#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR THE SIX-MONTH BILLING PERIODS ENDING APRIL 30, 2020, OCTOBER 31, 2020, APRIL 30, 2021, OCTOBER 31, 2021, APRIL 30, 2022, OCTOBER 31, 2022, APRIL 30, 2023, AND OCTOBER 31, 2023, AND THE TWO-YEAR BILLING PERIODS ENDING	) ) ) ) ) )	CASE NO. 2023-00375
	)	
APRIL 30, 2021 AND APRIL 30, 2023	)	

#### **DIRECT TESTIMONY OF**

#### ANDREA M. FACKLER MANAGER, REVENUE REQUIREMENT/COST OF SERVICE LG&E AND KU SERVICES COMPANY

Filed: February 14, 2024

#### VERIFICATION

COMMONWEALTH OF KENTUCKY	)
	)
COUNTY OF JEFFERSON	)

The undersigned, **Andrea M. Fackler**, being duly sworn, deposes and says that she is Manager - Revenue Requirement/Cost of Service for Louisville Gas and Electric Company, an employee of LG&E and KU Services Company, and that she has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of her information, knowledge, and belief.

Endrea M. Jadele

Andrea M. Fackler

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

and State, this 12th day of Junary 2024.

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22, 2027



**Q**.

#### Please state your name, title, and business address.

My name is Andrea M. Fackler. I am the Manager, Revenue Requirement/Cost of 2 A. Service for Louisville Gas and Electric Company ("LG&E" or "Company") and an 3 employee of LG&E and KU Services Company, which provides services to LG&E. 4 My business address is 220 West Main Street, Louisville, Kentucky, 40202. A 5 6 complete statement of my education and work experience is attached to this testimony as Appendix A. 7

8 **Q**.

#### Have you previously testified before this Commission?

9 A. Yes. I have previously submitted testimony and sponsored data responses to the Kentucky Public Service Commission ("Commission") in the Company's last six-10 month Environmental Cost Recovery (ECR) review. I have also previously submitted 11 testimony and data responses to the Commission related to the Company's FAC six-12 month and two-year review proceedings. I am also responsible for the Company's 13 14 monthly Environmental Surcharge Reports filed with the Commission.

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#### What is the purpose of this proceeding? Q.

The purpose of this proceeding is to review the past operation of LG&E's 16 A. 17 environmental surcharge during the six-month billing periods ending April 30, 2020, October 31, 2020, October 31, 2021, April 30, 2022, October 31, 2022, and October 18 31, 2023 as well as the two-year billing periods ending April 30, 2021 and April 30, 19 20 2023 (collectively, "Review Period"), and determine whether the surcharge amounts collected during the period are just and reasonable. 21

22 Q. What is the purpose of your testimony?

1 A. The purpose of my testimony is to summarize the operation of LG&E's environmental 2 surcharge during the Review Period, explain how the environmental surcharge factors were calculated during the Review Period, propose changes to the ES Forms, correct 3 any operating expenses or rate base data from the original ES Report, reflect actual 4 changes in the overall rate of return on capital, demonstrate that the amount collected 5 6 during the period was just and reasonable, and present and discuss LG&E's proposed adjustment to the Environmental Surcharge Revenue Requirement to reconcile past 7 surcharges with actual costs recoverable and its impact on a residential customer. In 8 9 addition, my testimony will recommend that the cumulative Environmental Surcharge revenue requirement for the twelve months ending with the expense month of February 10 2023 be used for purposes of incorporating or "rolling-into" LG&E's electric base rates 11 the appropriate surcharge amounts using the methodology previously approved by the 12 Commission, most recently in Case No. 2019-00206. Consistent with past review 13 14 cases, February 2023 represents the end of the most recent two-year review period; as such, the Commission can approve the incorporation of surcharge amounts found just 15 and reasonable into the existing electric base rates during a two-year review pursuant 16 17 to KRS 278.183(3). Finally, my testimony will recommend an updated overall rate of return on capital to be used for all ECR Plans in the ES Reports upon the Commission's 18 19 Order in this proceeding. 20 **Q**. Are you sponsoring any exhibits?

21 A. Yes. I am sponsoring two exhibits identified as Exhibit AMF-1 and AMF-2:

2.60, 2.61, and 3.10 and

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- 23

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Exhibit AMF-1: Current Monthly ES Forms 1.10, 2.00, 2.10, 2.40, 2.50, 2.51,

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 Exhibit AMF-2: Proposed Monthly ES Forms 1.10, 2.00, 2.10, 2.40, 2.50, 2.60, and 3.10.

# Q. Please summarize the operation of the environmental surcharge for the billing period included in this review.

LG&E billed an environmental surcharge to its customers from May 1, 2019 through 5 A. October 31, 2023 to collect (or refund) any difference between its Environmental 6 Surcharge Revenue Requirement and the ECR revenues collected through base rates 7 8 during the applicable expense period. For purposes of the Commission's examination in this case, the monthly LG&E environmental surcharges are considered for the billing 9 periods from November 2019 to October 31, 2023 (the May 2019 to October 2019 10 11 billing periods were reviewed with Case No. 2020-00171). In each month of the billing periods under review in this proceeding, LG&E calculated the environmental surcharge 12 13 factors in accordance with its ECR Tariff and the requirements of the Commission's 14 previous orders concerning LG&E's environmental surcharge. The calculations were 15 made in accordance with the Commission-approved monthly forms (hereinafter referred to as "ES Forms" for the approved templates or as "ES Report" for the monthly 16 data filed with the Commission) and filed with the Commission ten days before the 17 18 new monthly factor was billed by the Company.

#### 19

Q.

#### Please explain the distinction between billing periods and expense periods.

A. The expense period is the calendar month in which the Company incurs approved ECR costs. The Company prepares monthly ES Reports on an expense month basis to file with the Commission. As previously discussed, the environmental surcharge is determined in the monthly ES Report and billed (or refunded) to customers in the second month following the expense month. This is the billing period. References to
 expense periods and billing periods may be used interchangeably throughout my
 testimony, but each period is referring to the same six months of data regardless of
 whether referred to as an expense period or billing period.

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Q.

# What costs were included in the calculation of the environmental surcharge factors for the billing periods under review?

A. The capital and operating costs included in the calculation of the environmental surcharge factors for the Review Period were the September 2019 through August 2023
expense period costs LG&E incurred in conjunction with its approved ECR Plans, as detailed in the attachment to the response to Question No. 2 of the Commission Staff's First Request for Information, incorporating all required revisions.

12 The monthly environmental surcharge factors applied during the billing periods 13 under review were calculated consistent with the Commission's Orders in LG&E's 14 previous applications to assess or amend its environmental surcharge mechanism and 15 plan, as well as, Orders issued in previous review cases. The monthly ES Reports filed 16 with the Commission during this time reflect the various changes to the ES Forms 17 ordered by the Commission from time to time.

## Q. Please describe the most recently approved changes to LG&E's ECR Compliance Plan.

A. In Case No. 2020-00061, the Commission approved LG&E's 2020 ECR Compliance
 Plan that included two new projects and associated operation and maintenance costs.
 Pursuant to the Commission's September 29, 2020 Order approving LG&E's 2020
 ECR Compliance Plan, LG&E began including the approved projects in the monthly

1		ES Report for the September 2020 expense month with separate authorized rates of
2		return utilized for the Pre-2020 and 2020 ECR Compliance Plans.
3		Additionally, in LG&E's most recent base rate case (Case No. 2020-00350),
4		the Commission approved the Company's proposed elimination of all Eligible
5		Pollution Control capital costs and related O&M associated with Projects 22, 23, and
6		26-28 (from LG&E's 2009, 2011, and 2016 ECR Plans) from the ECR mechanism
7		effective July 1, 2021.
8	Q.	Please describe the most recently approved changes to the operation of the
9		environmental surcharge mechanism.
10	A.	The most recent change was approved in the Company's most recent base rate case,
11		Case No. 2020-00350. The Commission approved a Stipulation modifying the return
12		on equity to be used in the monthly ES Reports to 9.35% for all ECR Plans. Pursuant
13		to the Commission's June 30, 2021 Order, the changes were implemented with the July
14		2021 expense month.
15	Q.	Is LG&E proposing any changes to its Environmental Cost Recovery Surcharge
16		tariff?
17	A.	No, the Company is not proposing any changes to its Environmental Cost Recovery
18		Surcharge tariff at this time.
19	Q.	Is LG&E proposing any changes to the currently approved ES forms?
20	A.	Yes. The Company is proposing several changes to the currently approved ES Forms.
21		First, as a result of the synchronization of the return on equity for the Pre-2020 and
22		2020 ECR Plans discussed above, the separate columns to reflect the two different
23		authorized rates of return are no longer needed on the following ES Forms:

1	• ES Form 1.10 – Jurisdictional Surcharge Billing Factor (including updates to
2	line numbering where applicable);
3	• ES Form 2.00 – Revenue Requirements of Environmental Compliance Costs;
4	and
5	• ES Form 2.40 – O&M Expenses and Determination of Cash Working Capital
6	Allowances.
7	Additionally, the Company is proposing the following changes to its ES Forms:
8	• ES Form 1.10 – Update of definition of BR to align with definition currently
9	listed in the Environmental Compliance Surcharge tariff. Removed case
10	number referenced on Line (11).
11	• ES Form 2.00 – Removal of references to specific ES Forms for all Emission
12	Allowance lines since no other lines include references to other ES Form pages.
13	Consolidation of the existing Determination of Beneficial Reuse Operating
14	Expenses section lines into a single line, Net Monthly Beneficial Reuse
15	Operations Expenses/(Revenues). Update to Note 1 to remove the reference to
16	an "amount in base rates" since all CCR closure costs are now recovered
17	through the ECR mechanism.
18	• ES Form 2.10 – Update of Form name to "Capital and Related Costs by ECR
19	Plan and Project" to better describe the purpose of the form. Update to column
20	name for column (6) to remove specific date referenced. Removal of Project
21	22 of the 2009 ECR Plan, Projects 26 and 27 of the 2011 ECR Plan, and Project
22	28 of the 2016 ECR Plan, which were previously eliminated from recovery
23	through the ECR mechanism in LG&E's most recent base rate case (Case No.

1	2020-00350). Update to Note 1 to indicate it is also applicable to the 2016 ECF
2	Plan and removal of Note 2 (and resulting renumbering of Notes 3 and 4) since
3	related to Project 22 that is no longer recovered through the ECR mechanism.
4	• ES Form 2.50: Removal of O&M Expense Accounts applicable to ECR projects
5	in the 2011 and 2016 ECR Plans which were previously eliminated from
6	recovery through the ECR in LG&E's most recent base rate case (Case No
7	2020-00350). Additionally, removal of the Adjustment for CCP Disposal in
8	Base Rates (ES Form 2.51) since there are currently no 2009 ECR Plan CCH
9	Disposal Facilities Operation and Maintenance Expenses recovered in the
10	Company's base rates.
11	• ES Form 2.51 – Complete removal of the form due to the above mentioned
12	removal of expenses from the Company's base rates.
12 13	<ul> <li>removal of expenses from the Company's base rates.</li> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota</li> </ul>
13	• ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota
13 14	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota</li> </ul>
13 14 15	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota Monthly Beneficial Reuse Expense" and "Adjustment for Beneficial Reuse in</li> </ul>
13 14 15 16	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota Monthly Beneficial Reuse Expense" and "Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)" lines. Update of the "Net Beneficial Reuse</li> </ul>
13 14 15 16 17	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota Monthly Beneficial Reuse Expense" and "Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)" lines. Update of the "Net Beneficial Reuse O&amp;M Expense" line to "Net Monthly Beneficial Reuse Operations"</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota Monthly Beneficial Reuse Expense" and "Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)" lines. Update of the "Net Beneficial Reuse O&amp;M Expense" line to "Net Monthly Beneficial Reuse Operations Expenses/(Revenues)" to sum all current expense month expenses and</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	<ul> <li>ES Form 2.60 – Addition of "/Revenues" to Form name. Update of the "Tota O&amp;M" column heading to "Net Expenses/(Revenues)". Also, removal of "Tota Monthly Beneficial Reuse Expense" and "Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)" lines. Update of the "Net Beneficial Reuse O&amp;M Expense" line to "Net Monthly Beneficial Reuse Operations Expenses/(Revenues)" to sum all current expense month expenses and revenues.</li> </ul>

ES Form 3.10 - Addition of a new Line (7) for "Business and Community Solar"
 to break out the fixed monthly charge revenues associated with these programs
 and update of other line references as needed. Removal of Note 1 due to the
 addition of Line (7) Business and Community Solar.

These changes are shown in the proposed monthly ES Forms attached as Exhibit AMF-

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7 Q. Please explain why you are proposing to remove ES Form 2.61 from the ES Forms. 8 A. As currently constructed, ES Form 2.61 nets the 12-month total of Pre-2009 ECR Plan 9 beneficial reuse expenses and revenues against the baseline of beneficial reuse expenses and revenues included in base rates and then includes 1/12<sup>th</sup> of the amount 10 11 for recovery in the current expense month. With the removal of the beneficial reuse expenses and revenues from LG&E's base rates during the Company's last base rate 12 13 case, the need to net the 12-month average expenses and revenues against the level 14 established in base rates is no longer necessary, as the Company is including all beneficial reuse expenses and revenues in the ECR mechanism for recovery. With 15 Form 2.61 removed, LG&E proposes to include all current month Pre-2009 ECR Plan 16 beneficial reuse expenses and revenues on ES Form 2.60 with the 2009 ECR Plan 17 18 beneficial reuse expenses and revenues so that these items are included in the ES Report of the expense month in which they occurred. An 11-month transition period will be 19 needed in order to incorporate the remaining Pre-2009 ECR Plans' remaining beneficial 20 21 reuse expenses or revenues into the Environmental Surcharge Revenue Requirements. 22 But during that time, all current month Pre-2009 ECR Plans' beneficial reuse expenses or revenues will immediately be included in the Environmental Surcharge Revenue 23

1		Requirements. After the 11 months, ES Form 2.61 will no longer be needed and can
2		be removed from the ES Forms. Implementing this change would create a timing
3		difference in when the beneficial reuse expenses or revenues are charged or credited to
4		customers, but under either the existing or the proposed option, customers will be
5		charged or credited the same amount over a 12-month period. However, the proposed
6		change would create consistency between how the Pre-2009 ECR Plan and the 2009
7		ECR Plan beneficial reuse expenses and revenues are charged or credited to customers
8		by including all beneficial reuse expenses and revenues in the ES Report when
9		incurred.
10	Q.	Does this change require any modifications to the ECR tariff or monthly ES
11		Forms?
12	A.	No. The ECR tariff does not specifically identify how beneficial reuse
13		expenses/revenues are determined. With this change, the Company will be inputting
14		the current month Pre-2009 Plan beneficial reuse expenses or revenues on Form 2.60
15		instead of Form 2.61 beginning in the second full billing month following the
16		Commission's Order in this proceeding.
17	Q.	Please explain the proposed changes to ES Form 2.40.
18	A.	LG&E is proposing to update how the cash working capital requirement is determined.
19		Cash working capital requirement is the amount of investor-provided funds needed by
20		LG&E to fund the day-to-day operations to serve customers. When the Company
21		received approval in its 2009 ECR Plan case to recover beneficial reuse expenses and/or
22		revenues in the ECR mechanism, the Company was incurring O&M costs to dispose
23		of the coal combustion residual (CCR) materials. At that time, O&M costs exceeded

revenues received from the sale of CCRs, and the net beneficial reuse expenses and 1 2 revenues were included in the Total O&M in determining the cash working capital 3 requirement. As the market for CCR materials has evolved over the last 10+ years, the Company has been able to execute on new opportunities with third parties interested in 4 beneficially reusing the CCR materials such that the revenue for CCR sales now 5 6 significantly exceeds the O&M costs to dispose of CCRs. In recent monthly ES Reports, the Company has been able to maintain a net beneficial reuse revenue position. 7 These revenues are then passed through to customers through the ECR mechanism as 8 9 a reduction to the Environmental Surcharge Revenue Requirement.

Based on the current underlying spreadsheet formulae, the Company is reporting net negative O&M for cash working capital purposes, which does not align with the intent of a cash working capital requirement. Additionally, the Company does not receive the third party revenues in advance of when they are credited to customers through the ECR mechanism. As such, the Company does not receive any sort of cash flow benefit due to these transactions and should not be receiving a deduction to its cash working capital requirement.

# 17 Q. Does this change require any modifications to the ECR tariff or monthly ES 18 Forms?

A. No. The ECR tariff does not specifically identify how the cash working capital is
 determined, and the monthly ES Form 2.40 does not refer specifically to beneficial
 reuse expenses or revenues being included. It only refers to O&M. With this change,
 the underlying spreadsheet formulae on ES Form 2.40 for the Current Month O&M

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will be updated to only include the total O&M amount on ES Form 2.50 beginning in the second full billing month following the Commission's Order in this proceeding.

# Q. Are there any changes or adjustments in Operating Expenses from the originally filed expense months that LG&E is correcting in this review case?

Yes. For the Review Period, there is one update to the Operating Expenses that is 5 A. 6 reflected in the attachment to the response to Question No. 2 Commission Staff's First Request for Information. This update is a continuation of an issue previously reported 7 in the Company's last six-month review case regarding account 512107 - Landfill 8 9 Maintenance, related to the coal combustion residuals treatment facility ("CCRT") at Trimble County<sup>1</sup>. The issue in totality spanned the expense months of April 2019 to 10 November 2019 and was corrected in December 2019. In the Company's last six-11 month review case the impacts to operation and maintenance expenses in the April 12 2019 to August 2019 (totaling \$271,331) were corrected. In this proceeding, LG&E is 13 14 correcting the remaining impacted expense months. For the expense months of September 2019 through November 2019 an additional \$191,400 in expenses were 15 inadvertently excluded from ES Form 2.50. In the subsequent December 2019 expense 16 17 month, the total amount of the excluded expenses were included on ES Form 2.50, overstating December 2019 Operating Expense by the entire correction amount of 18 19 \$462,731. The impact of this issue on operating expenses and the cash working capital 20 component of rate base is reflected in the attachments to the responses to Question Nos. 1 and 2. 21

<sup>&</sup>lt;sup>1</sup> Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Six-Month Billing Period Ending October 31, 2019, Case No. 2020-00171, Direct Testimony of Andrea M. Fackler at 4-6.

1	Q.	Are there any changes or adjustments in Rate Base from the originally filed
2		expense months the LG&E is correcting in this review case?
3	A.	As discussed previously, both issues impacted the cash working capital component of
4		rate base as well.
5		There is one additional update to Rate Base that is reflected in the attachment
6		to the response to Question Nos. 1 and 2 of Commission Staff's First Request for
7		Information. This issue relates to a \$556,000 accounts receivable accrual for a self-
8		performed warranty claim that was inadvertently double booked for Project 26 of
9		LG&E's 2011 ECR Plan during the expense months of November 2019 to April 2020.
10		Due to this, Construction Work in Process (CWIP) - and thus rate base - was
11		understated by \$556,000 for each of these months. Because the monthly revenue
12		requirement impacts were not significant (total understated jurisdictional E(m) was
13		\$23,176 for November 2019 through April 2020), LG&E did not restate the prior
14		months' ES Reports and instead is correcting them in this review case. The impact of
15		this issue on rate base is reflected in the attachments to the responses to Question Nos.
16		1 and 2.
17	Q.	Are there any other changes necessary to the jurisdictional revenue requirement
18		(E(m))?
19	A.	Yes. Adjustments to E(m) are necessary for compliance with the Commission's Order
20		in Case No. 2000-00386, to reflect the actual changes in the overall rate of return on
21		capital that is used in the determination of the return on environmental rate base.
22		Pursuant to the terms of the Settlement Agreement approving the 2011 ECR
23		Plan, LG&E calculated the short- and long-term debt rate using average daily balances

and daily interest rates in the calculation of the overall rate of return true-up adjustment 1 for each six-month expense period of the Review Period. For the September 2019 2 expense month, the weighted average cost of capital was based on the average daily 3 balances for short- and long term- debt as of September 30, 2019 and the 9.725% 4 authorized return on equity for all approved ECR Plans at that time<sup>2</sup>. For the October 5 6 2019 through February 2020 expense months, the weighted average cost of capital was based on the average daily balances for short- and long term- debt as of February 29, 7 2020 and the 9.725% return on equity for all approved ECR Plans at that time<sup>3</sup>. For the 8 9 March 2020 through August 2020 expense months, the weighted average cost of capital was based on the average daily balances for short- and long term- debt as of August 31, 10 2020 and the 9.725% return on equity for all approved ECR Plans at that time<sup>4</sup>. For 11 the September 2020 through February 2021 expense months, the weighted average cost 12 of capital was based on the average daily balances for short- and long term- debt as of 13 14 February 28, 2021 and the 9.725% authorized return on equity for all approved Pre-2020 Plan<sup>5</sup> at that time or the 9.2% authorized return on equity for the approved 2020 15 ECR Plan<sup>6</sup>. For the March 2021 through April 2021 expense months, the weighted 16 17 average cost of capital was based on the average daily balances for short- and long term- debt as of April 30, 2021 and the 9.725% authorized return on equity for all 18

<sup>&</sup>lt;sup>2</sup> Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Six-Month Billing Period Ending October 31, 2018, Case No. 2019-00015, Final Order Dated April 30, 2019.

<sup>&</sup>lt;sup>3</sup> Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Two-Year Billing Period Ending April 30, 2019, Case No. 2019-00206, Final Order Dated October 22, 2019.

<sup>&</sup>lt;sup>4</sup> Id.

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> Electronic Application of Louisville Gas and Electric Company for Approval of its 2020 Compliance Plan for Recovery by Environmental Surcharge, Case No. 2020-00061, Final Order Dated September 29, 2020.

1	approved Pre-2020 Plan <sup>7</sup> at that time or the 9.2% authorized return on equity for the
2	approved 2020 ECR Plan <sup>8</sup> . For the May 2021 through June 2021 expense months, the
3	weighted average cost of capital was based on the average daily balances for short- and
4	long term- debt as of June 30, 2021 and the 9.725% authorized return on equity for all
5	approved Pre-2020 Plan <sup>9</sup> at that time or the 9.2% authorized return on equity for the
6	approved 2020 ECR Plan <sup>10</sup> . For the July 2021 through August 2021 expense months,
7	the weighted average cost of capital was based on the average daily balances for short-
8	and long term- debt as of August 31, 2021 and the 9.35% authorized return on equity
9	for all ECR Plan projects <sup>11</sup> . For the September 2021 through February 2022 expense
10	months, the weighted average cost of capital was based on the average daily balances
11	for short- and long term- debt as of February 28, 2022 and the 9.35% authorized return
12	on equity for all ECR Plan projects <sup>12</sup> . For the March 2022 through August 2022
13	expense months, the weighted average cost of capital was based on the average daily
14	balances for short- and long term- debt as of August 31, 2022 and the 9.35% authorized
15	return on equity for all ECR Plan projects <sup>13</sup> . For the September 2022 through February
16	2023 expense months, the weighted average cost of capital was based on the average

<sup>&</sup>lt;sup>7</sup> Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Two-Year Billing Period Ending April 30, 2019, Case No. 2019-00206, Final Order Dated October 22, 2019.

<sup>&</sup>lt;sup>8</sup> Electronic Application of Louisville Gas and Electric Company for Approval of its 2020 Compliance Plan for Recovery by Environmental Surcharge, Case No. 2020-00061, Final Order Dated September 29, 2020.

<sup>&</sup>lt;sup>9</sup> Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Six-Month Billing Period Ending October 31, 2019, Case No. 2020-00171, Final Order Dated May 20, 2021.

<sup>&</sup>lt;sup>10</sup> Id.

<sup>&</sup>lt;sup>11</sup> Electronic Application of Louisville Gas and Electric Company for an Adjustment of its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00350, Final Order Dated June 30, 2021.

<sup>&</sup>lt;sup>12</sup> *Id*.

<sup>&</sup>lt;sup>13</sup> Id.

1		daily balances for short- and long term- debt as of February 28, 2023 and the 9.35%				
2		authorized return on equity for all ECR Plan projects <sup>14</sup> . For the March 2023 through				
3		August 2023 expense months, the weighted average cost of capital was based on the				
4		average daily balances for short- and long term- debt as of August 31, 2023 and the				
5		9.35% authorized return on equity for all Plan projects <sup>15</sup> . The details of and support				
6		for the overall rate of return calculations used to true-up the return on environmental				
7		rate base are shown in the attachment to LG&E's response to Question No. 1 of the				
8		Commission Staff's First Request for Information.				
9	Q.	Are there any other corrections to information provided in the monthly ES				
10		Reports during the Review Period that LG&E is correcting in this review case?				
11	A.	No.				
11 12	А. <b>Q.</b>	No. Are the amounts collected through the environmental surcharge just and				
12		Are the amounts collected through the environmental surcharge just and				
12 13	Q.	Are the amounts collected through the environmental surcharge just and reasonable?				
12 13 14	Q.	Are the amounts collected through the environmental surcharge just and reasonable? Yes. The Company only includes costs in the environmental surcharge that were				
12 13 14 15	Q.	Are the amounts collected through the environmental surcharge just and reasonable? Yes. The Company only includes costs in the environmental surcharge that were incurred in conjunction with Commission-approved ECR Plans. Any information				
12 13 14 15 16	Q.	Are the amounts collected through the environmental surcharge just and reasonable? Yes. The Company only includes costs in the environmental surcharge that were incurred in conjunction with Commission-approved ECR Plans. Any information identified and corrected in a review case proceeding, such as the instant proceeding, or				
12 13 14 15 16 17	Q.	Are the amounts collected through the environmental surcharge just and reasonable? Yes. The Company only includes costs in the environmental surcharge that were incurred in conjunction with Commission-approved ECR Plans. Any information identified and corrected in a review case proceeding, such as the instant proceeding, or through the filing of revised ES Reports with the Commission are due to various checks				
12 13 14 15 16 17 18	Q.	Are the amounts collected through the environmental surcharge just and reasonable? Yes. The Company only includes costs in the environmental surcharge that were incurred in conjunction with Commission-approved ECR Plans. Any information identified and corrected in a review case proceeding, such as the instant proceeding, or through the filing of revised ES Reports with the Commission are due to various checks and balances the Company has in place to ensure proper cost recovery through the				

- <sup>14</sup> Id. <sup>15</sup> Id.

A. Yes. LG&E experienced an over-recovery of \$846,645 for the Review Period.
LG&E's attachment to the response to Question No. 2 of the Commission Staff's First
Request for Information shows the calculation of the over-recovery. An adjustment to
the Environmental Surcharge Revenue Requirement is necessary to reconcile the overcollection of past ECR revenues with actual costs for the Review Period.

# 6 Q. Has LG&E identified the causes of the over-recovery during the billing period 7 under review?

A. Yes. LG&E has identified the primary components that make up the over-recovery during the Review Period. The primary components are: (1) changes in overall rates of return as previously discussed and (2) the use of 12-month average revenues to determine the billing factor. The details and support of the primary components that make up the over-recovery during the Review Period are shown in the attachment to LG&E's response to Question No. 2 of the Commission Staff's First Request for Information.

# Q. Please explain how the function of the ECR mechanism contributes to the recovery position in the billing period under review.

A. The use of 12-month average revenues to calculate the monthly billing factors and then applying those same billing factors to the actual monthly revenues will result in an over- or under-collection of ECR revenues. For illustrative purposes, the table below shows a comparison of the 12-month average revenues used in the monthly ES Reports to determine the ECR billing factors and the actual revenues to which the ECR billing factors were applied in the billing month during the last six-month period under review.

Expense Month	12-Month Average Revenues	Billing Month	Actual Revenues Subject to ECR Billing Factors
March 2023	\$83,603,664	May 2023	\$73,666,988
April 2023	\$83,826,013	June 2023	\$85,335,532
May 2023	\$83,919,659	July 2023	\$95,778,868
June 2023	\$83,623,567	August 2023	\$100,139,285
July 2023	\$82,967,496	September 2023	\$95,898,848
August 2023	\$82,096,811	October 2023	\$76,466,501

\*The 12-month average revenues and the Actual Revenues subject to ECR Billing Factors reflect net revenues for Groups 1 and 2.

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Generally, an under-recovery will occur when actual revenues for the billing month are less than the 12-month average revenues used for the expense month. Likewise, an over-recovery will usually occur when actual revenues for the billing month are greater than the 12-month average revenues used for the expense month.

Additionally, the Company's revenues over the Review Period experienced 6 more volatility than normal due to the COVID-19 pandemic as well as fluctuations in 7 weather. Mild weather can result in lower actual monthly revenues applicable to the 8 environmental surcharge and vice versa for extreme weather. For example, for the 9 March through August 2023 expense period shown above, the total actual revenues 10 subject to the environmental surcharge were about \$527 million, but the 12-month 11 average revenues used to determine the environmental surcharge were about \$500 12 13 million. This contributed to an approximate \$0.7 million over-recovery of the Environmental Surcharge Revenue Requirement for this six-month period. 14

# Q. What kind of adjustment is LG&E proposing in this case as a result of the operation of the environmental surcharge during the billing period?

A. LG&E is proposing that the over-recovery be distributed over one month following the
Commission's Order in this proceeding. Specifically, LG&E recommends that the
Commission approve a decrease to the Environmental Surcharge Revenue
Requirement of \$846,645 for one month beginning in the second full billing month
following the Commission's Order in this proceeding. This method is consistent with
the method of implementing previous over- or under-recovery positions in prior ECR
review cases.

#### 8

Q.

#### 9

## the over-recovery?

What is the bill impact on a residential customer for the proposed distribution of

A. The inclusion of the distribution reflecting the over-recovery position in the 10 determination of the ECR billing factor will decrease the billing factor by 11 approximately 0.88% for one month. For a residential customer using an average of 12 868 kWh per month (based on 12-month ended October 2023 data), the impact of the 13 14 adjusted ECR billing factor would be a decrease of approximately \$0.92 for the month (using rates and adjustment clause factors in effect for the February 2024 billing 15 month). See the response and attachment to Commission Staff's First Request for 16 17 Information Question No. 7.

Q. Has LG&E calculated the Environmental Surcharge amount that should be
 incorporated into existing base rates pursuant to KRS 278.183(3)?

A. Yes, based on the most recent two-year period under review ended February 28, 2023,
LG&E determined that \$20,662,182 should be incorporated into base rates at the
conclusion of this case. See the response and attachment to Commission Staff's First
Request for Information Question No. 6.

#### Q. How did LG&E determine this amount?

2 A. LG&E determined the incremental roll-in amount of \$20,662,182 using environmental surcharge rate base as of February 28, 2023 and environmental surcharge operating 3 expenses for the twelve-month period ending February 28, 2023. If approved, the total 4 amount of environmental surcharge that will be included in base rates will be 5 6 \$49,852,191. The implementation of the change in base rates reflecting the roll-in amount should take effect with bills rendered beginning with the first billing cycle in 7 the second month following the month in which the Commission issues its Order in 8 9 this proceeding.

# 10Q.If the Commission accepts LG&E's recommendation to incorporate the proposed11amount into base rates, what will be the impact on LG&E's ECR revenue12requirement?

A. There will be no impact on the environmental costs LG&E is allowed to recover from its customers; only the method of collection will be impacted. The incorporation of the recommended surcharge amount into base rates will increase base rates and, two months later, decrease the environmental surcharge by an equal amount.

# 17 Q. Please explain why the environmental surcharge will not decrease in the same 18 month that base rates will increase.

A. The ECR is billed on a two-month lag, meaning that costs are incurred, for example, in
February (expense month) and ECR billing factor revenues are collected two months
later in April (billing month). LG&E's determination of costs recoverable through the
billing factor (E(m) for the expense month) are reduced by the ECR revenue included
in base rates. Therefore, total ECR costs for the month of February are collected from

customers through base rates in February and through the ECR billing mechanism in 1 April. If base rates increase due to a roll-in in February, the portion of ECR costs 2 3 incurred in February that is recovered through base rates will increase and the resulting decrease in the ECR billing factor will be applied in April. If the decrease in the ECR 4 billing factor were applied in February, the same month that base rates change, then 5 6 LG&E would not be collecting the correct amount of ECR revenue associated with costs incurred in December. This is because the February billing factor is associated 7 with the December expense month and must be calculated using base rates in effect in 8 9 December.

# Q. What rate of return is LG&E proposing to use for all ECR Plans upon the Commission's Order in this proceeding?

LG&E is recommending an overall rate of return on capital of 8.63%, including the 12 A. currently approved 9.35% return on equity and adjusted capitalization, to be used to 13 14 calculate the environmental surcharge. This is based on capitalization as of August 31, 2023, the Commission's Order of June 30, 2021 in Case No. 2020-00350 authorizing 15 a 9.35% return on equity for all ECR Plans, and the continued use of the federal 16 17 corporate income tax rate implemented in accordance with the Tax Cuts and Jobs Act and the Kentucky state corporate income tax rate implemented in accordance with 18 House Bill 487. 19

# See the response and attachment to Commission Staff's First Request for Information Question No. 5.

#### 22 Q. What is your recommendation to the Commission in this case?

23 A. LG&E makes the following recommendations to the Commission in this case:

1a)The Commission should determine the environmental surcharge amounts for2the six-month billing periods ending April 30, 2020, October 31, 2020, April330, 2021, October 31, 2021, April 30, 2022, October 31, 2022, April 30, 2023,4and October 31, 2023, and the two-year billing periods ending April 30, 20215and April 30, 2023 to be just and reasonable;

6 b) The Commission should approve the proposed changes to the ES Forms;

The Commission should approve the proposed decrease to the Environmental c) 7 Surcharge Revenue Requirement of \$846,645 for one month beginning in the 8 9 second full billing month following the Commission's Order in this proceeding; d) The Commission should approve a "roll-in" of \$20,662,182 in incremental 10 environmental costs into LG&E's base rates, for a total base rate ECR 11 component of \$49,852,191, to be included in base rates following the 12 methodology previously approved by the Commission and implemented by 13 14 LG&E. The implementation of the change in base rates reflecting the roll-in amount should take effect with bills rendered beginning with the first billing 15 cycle in the second month following the month in which the Commission issues 16 17 its Order in this proceeding; and

e) The Commission should approve the use of an overall rate of return on capital of 8.63% for all projects, using a return on equity of 9.35%, beginning in the second full billing month following the Commission's Order in this proceeding.

21 Q. Does this conclude your testimony?

22 A. Yes.

#### **APPENDIX A**

#### Andrea M. Fackler, CPA, CGMA

Manager, Revenue Requirement/Cost of Service LG&E and KU Services Company 220 West Main Street Louisville, Kentucky 40202

#### **Professional Experience**

LG&E and KU Services Company	
Manager, Revenue Requirement/Cost of Service	Nov 2019 – Present
Rate & Regulatory Analyst III & Senior	Jan 2016 – Nov 2019
Accounting Analyst III & Senior	Aug 2012 – Jan 2016
Accounting Analyst II & III	Jul 2010 – Aug 2012
Dean Dorton Ford, PSC	
Supervisor in Accounting and Compliance Services	Jan 2007 – May 2010

#### **Professional/Trade Memberships**

Association of International Certified Professional Accountants Kentucky Society of Certified Public Accountants Institute of Management Accountants

#### **Education/Certifications/Training**

Bachelor of Science in Accounting, University of Kentucky, Dec 2006 Bachelor of Business Administration, University of Kentucky, Dec 2006 Certified Public Accountant License, Feb 2009 Chartered Global Management Accountant Designation, Jul 2014 LG&E and KU Strategic Business Integration, 2017-2018 Cohort

#### **Civic Activities**

Troop Leader, Girl Scouts of Kentuckiana, September 2021 – Present
Parent Volunteer, Budget Committee, St. John United Methodist Church, January 2021 – Present
President, LG&E and KU CARE Business Resource Group, January 2021 – Present
Committee Member, Harmony Elementary PTA, August 2020 – Present
Committee Member, Members in Business and Industry, KYCPA, July 2017 – Present
President-Elect, President, and Immediate Past President, LG&E and KU Young Energy Professionals Business Resource Group, 2015-2017

#### Exhibit AMF-1 Page 1 of 9 Fackler

ES FORM 1.10

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Calculation of Total E(m) and

**Group Surcharge Billing Factors** 

For the Expense Month of

#### Calculation of Total E(m)

E(m) = [(RB / 12) (ROR)]	+(ROR -DR)(T	R/(1-TR)))] + 0	DE - BAS + BR, where	
	- ·		<b>D</b> D	

RB	=	Environmental Compliance Rate Base
ROR	=	Rate of Return on the Environmental Compliance Rate Base
DR	=	Debt Rate (both short-term and long-term debt)
TR	=	Composite Federal & State Income Tax Rate
OE	=	Pollution Control Operating Expenses
BAS	=	Total Proceeds from By-Product and Allowance Sales
BR	=	Beneficial Reuse Operating Expenses

			Pre-2020 Environmental Compliance Plans	2020 Environmental Compliance Plan
(1)	RB	=		
(2)	RB / 12	=		
(3)	(ROR + (ROR - DR) (TR / (1 - TR)))	=		
(4)	OE	=		
(5)	BAS	=		
(6)	BR	=		
(7)	E(m) (2) x (3) + (4) - (5) + (6)	=		
(8)	Total $E(m) = sum of Pre-2020 E(m) + 2020 E(m)$	=		

#### Calculation of Adjusted Net Jurisdictional E(m)

(9)	Jurisdictional Allocation Ratio for Expense Month ES Form 3.10	=	
(10)	Jurisdictional $E(m) = Total E(m) x$ Jurisdictional Allocation Ratio [(8) x (9)]	=	
(11)	Adjustment for (Over)/Under-collection pursuant to Case No. 2020-00171	=	
(12)	Prior Period Adjustment (if necessary)	=	
(13)	Revenue Collected through Base Rates	=	
(14)	Adjusted Net Jurisdictional $E(m) = [(10) + (11) + (12) - (13)]$	=	

#### Calculation of Group Environmental Surcharge Billing Factors

			GROUP 1 otal Revenue)	GROUP 2 (Net Revenue)
(15)	Revenue as a Percentage of 12-month Total Revenue ending with the Current Month ES Form 3.00	=		
(16)	Group E(m) [(14) x (15)]	=		
(17)	Group R(m) = Average Monthly Group Revenue for the 12 Months Ending with the Current Expense Month ES Form 3.00	=		
(18)	Group Environmental Surcharge Billing Factors $[(16) \div (17)]$	=		

Exhibit AMF-1 Page 2 of 9 Fackler

**ES FORM 2.00** 

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirements of Environmental Compliance Costs For the Expense Month of

Determination of Environmental Compliance Rate Base

	Pre-2020 Environmental Compliance Plans	2020 Environmental Compliance Plan
Eligible Pollution Control Plant		
Eligible Pollution CWIP Excluding AFUDC		
Subtotal		
Additions:		
Inventory - Emission Allowances per ES Form 2.31, 2.32, 2.33, and 2.34		
Cash Working Capital Allowance		
Net Unamortized Closure Cost Balance <sup>1</sup>		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Subtotal		
Environmental Compliance Rate Base		

#### **Determination of Pollution Control Operating Expenses**

	Pre-2020 Environmental Compliance Plans	2020 Environmental Compliance Plan
Monthly Operations & Maintenance Expense		
Monthly Depreciation & Amortization Expense		
less investment tax credit amortization		
Monthly Taxes Other Than Income Taxes - Eligible Plant		
Monthly Taxes Other Than Income Taxes - Closure Costs		
Amortization of Monthly Closure Costs		
Amortization of Excess ADIT with gross-up		
Monthly Emission Allowance Expense from ES Form 2.31, 2.32, 2.33, and 2.34		
Monthly Surcharge Consulting Fees		
Construction Monitoring Consultant Fee		
Total Pollution Control Operations Expense		

#### Determination of Beneficial Reuse Operating Expenses

	Environmental
	Compliance Plan
Total Monthly Beneficial Reuse Expense	
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)	
Net Beneficial Reuse Operations Expense	

Note 1: The net unamortized closure cost balance is comprised of CCR closure cost expenditures less accumulated amortization, accumulated deferred income taxes and amount in base rates.

ES FORM 2.10

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT Plant, CWIP & Depreciation Expense

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Description	Eligible Plant In Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant In Service	Deferred Tax Balance as of 12/31/2023	Monthly ITC Amortization Credit	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan: Project 22 - Cane Run CCP Storage (Landfill - Phase I) [CANCELLED] Project 23 - Trimble County Ash Treatment Basin (BAP/GSP) Project 24 - Trimble County CCP Storage (Landfill - Phase 1) Project 25 - Beneficial Reuse								
Subtotal Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
<b>2011 Plan:</b> Project 26 - Mill Creek Station Air Compliance Project 27 - Trimble County Unit 1 Air Compliance								
Subtotal Less Retirements and Replacement resulting from implementation of 2011 Plan								
Net Total - 2011 Plan:								
2016 Plan: Project 28 - Supplemental Mercury Control Project 29 - Mill Creek New Process Water Systems Project 30 - Trimble County New Process Water Systems								
Subtotal Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
2020 Plan Project 31 - Mill Creek ELG Water Treatment System and Diffuser Project 32 - Trimble County ELG Water Treatment System								
Subtotal Less Retirements and Replacement resulting from implementation of 2020 Plan								
Net Total - 2020 Plan:								
Net Total - All Plans:								

Note 1: Trimble County projects for the 2009 Plan and 2020 Plan are proportionately shared by KU at 48% and LG&E at 52%. Note 2: Effective with the September 2012 expense month, Project 22 is cancelled and the previous CWIP balance is included on ES Form 2.50 as an expense for the September 2012 expense month.

Note 3: The Deferred Tax Balance includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.

Note 4: Adjustment in Project 23 reflects capital amounts that were recovered in base rates rather than in ECR and were not removed in LG&E's base rate proceeding (CN 2020-00350) when the project was eliminated from ECR; therefore, the adjusted amount continues to be reflected in ECR.

Exhibit AMF-1 Page 4 of 9 Fackler

**ES FORM 2.40** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

O&M Expenses and Determination of Cash Working Capital Allowance

For the Month Ended:

Environmental Compliance Plan					
O&M Expenses	Pre-2020 Environmental Compliance Plans	2020 Environmental Compliance Plan			
11th Previous Month					
10th Previous Month					
9th Previous Month					
8th Previous Month					
7th Previous Month					
6th Previous Month					
5th Previous Month					
4th Previous Month					
3rd Previous Month					
2nd Previous Month					
Previous Month					
Current Month					
Total 12 Month O&M					

Determination of Working Capital Allowance				
12 Months O&M Expenses				
One Eighth (1/8) of 12 Month O&M Expenses	1/8	1/8		
Pollution Control Cash Working Capital Allowance				

Exhibit AMF-1 Page 5 of 9 Fackler

**ES FORM 2.50** 

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Pollution Control - Operations & Maintenance Expenses For the Month Ended:

O&M Expense Account	Mill Creek	Trimble County	Total
2009 Plan			
502013 - ECR Landfill Operations			
512107 - ECR Landfill Maintenance			
Adjustment for CCP Disposal in Base Rates (ES Form 2.51)			
Net 2009 Plan O&M Expenses			
2011 Plan			
502056 - ECR Scrubber Operations			
512055 - ECR Scrubber Maintenance			
506159 - ECR Sorbent Injection Operation			
506152 - ECR Sorbent Reactant - Reagent Only			
512152 - ECR Sorbent Injection Maintenance			
506156 - ECR Baghouse Operations			
512156 - ECR Baghouse Maintenance			
506151 - ECR Activated Carbon			
Adjustment for Base Rates Baseline Amounts			
Total 2011 Plan O&M Expenses			
2016 Plan			
506153 - ECR Liquid Injection - Reagent Only			
Total 2016 Plan O&M Expenses			
2020 Plan			
502015 - ECR Effluent Water Chemicals			
502017 - ECR Effluent Water Operations			
512157 - ECR Effluent Water Maintenance			
Total 2020 Plan O&M Expenses			
Current Month O&M Expense for All Plans			

Note 1: Trimble County projects for the 2009 Plan and 2020 Plan are proportionately shared by KU at 48% and LG&E at 52%.

Exhibit AMF-1 Page 6 of 9 Fackler

**ES FORM 2.51** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

CCP Disposal Facilities Expenses For the Month Ended:

On-Site CCP Disposal O&M Expense	Trimble County
Existing CCP Disposal Facilities (Pre 2009 Plan Project)	
(1) 12 Months Ending with Expense Month	
(2) Monthly Amount [(1) / 12]	
2009 Plan Project	
(3) Monthly Expense	
Total Generating Station	
(4) Monthly Expense $[(2) + (3)]$	
Base Rates	
(5) Annual Expense Amount (12 Mo Ending with Last Test Year)	
(6) Monthly Expense Amount [(5) / 12]	
(7) Total Generating Station Less Base Rates [(4) - (6)]	
(8) Less 2009 Plan Project [(7) - (3)]	
If Line (8) Greater than Zero, No Adjustment	
If Line (8) Less than Zero, Adjustment for Base Rates	
Adjustment for Base Rate Amount (to ES Form 2.50)	

Note 1: Trimble County projects for the 2009 Plan are proportionately shared by KU at 48% and LG&E at 52%.

Note 2: ES Form 2.51 will not be utilized until O&M costs associated with the 2009 Plan are incurred.

Exhibit AMF-1 Page 7 of 9 Fackler

**ES FORM 2.60** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Beneficial Reuse - Operations & Maintenance Expenses For the Month Ended:

Third Party	O&M Expense Account	Plant	Total O&M
Total Monthly Beneficial Reuse Expense			
Adjustment for Beneficial Reuse in Base Rates (f Net Beneficial Reuse O&M Expense	rom ES Form 2.61)		
Net Beneficial Reuse O&M Expense			

Exhibit AMF-1 Page 8 of 9 Fackler

**ES FORM 2.61** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Beneficial Reuse Opportunities For the Month Ended:

On-Site CCP Disposal O&M Expense	Mill Creek	Trimble County	Total
		1 1	
Existing Beneficial Reuse Opportunities (Pre 2009 Plan Project)			
(1) 12 Months Ending with Expense Month			
(2) Monthly Amount $[(1)/12]$			
2009 Plan Project 25			
(3) Monthly Amount (Expense/Revenue)			
Total Beneficial Reuse - Generating Station			
(4) Monthly Expense $[(2) + (3)]$			
Beneficial Reuse in Base Rates			
(5) Annual Expense Amount (12 Mo Ending with Last Test Year)			
(6) Monthly Expense Amount [(5) / 12]			
(7) Total Generating Station Less Base Rates [(4) - (6)]			
(8) Less 2009 Plan Project 25 $[(7) - (3)]$			
If Line (8) Greater than Zero, No Adjustment			
If Line (8) Less than Zero, Adjustment for Base Rates			
Adjustment for Base Rate Amount (to ES Form 2.60)			

Note 1: Trimble County projects for the 2009 Plan are proportionately shared by KU at 48% and LG&E at 52%.

Note 2: \$0 is included in the Mill Creek beneficial reuse in base rates (Line 5) as filed in Case Number 2018-00295.

Exhibit AMF-1 Page 9 of 9 Fackler

**ES FORM 3.10** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

**Reconciliation of Reported Revenues** 

For the Month Ended: December 31, 2023

	Revenues per	Revenues per
	Form 3.00	Income Statement
Kentucky Retail Revenues		
(1) Base Rates (Customer Charge, Energy Charge, Demand Charge)		
(2) Fuel Adjustment Clause including Off System Sales Tracker		
(3) DSM		
(4) Environmental Surcharge		
(5) CSR Credits		
(6) EDR Credits		
(7) Total Kentucky Jurisdictional Revenues for Environmental Surcharge P	Purposes =	
Non -Jurisdictional Revenues		
(8) InterSystem (Total Less Transmission Portion Booked in Account 447)		
(9) Total Non-Jurisdictional Revenues for Environmental Surcharge P	Purposes =	
(10) Total Company Revenues for Environmental Surcharge P	Purposes =	
Jurisdictional Allocation Ratio for Current Month [(7)	/(10)] =	
Reconciling Revenues		
(11) Brokered		
(12) InterSystem (Transmission Portion Booked in Account 447)		
(13) Unbilled		
(14) Miscellaneous		
(15) Total Company Revenues per Income Statement =		

Note 1: Revenues per Form 3.00 do not include the fixed monthly charges for the Company's Solar Share and Business Solar programs and therefore will not always reflect Revenues per the Income Statement.

#### Exhibit AMF-2 Page 1 of 7 Fackler

ES FORM 1.10

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Calculation of Total E(m) and

**Group Surcharge Billing Factors** 

For the Expense Month of

#### Calculation of Total E(m)

E(m) = [(RB / 12) (RC)]	DR+(ROR -DR)(TR/(1-TR)))] + OE - BAS + BR, where
DD	- Environmental Compliance Data Data

RB	=	Environmental Compliance Rate Base
ROR	=	Rate of Return on the Environmental Compliance Rate Base
DR	=	Debt Rate (both short-term and long-term debt)
TR	=	Composite Federal & State Income Tax Rate
OE	=	Pollution Control Operating Expenses
BAS	=	Total Proceeds from By-Product and Allowance Sales
BR	=	Net Monthly Beneficial Reuse Operations Expenses/(Revenues)

		All Environm Compliance F	
(1) RB		=	
(2) RB / 12		=	
	DR) (TR / (1 - TR)))	=	
(4) OE		=	
(5) BAS		=	
(6) BR		=	
(7) E(m)	(2) x (3) + (4) - (5) + (6)	=	

#### Calculation of Adjusted Net Jurisdictional E(m)

(8)	Jurisdictional Allocation Ratio for Expense Month ES Form 3.10	=	
(9)	Jurisdictional $E(m) = Total E(m) x$ Jurisdictional Allocation Ratio [(7) x (8)]	=	
(10)	Adjustment for (Over)/Under-collection pursuant to Case No.	=	
(11)	Prior Period Adjustment (if necessary)	=	
(12)	Revenue Collected through Base Rates	=	
(13)	Adjusted Net Jurisdictional $E(m) = [(9) + (10) + (11) - (12)]$	=	

#### Calculation of Group Environmental Surcharge Billing Factors

			GROUP 1	GROUP 2
			(Total Revenue)	(Net Revenue)
(14)	Revenue as a Percentage of 12-month Total Revenue			
	ending with the Current Month ES Form 3.00	=		
(15)	Group E(m) [(13) x (14)]	=		
(16)	Group $R(m) =$ Average Monthly Group Revenue for the 12			
	Months Ending with the Current Expense Month ES Form 3.00	=		
(17)	Group Environmental Surcharge Billing Factors $[(15) \div (16)]$	=		

Exhibit AMF-2 Page 2 of 7 Fackler

**ES FORM 2.00** 

#### LOUISVILLE GAS AND ELECTRIC COMPANY

#### **ENVIRONMENTAL SURCHARGE REPORT**

Revenue Requirements of Environmental Compliance Costs For the Expense Month of

#### **Determination of Environmental Compliance Rate Base**

	All Environmental Compliance Plans
Eligible Pollution Control Plant	
Eligible Pollution CWIP Excluding AFUDC	
Subtotal	
Additions:	
Inventory - Emission Allowances	
Cash Working Capital Allowance	
Net Unamortized Closure Cost Balance <sup>1</sup>	
Subtotal	
Deductions:	
Accumulated Depreciation on Eligible Pollution Control Plant	
Pollution Control Deferred Income Taxes	
Subtotal	
Environmental Compliance Rate Base	

#### **Determination of Pollution Control Operating Expenses**

	All Environmental Compliance Plans
Monthly Operations & Maintenance Expense	
Monthly Depreciation & Amortization Expense	
less investment tax credit amortization	
Monthly Taxes Other Than Income Taxes - Eligible Plant	
Monthly Taxes Other Than Income Taxes - Closure Costs	
Amortization of Monthly Closure Costs	
Amortization of Excess ADIT with gross-up	
Monthly Emission Allowance Expense	
Monthly Surcharge Consulting Fees	
Construction Monitoring Consultant Fee	
Total Pollution Control Operations Expense	

#### **Determination of Beneficial Reuse Operations Expenses/(Revenues)**

	All Environmental
	Compliance Plans
Net Monthly Beneficial Reuse Operations Expenses/(Revenues)	

Note 1: The net unamortized closure cost balance is comprised of CCR closure cost expenditures less accumulated amortization, and accumulated deferred income taxes.

#### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT Capital and Related Costs by ECR Plan and Project

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Description	Eligible Plant In Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant In Service	Deferred Tax Balance as of	Monthly ITC Amortization Credit	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan: Project 23 - Trimble County Ash Treatment Basin (BAP/GSP) Project 24 - Trimble County CCP Storage (Landfill - Phase 1) Project 25 - Beneficial Reuse								
Subtotal Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
<b>2016 Plan:</b> Project 29 - Mill Creek New Process Water Systems Project 30 - Trimble County New Process Water Systems								
Subtotal Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
2020 Plan Project 31 - Mill Creek ELG Water Treatment System and Diffuser Project 32 - Trimble County ELG Water Treatment System								
Subtotal Less Retirements and Replacement resulting from implementation of 2020 Plan								
Net Total - 2020 Plan:								
Net Total - All Plans:								

Note 1: Trimble County projects for the 2009, 2016, and 2020 Plans are proportionately shared by KU at 48% and LG&E at 52%. Note 2: The Deferred Tax Balance includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.

Note 3: Adjustment in Project 23 reflects capital amounts that were recovered in base rates rather than in ECR and were not removed in LG&E's base rate proceeding (CN 2020-00350) when the project was eliminated from ECR; therefore, the adjusted amount continues to be reflected in ECR.

**ES FORM 2.40** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

O&M Expenses and Determination of Cash Working Capital Allowance

For the Month Ended:

	All Environmental
O&M Expenses	Compliance Plans
11th Previous Month	
10th Previous Month	
9th Previous Month	
8th Previous Month	
7th Previous Month	
6th Previous Month	
5th Previous Month	
4th Previous Month	
3rd Previous Month	
2nd Previous Month	
Previous Month	
Current Month	
Total 12 Month O&M	

Determination of Working Capital Allowance		
12 Months O&M Expenses		
One Eighth (1/8) of 12 Month O&M Expenses	1/8	
Allowance		

Exhibit AMF-2 Page 5 of 7 Fackler

**ES FORM 2.50** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Pollution Control - Operations & Maintenance Expenses For the Month Ended:

O&M Expense Account	Mill Creek	Trimble County	Total
2009 Plan			
502013 - ECR Landfill Operations			
512107 - ECR Landfill Maintenance			
Total 2009 Plan O&M Expenses			
2020 Plan			
502015 - ECR Effluent Water Chemicals			
502017 - ECR Effluent Water Operations			
512157 - ECR Effluent Water Maintenance			
Total 2020 Plan O&M Expenses			
Current Month O&M Expense for All Plans			

Note 1: Trimble County projects for the 2009 Plan and 2020 Plan are proportionately shared by KU at 48% and LG&E at 52%.

Exhibit AMF-2 Page 6 of 7 Fackler

**ES FORM 2.60** 

### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Beneficial Reuse - Operations & Maintenance Expenses/(Revenues) For the Month Ended:

Third Party	O&M Expense Account	Plant	Net Expenses/ (Revenues)
			· · · · /
	4	4	
Net Monthly Beneficial Reuse Operations Expenses/	Revenues)		
The monthly Bencholar Reuse Operations Expenses/			

Exhibit AMF-2 Page 7 of 7 Fackler

**ES FORM 3.10** 

## LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

**Reconciliation of Reported Revenues** 

#### For the Month Ended:

	Revenues per Form 3.00	Revenues per Income Statement
Kentucky Retail Revenues	FOIII 5.00	Income Statement
(1) Base Rates (Customer Charge, Energy Charge, Demand Charge)		
(2) Fuel Adjustment Clause including Off System Sales Tracker		
(3) DSM		
(4) Environmental Surcharge		
(5) CSR Credits		
(6) EDR Credits		
(7) Business and Community Solar		
(8) Total Kentucky Jurisdictional Revenues for Environmental Surcharge Purposes =		
Non -Jurisdictional Revenues		
(9) InterSystem (Total Less Transmission Portion Booked in Account 447)		
(10) Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes =		
(11) Total Company Revenues for Environmental Surcharge Purposes =		
(12) Jurisdictional Allocation Ratio for Current Month $[(8)/(11)] =$		-
Reconciling Revenues		
(13) Brokered		
(14) InterSystem (Transmission Portion Booked in Account 447)		
(15) Unbilled		
(16) Miscellaneous		
(17) Total Company Revenues per Income Statement =		