemized schedule describing each type of meter purchased, the number of meters purchased, the purpose of the meters purchased, and the total cost of each meter type.

A-80. See itemized schedule of meter purchases below. KU and LG&E purchase a variety of meters with a wide range of unit costs. The table below is a summary level of types of meters and the associated average costs.

LG&E Test Year

Purpose	Item	Avg. Unit Cost	Count	Total $
Normal Business	Single Phase Meters	$19	3,890	$75,410
Replace retired	Three Phase Meters	$80	1,224	$97,584
meters, address	Time of Day Meters	$580	670	$388,600
new business and	AMR (drive by) Meters	$45	1,120	$50,400
support meter	Transformers	$128	495	$63,450
testing programs.	Meter equipment, test boards, scanners, other	n/a	n/a	$73,100
	Labor	n/a	n/a	$636,996
AMS Opt-In	Advanced Meters	n/a	n/a	$0
			TOTAL	**$1,385,540**