COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY	)	
UTILITIES COMPANY FOR APPROVAL OF ITS	)	**CASE NO.**
2025 COMPLIANCE PLAN FOR RECOVERY BY	)	**2025-00105**
ENVIRONMENTAL SURCHARGE	)	

DIRECT TESTIMONY OF
ROBERT M. CONROY
VICE PRESIDENT, STATE REGULATION AND RATES
ON BEHALF OF
KENTUCKY UTILITIES COMPANY

Filed: April 30, 2025

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INTRODUCTION

Q. Please state your name, position, and business address.

A. My name is Robert M. Conroy. I am the Vice President of State Regulation and Rates for Kentucky Utilities Company ("KU" or "Company") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies"), and an employee of LG&E and KU Services Company, which provides services to the Companies. My business address is 2701 Eastpoint Parkway, Louisville, Kentucky 40223. A complete statement of my education and work experience is attached to this testimony as Appendix A.

Q. Have you previously testified before this Commission?

A. Yes, I have testified before this Commission in numerous proceedings over almost 20 years, including a number of Environmental Cost Recovery ("ECR") Compliance Plan proceedings.[1] Most recently, I submitted testimony in the ongoing proceeding concerning the Companies' 2025 application for certificates of public convenience and necessity ("CPCNs") and site compatibility certificates ("2025 CPCN Case").[2] The Companies' application in the 2025 CPCN Case requests a CPCN for a selective catalytic reduction ("SCR") facility for Ghent Generating Station Unit 2 ("Ghent 2"), for which KU is seeking ECR Surcharge (Adjustment Clause ECR) cost recovery in this proceeding.

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[1] *Electronic Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates*, Case No. 2025-00045 (Ky. PSC Feb. 28, 2025)(including seeking a CPCN for the Ghent 2 selective catalytic reduction ("SCR") facility for which KU is seeking ECR recovery here). The Companies' previous ECR compliance plan proceedings include 2020 (Case Nos. 2020-00060 (KU) and 2020-00061 (LG&E)); 2018 (Case No. 2017-00483 (KU)), 2016 (Case Nos. 2016-00026 (KU) and 2016-00027 (LG&E)), 2009 (Case Nos. 2009-00197 (KU) and 2009-00198 (LG&E), and 2006 (Case Nos. 2006-00206 (KU).

[2] *Electronic Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates*, Case No. 2025-00045, Direct Testimony of Robert M. Conroy (Feb. 28, 2025).

Q. What is the purpose of your direct testimony?

A. My testimony summarizes the Company's other witnesses' testimony and KU's request for approval of its 2025 Environmental Compliance Plan ("2025 Plan"), which consists of a single project, Project 45, to construct, operate, and maintain the Ghent 2 SCR. Also, I discuss KU's proposal to use the currently approved 9.35% return on equity ("ROE") for the ECR Surcharge for all ECR Plans, including the 2025 Plan, until the Commission approves a new ROE for KU's ECR Surcharge in the base rate case for which KU will file an application with the Commission on May 30, 2025. Finally, I describe the circumstances leading KU to file for approval of the 2025 Plan separately from the Companies' pending joint application for CPCNs and site compatibility certificates in the 2025 CPCN Case, and why consolidation of this case with the 2025 CPCN Case is appropriate.

OVERVIEW OF TESTIMONY

Q. Please provide an overview of the testimony of the witnesses supporting the Company's application in this proceeding.

A. In addition to my testimony, the Company is presenting the testimony of three other witnesses in support of this application:

- Andrea M. Fackler, Manager, Revenue Requirement/Cost of Service, presents testimony concerning how KU will include the 2025 Plan in its ECR Surcharge, explaining that KU's methodology for calculating its ECR Surcharge will remain the same other than one modification, and KU's ECR Surcharge tariff sheets will remain the same other than one modification and an update to the issue and effective dates. Ms. Fackler further explains that KU does not currently recover any of the 2025 Plan's costs through base rates, and she presents KU's proposed depreciation rate approach for the 2025 Plan. Ms. Fackler supports KU's request to establish a regulatory asset for the cost of the required customer notice for this application and to recover the amortization of that asset over 12 months. Ms. Fackler also supports KU's request to use its ECR Surcharge to recover its future compliance plan customer notice costs when and as incurred. Finally, she presents KU's proposed revisions to its monthly Environmental Surcharge reporting forms ("ES Forms") and discusses the bill impact on KU's customers.

- David L. Tummonds, Senior Director, Project Engineering, presents testimony sponsoring KU's 2025 Plan and supporting the timeline, capital cost, and operation and maintenance ("O&M") expenses for Project 45.
- Philip A. Imber, Director, Environmental Compliance, presents testimony explaining why constructing, operating, and maintaining the Ghent 2 SCR will help ensure ongoing compliance with applicable environmental regulations, in particular the 2015 National Ambient Air Quality Standards for ozone ("2015 Ozone NAAQS") promulgated by the U.S. Environmental Protection Agency ("EPA") under the federal Clean Air Act as amended. He concludes that, because the Ghent 2 SCR will help KU comply with such regulations, the Commission should find that the costs of the 2025 Plan are costs of complying with the federal Clean Air Act as amended.

THE 2025 PLAN AND ECR SURCHARGE COST RECOVERY

Q. Please briefly describe Project 45, which is the only project in KU's 2025 Plan, and how it will support compliance with the federal Clean Air Act as amended ("CAAA").

A. As I noted above, Project 45 consists of constructing, operating, and maintaining the proposed Ghent 2 SCR. KU's ownership share of the Ghent 2 SCR will be 100% to align with KU's 100% ownership of Ghent 2.

As Mr. Imber discusses in his testimony, the EPA promulgated the 2015 Ozone NAAQS under authority granted to it by the CAAA, and the EPA must drive attainment of the 2015 Ozone NAAQS, including any state's significant contribution to downwind states' nonattainment or interference with any state's maintenance of attainment. As he further explains, reducing ozone levels as needed to comply with the 2015 Ozone NAAQS requires reducing nitrogen oxide ("NOx") emissions, and SCRs reduce NOx emissions from fossil fuel-fired electric generating units like Ghent 2. He notes that because Ghent 2 is one of a small minority of coal-fired generating units not expected to retire in the next few years that lacks SCR, it is a natural target for compliance efforts. Thus, the Ghent 2 SCR will help ensure ongoing compliance with the 2015 Ozone NAAQS, which the EPA promulgated under the CAAA.

Q. Why is it appropriate for the Company to recover the costs of the 2025 Plan through its ECR Surcharge?

A. Kentucky's ECR statute, KRS 278.183, states in relevant part:

> (1) [A] utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for

> production of energy from coal in accordance with the utility's compliance plan as designated in subsection (2) of this section.
>
> (2) Recovery of costs pursuant to subsection (1) of this section that are not already included in existing rates shall be by environmental surcharge to existing rates imposed as a positive or negative adjustment to customer bills in the second month following the month in which costs are incurred.

Therefore, because, as described above, the costs of the 2025 Plan are costs of complying with the CAAA, KU is entitled to recover the costs of the 2025 Plan through its ECR Surcharge. As Ms. Fackler explains in her testimony, KU is not recovering and does not plan to recover any costs of the Ghent 2 SCR through base rates, making it appropriate to recover all costs of the Ghent 2 SCR through KU's ECR Surcharge.

Q. How does the Company plan to finance the 2025 Plan?

A. The Company expects to finance the costs of the Ghent 2 SCR with a combination of new debt and equity. The mix of debt and equity used to finance the project will be determined to allow the Company to maintain its strong investment-grade credit ratings. To the extent that tax-exempt financing may be available for the project, the Company anticipates using such opportunities to the extent that they are reasonably cost effective. KU does not engage in project financing.

<u>RETURN ON EQUITY</u>

Q. What return on equity is the Company currently using for its ECR Surcharge?

A. KU currently uses a 9.35% return on equity ("ROE") for its ECR Surcharge as stipulated by the parties and approved by the Commission during the Company's 2020 base rate case.[3] Consistent with that approval, the Commission's Final Order in the

[3] *Electronic Application of Kentucky Utilities 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. 2020-00349, Order at 19-24 (Ky. PSC June 30, 2021).

Company's most recent ECR review case required the Company to continue to use a 9.35% ROE unless directed otherwise by the Commission.[4]

Solely for the purpose of administrative efficiency, KU proposes to continue using the currently approved ROE for all ECR Surcharge recovery, including for the 2025 Plan (Project 45), but only until the Commission approves a different ROE for the ECR Surcharge. KU will request a new ROE for the ECR Surcharge in the base rate application it plans to file on May 30, 2025. It would therefore be administratively efficient to address a new ROE for the ECR Surcharge once in KU's upcoming base rate case rather than to litigate it twice in two parallel proceedings. Therefore, KU is not proposing a new ECR Surcharge ROE in this case, but not because KU believes the current ECR ROE is adequate or appropriate.

CONSOLIDATING THIS CASE WITH CASE NO. 2025-00045 IS APPROPRIATE

Q. Please explain why consolidating this case with Case No. 2025-00045 would be appropriate.

A. As the Company explains in a separate motion being filed with this application, the decision to file KU's 2025 ECR compliance plan application separately from the Companies' CPCN application in Case No. 2025-00045 was due only to the new order-issuance deadlines imposed by KRS 278.019(1), which the Kentucky General Assembly enacted last year.[5] KRS 278.019(1) gives the Commission eight months to

[4] *An Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Utilities for the Six-Month Billing Periods Ending April 30, 2020, October 31, 2020, October 31, 2021, April 30, 2022, October 31, 2022, and October 31, 2023, and for the Two-Year Billing Periods Ending April 30, 2021 and April 30, 2023*, Case No. 2023-00376, Order at 17 (Ky. PSC Aug. 30, 2024) ("Beginning in the second full billing month following the date of this Order, KU shall use … a ROE of 9.35 percent … for all its ECR Plans in all future monthly environmental surcharge filings unless directed otherwise by the Commission").
[5] *See* 2024 Ky. Acts ch. 172 sec. 2 (April 12, 2024).

issue a final order on CPCN applications.[6] In light of these new deadlines, the Company concluded that concurrently filing this application—which, per KRS 278.183(2), must be approved or denied by the Commission within six months of submittal—would effectively deprive the Commission of the full eight months provided under KRS 278.019(1) regarding the full array of non-ECR related requests the Companies made in Case No. 2025-00045. Therefore, the Company determined that filing the CPCN application first and seeking to consolidate the two cases would provide the Commission, the Companies, and intervenors with the best opportunity to fully develop a record for the Commission's ultimate decision at a reasonable pace.

CONCLUSION

Q. What is your recommendation for the Commission?

A. I recommend the Commission approve the Company's 2025 Plan and application for cost recovery through KU's ECR Surcharge, as well as all other relief KU is requesting in this proceeding, including continuing to use the currently approved ROE for its ECR Surcharge for all ECR Plans, including the 2025 Plan (Project 45), until the Commission approves a new ROE for KU's ECR Surcharge in the base rate case for which KU will file an application with the Commission on May 30, 2025.

Q. Does this conclude your testimony?

A. Yes, it does.

[6] KRS 278.019(1).

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, an employee of LG&E and KU Services Company, and that he 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 his information, knowledge, and belief.

Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 23rd day of April 2025.

Notary Public

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026

TAMMY J. ELZY
COMM EXPIRES 11/09/2026
NOTARY PUBLIC
ID # KYNP61560
STATE AT LARGE, KENTUCKY

APPENDIX A

Robert M. Conroy

Vice President, State Regulation and Rates
LG&E and KU Services Company
2701 Eastpoint Parkway
Louisville, Kentucky 40223

Previous Positions

Vice President, State Regulation and Rates	Feb 2016 – Present
Director, Rates	Feb 2008 – Feb 2016
Manager, Rates	April 2004 – Feb 2008
Manager, Generation Systems Planning	Feb. 2001 – April 2004
Group Leader, Generation Systems Planning	Feb. 2000 – Feb. 2001
Lead Planning Engineer	Oct. 1999 – Feb. 2000
Consulting System Planning Analyst	April 1996 – Oct. 1999
System Planning Analyst III & IV	Oct. 1992 - April 1996
System Planning Analyst II	Jan. 1991 - Oct. 1992
Electrical Engineer II	Jun. 1990 - Jan. 1991
Electrical Engineer I	Jun. 1987 - Jun. 1990

Professional/Trade Memberships

Registered Professional Engineer in Kentucky, 1995
Edison Electric Institute - Rates and Regulatory Affairs Committee
Southeastern Energy Exchange - Rates and Regulation Committee

Education

Essentials of Leadership, London Business School, 2004
Masters of Business Administration
Indiana University (Southeast campus), December 1998
Center for Creative Leadership, Foundations in Leadership program, 1998.
Bachelor of Science in Electrical Engineering
Rose Hulman Institute of Technology, May 1987

Civic Activities

Olmstead Parks Conservancy – Board of Directors – 2016 – 2024
Leadership Kentucky – Class of 2016
Financial Research Institute – Advisory Board Member – 2016 – 2024

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In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY	**)**	
UTILITIES COMPANY FOR APPROVAL OF ITS	**)**	**CASE NO.**
2025 COMPLIANCE PLAN FOR RECOVERY BY	**)**	**2025-00105**
ENVIRONMENTAL SURCHARGE	**)**	

DIRECT TESTIMONY OF
ANDREA M. FACKLER
MANAGER, REVENUE REQUIREMENT/COST OF SERVICE
ON BEHALF OF
KENTUCKY UTILITIES COMPANY

Filed: April 30, 2025

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INTRODUCTION

Q. Please state your name, position, and business address.

A. My name is Andrea M. Fackler. I am the Manager of Revenue Requirement/Cost of Service for Kentucky Utilities Company ("KU" or "Company") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies") and an employee of LG&E and KU Services Company, which provides services to the Companies. My business address is 2701 Eastpoint Parkway, Louisville, Kentucky 40223. A complete statement of my education and work experience is attached to this testimony as Appendix A.

Q. Have you previously testified before this Commission?

A. Yes. I submitted testimony and sponsored responses to data requests in a number of the Companies' Environmental Cost Recovery ("ECR") and Fuel Adjustment Clause ("FAC") review proceedings,[1] as well as in the Companies' 2020 ECR Plan cases.[2] Most recently, I submitted testimony and sponsored responses to data requests in the Commission's proceeding concerning LG&E's application to recover the retirement costs of Mill Creek Unit 1 through LG&E's Retired Asset Recovery Rider.[3]

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[1] *See, e.g., An 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, October 31, 2021, April 30, 2022, October 31, 2022, and October 31, 2023, and for the Two-Year Billing Periods Ending April 30, 2021, and April 30, 2023*, Case No. 2023-00375, Direct Testimony of Andrea M. Fackler (Feb. 14, 2024); *An Electronic Examination of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 2020, through October 31, 2022*, Case No. 2023-00011, Direct Testimony of Andrea M. Fackler (Sept. 22, 2023).

[2] *Electronic Application of Kentucky Utilities Company for Approval of Its 2020 Compliance Plan for Recovery by Environmental Surcharge*, Case No. 2020-00060, Direct Testimony of Andrea M. Fackler (Mar. 31, 2020); *Electronic Application of Louisville Gas and Electric Company for Approval of Its 2020 Compliance Plan for Recovery by Environmental Surcharge, Case No. 2020-00061*, Direct Testimony of Andrea M. Fackler (Mar. 31, 2020).

[3] *Electronic Application of Kentucky Utilities Company for Approval of its 2020 Compliance Plan for Recovery by Environmental Surcharge*, Case No. 2020-00060, Application (Mar. 31, 2020); *Electronic Application of Louisville Gas and Electric Company for Approval of Retired Asset Recovery Rider Cost Recovery for the Retirement of Mill Creek Unit 1 and of Retired Asset Recovery Rider Tariff Revisions and Monthly Reporting Forms*, Case No. 2024-00317, Application (Oct. 4, 2024).

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring five exhibits, four of which are attached to my testimony:

Exhibit AMF-1	KU Proposed ECR Tariff Sheets – Redline
Exhibit AMF-2	Current KU Environmental Surcharge Monthly Reports
Exhibit AMF-3	Proposed KU Environmental Surcharge Monthly Reports
Exhibit AMF-4	KU 2025 Plan Customer Bill Impact

I am also sponsoring Application Exhibit 2.

Q. What is the purpose of your direct testimony?

A. My testimony has several purposes. First, I address how the Environmental Surcharge Billing Factors under KU's ECR Surcharge tariff provisions (Adjustment Clause ECR) will be calculated to include the costs of the Company's 2025 Environmental Compliance Plan (Application Exhibit 1, the "2025 Plan"). I explain that KU's methodology for calculating its Environmental Surcharge Billing Factors will remain the same with one modification, and KU's ECR Surcharge tariff sheets will remain the same other than one modification and an update to the issue and effective dates. Next, I explain that KU does not currently recover any of the 2025 Plan's costs through base rates, and I present KU's proposed depreciation rate approach for the 2025 Plan. I then support KU's request to establish a regulatory asset for the cost of the required customer notice for this application and to recover the amortization of that asset over twelve months. I also support KU's request to use its ECR Surcharge to recover its future compliance plan customer notice costs when and as incurred. Finally, I present KU's proposed revisions to its monthly Environmental Surcharge reporting forms ("ES Forms") and discuss the bill impact on KU's customers.

ECR SURCHARGE TARIFF PROVISIONS

Q. Is the Company proposing any changes to its ECR Surcharge tariff sheets?

A. Yes. KU proposes to revise the definition of Total E(m) in paragraph 2 of the Definitions section on Sheet No. 87.1 to include the addition of Commission-approved Administrative Expenses. KU proposes this addition because it is requesting Commission authority to recover ECR customer notice costs through the ECR Surcharge, and there is not currently an appropriate tariff cost category for such expenses.

Other than that change, KU is not proposing to make any changes to its ECR Surcharge tariff sheets other than to change the issue and effective dates to reflect KU's application in this proceeding.

KU's proposed ECR Surcharge tariff sheets are attached to the Company's application as Application Exhibit 2, and a redline version comparing the proposed ECR Surcharge tariff sheets to the existing tariff sheets is attached to my testimony as Exhibit AMF-1. The Company's revised ECR Surcharge tariff sheets have an issue date of April 30, 2025 and are proposed to be effective October 31, 2025, and the revised Environmental Surcharge Billing Factors will be effective with the expense month of October 2025 for bills issued on and after the first day of the billing cycle for December 2025.[4]

Q. Will the methodologies for calculating the Environmental Surcharge Billing Factors change if the Commission approves recovery of the 2025 Plan?

[4] The first day of the billing cycle for December 2025 is December 1, 2025.

A. The only change is in the determination of the monthly adjusted net jurisdictional revenue requirement to accommodate customer notice costs being added. Otherwise, KU will continue to use the currently approved methodology for calculating the Environmental Surcharge Billing Factors, including the monthly jurisdictional revenue requirement (E(m)) and the revenue allocation methodology I describe below that is used to determine the Group Environmental Surcharge Billing Factors. The proposed calculation of the monthly Environmental Surcharge Billing Factors will continue to consolidate the 2009 Plan (Projects 32 and 33 only), the 2016 Plan (Projects 40, 41, and 42), and the 2020 Plan, and it will also now include the proposed 2025 Plan. As explained in the testimony of Robert M. Conroy, the 2025 Plan consists of a single project, Project 45, which consists of a single new facility, namely a selective catalytic reduction ("SCR") facility for KU's Ghent Generating Station Unit 2 ("Ghent 2").

Q. What revenue allocation is KU proposing in this case?

A. KU proposes to continue to use the two-step revenue allocation methodology approved by the Commission in the Company's 2011 ECR Plan proceeding, which the Company has used in calculating its Environmental Surcharge Billing Factors since the Commission's approval in that proceeding.[5]

COST IN BASE RATES

Q. Is KU proposing to recover operation and maintenance ("O&M") costs associated with the 2025 Plan?

[5] *Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of its 2011 Compliance Plan for Recovery by Environmental Surcharge*, Case No. 2011-00161, Order at Appx. A. pp. 8-10 (Ky. PSC Dec. 15, 2011).

A. Yes. As shown on Page 2 of the 2025 Plan (Application Exhibit 1), the Company expects to incur new O&M costs for Project 45 once the asset is placed into service, and KU is seeking recovery of those O&M costs through its ECR Surcharge. The O&M costs associated with the 2025 Plan are not currently included in existing base rates or ECR O&M costs.

Q. Are any of the capital expenditures for the 2025 Plan already included in existing base rates?

A. No. Because the 2025 Plan is an entirely new environmental compliance installation that KU did not anticipate or include in its forecasted test year in its most recent base rate case (Case No. 2020-00349), the capital expenditures for the 2025 Plan are not included in existing base rates.

Q. How will KU treat capital expenditures for the 2025 Plan in future base rates?

A. KU is not planning to include capital expenditures for the 2025 Plan in its future rate base used to determine base rates, including future incremental capital expenditures for the 2025 Plan (e.g., catalyst replacements), because the project qualifies for recovery through its ECR Surcharge.[6] Upon Commission approval of the 2025 Plan, the Company will recover the total costs of this ECR project through the ECR Surcharge.

DEPRECIATION RATES

Q. What depreciation rate is KU proposing to use for Project 45?

[6] Upon completion of a two-year ECR roll-in of costs to base rates, certain costs related to Project 45 could be collected for ECR purposes as a component of base rates. These costs and revenues collected would still be accounted for pursuant to the ECR Surcharge tariff and statute as they are today. Only upon a request to eliminate Project 45 from ECR cost recovery to base rates would the Company include any costs related to Project 45 in its future rate base used to determine base rates.

A. In this case, KU used the existing book depreciation rate previously approved by the Commission for FERC account 312 Boiler Plant Equipment of 1.17% to calculate depreciation expense for the Ghent 2 SCR until the Commission approves new depreciation rates in the base rate case KU will file with the Commission on May 30, 2025. When the Commission approves a new depreciation rate for FERC account 312 Boiler Plant Equipment, KU will correspondingly update the depreciation rate applied to Project 45.

KU'S PROPOSAL FOR REGULATORY DEFERRAL ACCOUNTING FOR, AND ECR SURCHARGE RECOVERY OF, THE COST OF CUSTOMER NOTICE FOR THIS APPLICATION

Q. Please explain the Company's proposal regarding regulatory deferral accounting for, and ECR Surcharge cost recovery of, KU's customer notice cost for this application.

A. KU requests Commission approval to establish a regulatory asset for its customer notice cost for this application (estimated to be $359,976) and then to amortize that asset over 12 months beginning October 2025, i.e., the same expense month for which KU proposes to begin cost recovery for the Ghent 2 SCR under Project 45 of the 2025 Plan. KU further proposes to recover those amortized costs through its ECR Surcharge.

Q. Why is it appropriate for KU to recover its notice cost as proposed?

A. There are several reasons KU's proposed regulatory deferral accounting approach and ECR Surcharge cost recovery are appropriate.

First, such regulatory deferral accounting treatment and ECR Surcharge cost recovery would be consistent with the Commission's Orders in at least two other ECR cases.[7] In those cases, the Commission granted Big Rivers Electric Corporation ("Big Rivers") authority to establish a regulatory asset for its ECR case costs, amortize those costs over three years, and recover that amortization through Big Rivers' ECR mechanism.[8] Notably, in one of Big Rivers' ECR cases, the Commission explicitly stated it was appropriate to establish a regulatory asset for Big Rivers' ECR case costs because they were "expense[s] resulting from a statutory or administrative directive …."[9] Here, KU is not asking for such treatment for all its costs of this case, but rather a subset of those costs, i.e., only KU's notice cost, which is clearly a cost KU incurred to comply with the Commission's customer notice requirements.

Second, KU's notice cost for this case is not a cost it currently recovers through base rates. Therefore, KU's requested regulatory deferral accounting treatment and ECR Surcharge cost recovery would not result in double-recovery of the Company's notice cost.

Third, recovering this cost through KU's ECR Surcharge rather than base rates helps ensure KU will recover the actual cost rather than over- or under-recovering an estimated cost, which could occur if the cost were embedded in base rates.

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[7] *Electronic Application of Big Rivers Electric Corporation for Approval of its 2020 Environmental Compliance Plan, Authority to Recover Costs through a Revised Environmental Surcharge and Tariff, the Issuance of a Certificate of Public Convenience and Necessity for Certain Projects, and Appropriate Accounting and Other Relief*, Case No. 2019-00435, Order at 15-16, 23-24, and 27 (Ky. PSC Aug. 6, 2020); *Application of Big Rivers Electric Corporation for Approval of its 2012 Environmental Compliance Plan, for Approval of Its Amended Environmental Cost Recovery Surcharge Tariff, for Certificates of Public Convenience and Necessity, and for Authority to Establish a Regulatory Account*, Case No. 2012-00063, Order at 19 (Ky. PSC Oct. 1, 2012).

[8] *Id.* Note that the Commission approved ECR cost recovery for the amortization of the regulatory asset it approved for Big Rivers' ECR case cost in Case No. 2019-00435 in a later Order in a separate case. *Electronic Application of Big Rivers Electric Corporation for Annual Report on MRSM Credit*, Case No. 2021-00061, Order at 12 (Ky. PSC June 9, 2021).

[9] Case No. 2019-00435, Order at 23-24 (Ky. PSC Aug. 6, 2020).

Therefore, the Commission should approve KU's requested regulatory deferral accounting treatment, amortization of the asset over 12 months, and recovery of the amortized costs through the ECR Surcharge because it would be consistent with the Commission's Orders in other ECR cases and would not result in double- or over-recovery of KU's notice costs.

KU'S PROPOSAL FOR ECR SURCHARGE RECOVERY OF FUTURE ECR APPLICATION NOTICE COSTS

Q. Why would it be appropriate for the Commission to grant KU ongoing authority to use its ECR Surcharge to recover future ECR compliance plan customer notice costs when and as incurred?

A. There are three reasons it would be appropriate for the Commission to grant KU ongoing authority to use its ECR Surcharge to recover future ECR compliance plan customer notice costs when and as incurred. First, granting this authority would improve administrative efficiency by eliminating the need for KU to request, and the Commission to consider and grant, authority to recover such costs in each future ECR compliance plan proceeding. Second, granting the requested authority would improve administrative efficiency by obviating the need for regulatory deferral accounting for such future costs. Third, granting this authority would preserve the Commission's ability to review such costs in future ECR Surcharge review proceedings. Therefore, if the Commission agrees that, consistent with its prior Orders, it is appropriate for KU to recovery its ECR compliance plan customer notice costs through its ECR Surcharge, there are real efficiencies to be gained and no Commission oversight to be lost by granting KU's requested ongoing ECR Surcharge cost recovery authority.

ACCOUNTING FOR ECR SURCHARGE RECOVERY OF ECR APPLICATION NOTICE COSTS

Q. How would KU account for the regulatory deferral and future customer notice costs?

A. Customer notice costs are recorded to FERC account 928, Regulatory commission expenses, for all regulatory filings except base rate cases. Upon Commission approval of the requested deferral accounting approach for KU's customer notice costs for this application, the Company will reclassify the actual customer notice costs for this proceeding from FERC account 928 to FERC account 182.3, Other regulatory assets. The total deferred amount will then be amortized to FERC account 928 over 12 months, reducing the balance in the FERC account 182.3 over that period. The monthly amortization amount will then be input into the applicable monthly ES Forms as discussed in the following section of my testimony.

For future customer notice costs, the Company will resume recording the expense to FERC account 928 when the costs are incurred. This amount will then be input in the applicable monthly ES Forms when incurred for recovery.

REVISIONS TO ES FORMS

Q. Will the monthly reporting forms used for calculating the Environmental Surcharge Billing Factors change if the Commission approves recovery of the Company's 2025 Plan and the requested notice cost recovery?

A. Yes, the ES Forms will change slightly to reflect the recovery of the costs associated with the 2025 Plan and the requested customer notice cost recovery. Exhibit AMF-2 contains the Company's current monthly ES Forms and Exhibit AMF-3 contains the Company's proposed monthly ES Forms.

Q. Please describe how KU proposes to modify the ES Forms to account for the 2025 Plan and the requested customer notice cost recovery.

A. As I previously explained, the calculations of the monthly jurisdictional revenue requirement (E(m)) and the group Environmental Surcharge Billing Factors on ES Form 1.10 will be consistent with the current methodology approved by the Commission but will now also include the costs associated with the 2025 Plan. However, the Company proposes expanding the calculation of adjusted net jurisdictional revenue requirement (E(m)) on ES Form 1.10 to include Commission-approved Administrative Expenses, such as customer notice expenses.

Capital and related costs for each Commission-approved ECR Project are currently reported on ES Form 2.10. This form is being expanded to include the recoverable costs incurred by the 2025 Plan.

Pollution control equipment O&M expenses for each Commission-approved ECR project are currently reported on ES form 2.50. This form is being expanded to include the O&M expenses associated with the 2025 Plan. As discussed below and in the direct testimony of Mr. Conroy, KU is proposing to recover the O&M expenses for the Ghent 2 SCR project through the ECR Surcharge.

BILL IMPACT

Q. Has KU estimated the impact of Project 45 and the inclusion of customer notice costs on its ECR Surcharge for customers' bills?

A. Yes. The table below shows the estimated annual impact for years 2025 through 2029, on E(m) and the incremental billing factor associated with Project 45 in the 2025 Plan and the requested customer notice cost recovery.

Kentucky Utilities Company

Environmental Cost Recovery Surcharge Summary

Table 1: KU Environmental Cost Recovery Surcharge Summary

	2025	2026	2027	2028	2029
Total E(m) - (in '000s)	$100	$3,209	$10,053	$15,642	$16,115
12 Month Average Jurisdictional Ratio*	92.68%	92.68%	92.68%	92.68%	92.68%
Jurisdictional E(m)	$93	$2,974	$9,317	$14,497	$14,936
Administrative Expenses	$89	$267	$0	$0	$0
Adjusted Jurisdictional E(m) - (in '000s)	$182	$3,241	$9,317	$14,497	$14,936
12 Month Total Jurisdictional R(m) - (in '000s)*	$1,841	$1,841	$1,841	$1,841	$1,841
Incremental Billing Factor Group 1	0.01%	0.18%	0.51%	0.79%	0.81%
Residential Customer Impact Monthly bill (1085 kWh per month)	$0.01	$0.24	$0.68	$1.05	$1.09
Incremental Billing Factor Group 2	0.01%	0.24%	0.68%	1.06%	1.10%

*Based on Actuals for the 12 Months Ended February 2025

As shown in Table 1, the estimated impact on a KU Group 1 customer is an increase of 0.01 percent initially in 2025 and increasing to a maximum of 0.81 percent in 2029. For a residential customer using an average of 1,085 kWh per month, the initial monthly increase is expected to be $0.01 in 2025, upon approval by the Commission. It is estimated that this amount will increase to a maximum of $1.09 per month in 2029. The estimated impact on a KU Group 2 customer is an increase of 0.01 percent initially in 2025 and increasing to a maximum of 1.10 percent in 2029. Exhibit AMF-4 shows the details of the impact on and of the Environmental Surcharge Billing Factors for 2025 through 2029 for all KU rate schedules under which at least one customer takes service.

CONCLUSION

Q. What is your recommendation for the Commission?

A. I recommend the Commission approve KU's 2025 Plan and application for cost recovery, including costs related to customer notice, of its environmental compliance costs through KU's ECR Surcharge, as well as the proposed changes to the Company's ECR Surcharge tariff sheets and monthly ES Forms to be effective with the expense month of October 2025 for bills issued on and after the first day of the billing cycle for December 2025.[10] I further recommend the Commission approve KU's proposal to use existing depreciation rates for Project 45 until the Commission approves new depreciation rates in the base rate case for which KU will file an application with the Commission on May 30, 2025.

Q. Does this conclude your testimony?

A. Yes, it does.

---

[10] The first day of the billing cycle for December 2025 is December 1, 2025.

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 Kentucky Utilities 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.

Andrea M. Fackler

Andrea M. Fackler

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 28th day of April 2025.

Caroline J. Davison (SEAL)
Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027

CAROLINE J. DAVISON
COMM EXPIRES 01/22/2027
NOTARY PUBLIC
ID # KYNP63286
STATE AT LARGE, KENTUCKY

APPENDIX A

Andrea M. Fackler, CPA, CGMA
Manager, Revenue Requirement/Cost of Service
LG&E and KU Services Company
2701 Eastpoint Parkway
Louisville, Kentucky 40223

Relevant Work and Professional Experience

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

Professional and Trade Memberships

American Institute of Certified Public Accountants
Kentucky Society of Certified Public Accountants
Institute of Management Accountants

Education, Professional Credentials, and Training

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

Civic Activities

Parent Volunteer, Budget Committee, St. John United Methodist Church	2021 – Present
President, LG&E and KU CARE Business Resource Group	2021 – Present
Committee Member, Harmony Elementary PTA	2020 – Present
Committee Member, Members in Business and Industry, KYCPA	2017 – Present
Troop Leader, Girl Scouts of Kentuckiana	2021 – 2024
President-Elect, President, and Immediate Past President, LG&E and KU Young Energy Professionals Business Resource Group	2015 – 2017

Exhibit AMF-1 – KU Proposed ECR Tariff Sheets - Redline

Kentucky Utilities Company

P.S.C. No. 20, First Revision of Original Sheet No. 87
Canceling P.S.C. No. 20, Original Sheet No. 87

Adjustment Clause **ECR**

Environmental Cost Recovery Surcharge

APPLICABLE

In all territory served.

AVAILABILITY

This schedule is mandatory to all rate schedules listed in Section 1 of the General Index except Rate PSA and Special Charges, all Pilot Programs listed in Section 3 of the General Index, and FAC (including OSS) and DSM Adjustment Clauses. Rate schedules subject to this adjustment clause are divided into Group 1 or Group 2 as follows:

Group 1: Rates RS; RTOD-Energy; RTOD-Demand; VFD; AES; LS; RLS; LE; and TE.
Group 2: Rates GS; GTOD-Energy; GTOD-Demand; PS; TODS; TODP; RTS; FLS; EVSE; EVC-L2; EVC-FAST; and OSL.

RATE

The monthly billing amount under each of the schedules to which this mechanism is applicable, shall be increased or decreased by a percentage factor calculated in accordance with the following formula.

Group Environmental Surcharge Billing Factor = Group E(m) / Group R(m)

As set forth below, Group E(m) is the sum of Jurisdictional E(m) of each approved environmental compliance plan revenue requirement of environmental compliance costs for the current expense month allocated to each of Group 1 and Group 2. Group R(m) for Group 1 is the twelve (12) month average revenue for the current expense month and for Group 2 it is the twelve (12) month average non-fuel revenue for the current expense month.

DEFINITIONS

1. For all Plans, E(m) = [(RB/12) (ROR + (ROR – DR) (TR / (1 – TR))] + OE – BAS + BR
   a. RB is the Total Environmental Compliance Rate Base.
   b. ROR is the Rate of Return on Environmental Compliance Rate Base, designated as the overall rate of return [cost of short-term debt, long-term debt, preferred stock, and common equity].
   c. DR is the Debt Rate [cost of short-term debt and long-term debt].
   d. TR is the Composite Federal and State Income Tax Rate.
   e. OE is the Operating Expenses. OE includes operation and maintenance expense recovery authorized by the Kentucky Public Service Commission in all approved ECR Plan proceedings.
   f. BAS is the total proceeds from by-product and allowance sales.
   g. BR is the operation and maintenance expenses, and/or revenues if applicable, associated with Beneficial Reuse.
   h. Plans are the environmental surcharge compliance plans submitted to and approved by the Kentucky Public Service Commission pursuant to KRS 278.183.

DATE OF ISSUE: April 30, 2025

DATE EFFECTIVE: October 31, 2025

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

Issued by Authority of an Order of the Public Service Commission in Case No. 2025-00105 dated XXXX

Deleted: July 20, 2021

Deleted: With Service Rendered
On and After July 1, 2021

Deleted: 2020-00349

Deleted: June 30, 2021

Kentucky Utilities Company

P.S.C. No. 20, First Revision of Original Sheet No. 87.1
Canceling P.S.C. No. 20, Original Sheet No. 87.1

Adjustment Clause **ECR**
Environmental Cost Recovery Surcharge

DEFINITIONS (continued)

2. Total E(m) (sum of each approved environmental compliance plan revenue requirement) is multiplied by the Jurisdictional Allocation Factor. Jurisdictional E(m) is adjusted for any (Over)/Under collection or prior period adjustment, by the addition of Commission-approved Administrative Expenses, and by the subtraction of the Revenue Collected through Base Rates for the Current Expense month to arrive at Adjusted Net Jurisdictional E(m). Adjusted Net Jurisdictional E(m) is allocated to Group 1 and Group 2 on the basis of Revenue as a Percentage of Total Revenue for the twelve (12) months ending with the Current Month to arrive at Group 1 E(m) and Group 2 E(m). T T

3. The Group 1 R(m) is the average of total Group 1 monthly base revenue for the twelve (12) months ending with the current expense month. Base revenue includes customer, energy, and lighting charges for each rate schedule included in Group 1 to which this mechanism is applicable and automatic adjustment clause revenues for the Fuel Adjustment Clause, Off-System Sales Adjustment Clause, and the Demand-Side Management Cost Recovery Mechanism as applicable for each rate schedule in Group 1.

4. The Group 2 R(m) is the average of total Group 2 monthly base non-fuel revenue for the twelve (12) months ending with the current expense month. Base non-fuel revenue includes customer, non-fuel energy, and demand charges for each rate schedule included in Group 2 to which this mechanism is applicable and automatic adjustment clause revenues for the Demand-Side Management Cost Recovery Mechanism as applicable for each rate schedule in Group 2. Non-fuel energy is equal to the tariff energy rate for each rate schedule included in Group 2 less the base fuel factor as defined on Sheet No. 85.1, Paragraph 6.

5. Current expense month (m) shall be the second month preceding the month in which the Environmental Surcharge is billed.

DATE OF ISSUE: April 30, 2025

DATE EFFECTIVE: October 31, 2025

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

Issued by Authority of an Order of the Public Service Commission in Case No. 2025-00105 dated XXXX

Deleted: July 20, 2021
Deleted: With Service Rendered¶
On and After July 1, 2021
Deleted: 2020-00349
Deleted: June 30, 2021

Exhibit AMF-2 – Current KU Environmental Surcharge Monthly Reports

ES FORM 1.00

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Net Jurisdictional E(m) and
Jurisdictional Environmental Surcharge Billing Factor
For the Expense Month of

GROUP 1 (Total Revenue)

Group 1 E(m) -- ES Form 1.10, line 16	=
Group 1 ES Billing Factor -- ES Form 1.10, line 18	=

GROUP 2 (Net Revenue)

Group 2 E(m) -- ES Form 1.10, line 16	=
Group 2 ES Billing Factor -- ES Form 1.10, line 18	=

Effective Date for Billing:

Submitted by: ______________________________

Title: Manager, Revenue Requirement/Cost of Service

Date Submitted:

ES FORM 1.10

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor

For the Expense Month of

Calculation of Total E(m)

E(m) = [(RB / 12) (ROR+(ROR -DR)(TR/(1-TR)))] + OE - AS + BR, where

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
AS	=	Total Proceeds from Allowance Sales
BR	=	Net Monthly Beneficial Reuse Operations Expenses/(Revenues)

				All Environmental Compliance Plans
(1)	RB		=	
(2)	RB / 12		=	
(3)	(ROR + (ROR - DR) (TR / (1 - TR)))		=	
(4)	OE		=	
(5)	AS		=	
(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. 2023-00376	=	
(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 (Total Revenue)	**GROUP 2 (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) ÷ (16)]	=		

ES FORM 2.00

KENTUCKY UTILITIES 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		
Less: Allowance Inventory Baseline		
Net Emission Allowance Inventory		
Cash Working Capital Allowance		
Net Unamortized Closure Cost Balance - Active Stations[1]		
Net Unamortized Closure Cost Balance - Retired Stations[1]		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Pollution Control Deferred Investment Tax Credit		
Subtotal		
Environmental Compliance Rate Base		

Determination of Pollution Control Operating Expenses

	All Environmental Compliance Plans	
Monthly Operations & Maintenance Expense		
Monthly Depreciation & Amortization Expense		
Monthly Taxes Other Than Income Taxes - Eligible Plant		
Monthly Taxes Other Than Income Taxes - Closure Costs		
Amortization of Monthly Closure Costs - Active Stations		
Amortization of Monthly Closure Costs - Retired Stations		
Amortization of Excess ADIT with gross-up		
Monthly Emission Allowance Expense		
Add KU Current Month TC2 Emission Allowance Expense		
Less Monthly Emission Allowance Expense in base rates		
Net Recoverable Emission Allowance Expense		
Monthly Surcharge Consultant Fee		
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, accumulated deferred income taxes.

ES FORM 2.01

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Amortization of Monthly CCR Closure Costs

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Description	Accumulated CCR Closure Costs	Accumulated Amortization (Prior Month)	Current Month Amortization	Accumulated Amortization (Current Month)	Accumulated Deferred Income Taxes (ADIT)	Unamortized CCR Closure Cost Balance (Net of ADIT)
			[(2)-(3)]/ RemainingAmortMonths	(3)+(4)		(2)-(5)-(6)
2016 Plan:						
Amended Project 36 - Brown Station (Main Pond)						
Project 39 - Green River Station						
Project 39 - Pineville Station						
Project 39 - Tyrone Station						
Project 40 - Ghent Station						
Project 41 - Trimble County Station						
Project 42 - Brown Station (Aux. Pond)						
Net Total - All Projects:						

Note 1: The Accumulated Deferred Income Taxes (ADIT) includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.
Note 2: Amended Project 36 – Brown Station (Main Pond)'s CCR Closure Costs were not included in the proposed ECR project eliminations in KU's base rate proceeding (CN 2020-00349) and therefore continue to be recovered in the ECR mechanism.

ES FORM 2.10

KENTUCKY UTILITIES 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	Unamortized ITC	Deferred Tax Balance	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan:								
Project 28 - Brown 3 SCR								
Project 29 - ATB Expansion at E.W. Brown Station (Phase II)								
Project 30 - Ghent CCP Storage (Landfill- Phase I)								
Project 31 - Trimble County Ash Treatment Basin (BAP/GSP)								
Project 32 - Trimble County CCP Storage (Landfill - Phase I)								
Project 33 - Beneficial Reuse								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
2016 Plan:								
Project 40 - Ghent New Process Water Systems								
Project 41 - Trimble County New Process Water Systems								
Project 42 - Brown New Process Water Systems								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
2020 Plan:								
Project 43 - Ghent ELG Water Treatment System, Diffuser, and BATW Recirculation System								
Project 44 - 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: Project 29 as approved in the 2009 ECR Plan recovers costs associated with the Brown Aux Pond (Phase II).
Note 3: The Deferred Tax Balance includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.
Note 4: Adjustments in Projects 28-31 reflect capital amounts that were recovered in base rates rather than in ECR and were not removed in KU's base rate proceeding (CN 2020-00349) when the projects were eliminated from ECR; therefore, the adjusted amounts continue to be reflected in ECR.

ES FORM 2.30

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of Emission Allowances

For the Month Ended:

Vintage Year	Number of Allowances				Total Dollar Value Of Vintage Year				Comments and Explanations
	SO_2 CAIR	SO_2 CSAPR	NOx Ozone Season	NOx Annual	SO_2 CAIR	SO_2 CSAPR	NOx Ozone Season	NOx Annual	
Current Year									
2026									
2027									
2028									
2029									
2030									
2031									
2032									
2033									
2034									
2035									
2036									
2037									
2038									
2039									
2040									
2041									
2042									
2043									
2044									
2045									
2046 - 2054									

In the "Comments and Explanation" Column, describe any allowance inventory adjustment other than the assignment of allowances by EPA. Inventory adjustments include, but are not limited to, purchases, allowances acquired as part of other purchases, and the sale of allowances.

ES FORM 2.31

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of CAIR Emission Allowances (SO_2) - Current Vintage Year

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor

ES FORM 2.32

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of CSAPR Emission Allowances (SO_2) - Current Vintage Year

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor

ES FORM 2.33

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Inventory of Emission Allowances (NOx) - Ozone Season Allowance Allocation

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E:							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor.

ES FORM 2.34

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of Emission Allowances (NOx) - Annual Allowance Allocation

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E:							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor.

ES FORM 2.40

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
O&M Expenses and Determination of Cash Working Capital Allowance

For the Month Ended:

O&M Expenses	All Environmental 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
Pollution Control Cash Working Capital Allowance	

ES FORM 2.50

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Pollution Control - Operations & Maintenance Expenses

For the Month Ended:

O&M Expense Account	E. W. Brown	Ghent	Trimble County	Total
2009 Plan				
506154 - ECR NOx Operation -- Consumables				
506155 - ECR NOx Operation -- Labor and Other				
512151 - ECR NOx Maintenance				
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%.

ES FORM 2.60

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Beneficial Reuse - Operations & Maintenance Expenses/(Revenues)
For the Month Ended:

Third Party	O&M Expense Account	Plant	Net Expenses/ (Revenues)
Net Monthly Beneficial Reuse Operations Expenses / (Revenues)			

ES FORM 3.00

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Monthly Average Revenue Computation of R (m) for GROUP 1 AND GROUP 2

For the Month Ended:

	GROUP 1 (Total Revenues) - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Month	Non-fuel Base Rate Revenues	Base Rate Fuel Component	Fuel Clause Revenues Including Off-System Sales Tracker	DSM Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)+(5)+(6)	Total Excluding Environmental Surcharge (7)-(6)
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month.							
Average Kentucky Jurisdictional Revenues excluding Environmental Surcharge for 12-months ending with Current Month =							
GROUP 1 Revenues as a Percentage of Total Revenues for 12-months ending with the Current Month							

	GROUP 2 (Net Revenues) - Kentucky Jurisdictional Revenues							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Non-fuel Base Rate Revenues	Base Rate Fuel Component	Fuel Clause Revenues Including Off-System Sales Tracker	DSM Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)+(5)+(6)	Total Excluding Environmental Surcharge (7)-(6)	Total Non-Fuel Revenues plus DSM (2)+(5)
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge and Fuel, for 12 Months Ending Current Expense Month.								
Average Kentucky Jurisdictional Revenues excluding Environmental Surcharge for 12-months ending with Current Month =								
GROUP 2 Revenues as a Percentage of Total Revenues for 12-months ending with the Current Month								

ES FORM 3.10

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Reconciliation of Reported Revenues

For the Month Ended:

		Revenues per Form 3.00	Revenues per 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)	Business and Community Solar		
(8)	Total Kentucky Jurisdictional Revenues for Environmental Surcharge Purposes =		
Non -Jurisdictional Revenues			
(9)	Virginia Retail		
(10)	Wholesale		
(11)	InterSystem (Total Less Transmission Portion Booked in Account 447)		
(12)	Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes =		
(13)	Total Company Revenues for Environmental Surcharge Purposes =		
(14)	Jurisdictional Allocation Ratio for Current Month [(8) / (13)] =		
Reconciling Revenues			
(15)	Brokered		
(16)	InterSystem (Transmission Portion Booked in Account 447)		
(17)	Unbilled		
(18)	Provision for Refund		
(19)	Miscellaneous		
(20)	Total Company Revenues per Income Statement =		

Exhibit AMF-3 – Proposed KU Environmental Surcharge Monthly Reports

ES FORM 1.00

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Net Jurisdictional E(m) and
Jurisdictional Environmental Surcharge Billing Factor
For the Expense Month of

GROUP 1 (Total Revenue)

Group 1 E(m) -- ES Form 1.10, line 16	=
Group 1 ES Billing Factor -- ES Form 1.10, line 18	=

GROUP 2 (Net Revenue)

Group 2 E(m) -- ES Form 1.10, line 16	=
Group 2 ES Billing Factor -- ES Form 1.10, line 18	=

Effective Date for Billing:

Submitted by: ______________________________

Title: Manager, Revenue Requirement/Cost of Service

Date Submitted:

ES FORM 1.10

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor

For the Expense Month of

Calculation of Total E(m)

E(m) = [(RB / 12) (ROR+(ROR -DR)(TR/(1-TR)))] + OE - AS + BR, where

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
AS	=	Total Proceeds from Allowance Sales
BR	=	Net Monthly Beneficial Reuse Operations Expenses/(Revenues)

				All Environmental Compliance Plans
(1)	RB		=	
(2)	RB / 12		=	
(3)	(ROR + (ROR - DR) (TR / (1 - TR)))		=	
(4)	OE		=	
(5)	AS		=	
(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)	Administrative Expenses	=	
(13)	Revenue Collected through Base Rates	=	
(14)	Adjusted Net Jurisdictional E(m) [(9) + (10) + (11) + (12) - (13)]	=	

Calculation of Group Environmental Surcharge Billing Factors

			GROUP 1 (Total 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) ÷ (17)]	=		

ES FORM 2.00

KENTUCKY UTILITIES 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		
Less: Allowance Inventory Baseline		
Net Emission Allowance Inventory		
Cash Working Capital Allowance		
Net Unamortized Closure Cost Balance - Active Stations[1]		
Net Unamortized Closure Cost Balance - Retired Stations[1]		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Pollution Control Deferred Investment Tax Credit		
Subtotal		
Environmental Compliance Rate Base		

Determination of Pollution Control Operating Expenses

		All Environmental Compliance Plans	
Monthly Operations & Maintenance Expense			
Monthly Depreciation & Amortization Expense			
Monthly Taxes Other Than Income Taxes - Eligible Plant			
Monthly Taxes Other Than Income Taxes - Closure Costs			
Amortization of Monthly Closure Costs - Active Stations			
Amortization of Monthly Closure Costs - Retired Stations			
Amortization of Excess ADIT with gross-up			
Monthly Emission Allowance Expense			
Add KU Current Month TC2 Emission Allowance Expense			
Less Monthly Emission Allowance Expense in base rates			
Net Recoverable Emission Allowance Expense			
Monthly Surcharge Consultant Fee			
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, accumulated deferred income taxes.

ES FORM 2.01

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Amortization of Monthly CCR Closure Costs

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Description	Accumulated CCR Closure Costs	Accumulated Amortization (Prior Month)	Current Month Amortization	Accumulated Amortization (Current Month)	Accumulated Deferred Income Taxes (ADIT)	Unamortized CCR Closure Cost Balance (Net of ADIT)
			[(2)-(3)]/ RemainingAmortMonths	(3)+(4)		(2)-(5)-(6)
2016 Plan:						
Amended Project 36 - Brown Station (Main Pond)						
Project 39 - Green River Station						
Project 39 - Pineville Station						
Project 39 - Tyrone Station						
Project 40 - Ghent Station						
Project 41 - Trimble County Station						
Project 42 - Brown Station (Aux. Pond)						
Net Total - All Projects:						

Note 1: The Accumulated Deferred Income Taxes (ADIT) includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.
Note 2: Amended Project 36 – Brown Station (Main Pond)'s CCR Closure Costs were not included in the proposed ECR project eliminations in KU's base rate proceeding (CN 2020-00349) and therefore continue to be recovered in the ECR mechanism.

ES FORM 2.10

KENTUCKY UTILITIES 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	Unamortized ITC	Deferred Tax Balance	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan:								
Project 28 - Brown 3 SCR								
Project 29 - ATB Expansion at E.W. Brown Station (Phase II)								
Project 30 - Ghent CCP Storage (Landfill- Phase I)								
Project 31 - Trimble County Ash Treatment Basin (BAP/GSP)								
Project 32 - Trimble County CCP Storage (Landfill - Phase I)								
Project 33 - Beneficial Reuse								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
2016 Plan:								
Project 40 - Ghent New Process Water Systems								
Project 41 - Trimble County New Process Water Systems								
Project 42 - Brown New Process Water Systems								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
2020 Plan:								
Project 43 - Ghent ELG Water Treatment System, Diffuser, and BATW Recirculation System								
Project 44 - Trimble County ELG Water Treatment System								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2020 Plan								
Net Total - 2020 Plan:								
2025 Plan:								
Project 45 - Ghent 2 SCR								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2025 Plan								
Net Total - 2025 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: Project 29 as approved in the 2009 ECR Plan recovers costs associated with the Brown Aux Pond (Phase II).
Note 3: The Deferred Tax Balance includes Excess Deferred Taxes resulting from the Tax Cuts and Jobs Act.
Note 4: Adjustments in Projects 28-31 reflect capital amounts that were recovered in base rates rather than in ECR and were not removed in KU's base rate proceeding (CN 2020-00349) when the projects were eliminated from ECR; therefore, the adjusted amounts continue to be reflected in ECR.

ES FORM 2.30

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of Emission Allowances

For the Month Ended:

Vintage Year	Number of Allowances				Total Dollar Value Of Vintage Year				Comments and Explanations
	SO_2 CAIR	SO_2 CSAPR	NOx Ozone Season	NOx Annual	SO_2 CAIR	SO_2 CSAPR	NOx Ozone Season	NOx Annual	
Current Year									
2026									
2027									
2028									
2029									
2030									
2031									
2032									
2033									
2034									
2035									
2036									
2037									
2038									
2039									
2040									
2041									
2042									
2043									
2044									
2045									
2046 - 2054									

In the "Comments and Explanation" Column, describe any allowance inventory adjustment other than the assignment of allowances by EPA. Inventory adjustments include, but are not limited to, purchases, allowances acquired as part of other purchases, and the sale of allowances.

ES FORM 2.31

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of CAIR Emission Allowances (SO_2) - Current Vintage Year

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor

ES FORM 2.32

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Inventory of CSAPR Emission Allowances (SO_2) - Current Vintage Year

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor

ES FORM 2.33

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of Emission Allowances (NOx) - Ozone Season Allowance Allocation

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E:							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor.

ES FORM 2.34

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Inventory of Emission Allowances (NOx) - Annual Allowance Allocation

For the Expense Month of

	Beginning Inventory	Allocations/ Purchases	Utilized (Coal Fuel)	Utilized (Other Fuels)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS							
Quantity							
Dollars							
$/Allowance							
ALLOCATED ALLOWANCES FROM EPA: COAL FUEL							
Quantity							
Dollars							
ALLOCATED ALLOWANCES FROM EPA: OTHER FUELS							
Quantity							
Dollars							
ALLOWANCES FROM PURCHASES:							
From Market:							
Quantity							
Dollars							
$/Allowance							
From LG&E:							
Quantity							
Dollars							
$/Allowance							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor.

ES FORM 2.40

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
O&M Expenses and Determination of Cash Working Capital Allowance

For the Month Ended:

O&M Expenses	All Environmental 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
Pollution Control Cash Working Capital Allowance	

ES FORM 2.50

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Pollution Control - Operations & Maintenance Expenses

For the Month Ended:

O&M Expense Account	E. W. Brown	Ghent	Trimble County	Total
2009 Plan				
506154 - ECR NOx Operation -- Consumables		[redacted]	[redacted]	
506155 - ECR NOx Operation -- Labor and Other		[redacted]	[redacted]	
512151 - ECR NOx Maintenance		[redacted]	[redacted]	
502013 - ECR Landfill Operations	[redacted]			
512107 - ECR Landfill Maintenance	[redacted]			
Total 2009 Plan O&M Expenses				
2020 Plan				
502015 - ECR Effluent Water Chemicals	[redacted]			
502017 - ECR Effluent Water Operations	[redacted]			
512157 - ECR Effluent Water Maintenance	[redacted]			
Total 2020 Plan O&M Expenses	[redacted]			
2025 Plan				
506154 - ECR NOx Operation -- Consumables	[redacted]		[redacted]	
506155 - ECR NOx Operation -- Labor and Other	[redacted]		[redacted]	
512151 - ECR NOx Maintenance	[redacted]		[redacted]	
Total 2025 Plan O&M Expenses	[redacted]		[redacted]	
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%.

ES FORM 2.60

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Beneficial Reuse - Operations & Maintenance Expenses/(Revenues)
For the Month Ended:

Third Party	O&M Expense Account	Plant	Net Expenses/ (Revenues)
Net Monthly Beneficial Reuse Operations Expenses / (Revenues)			

ES FORM 3.00

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Monthly Average Revenue Computation of R (m) for GROUP 1 AND GROUP 2

For the Month Ended:

	GROUP 1 (Total Revenues) - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Month	Non-fuel Base Rate Revenues	Base Rate Fuel Component	Fuel Clause Revenues Including Off-System Sales Tracker	DSM Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)+(5)+(6)	Total Excluding Environmental Surcharge (7)-(6)
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month.							
Average Kentucky Jurisdictional Revenues excluding Environmental Surcharge for 12-months ending with Current Month =							
GROUP 1 Revenues as a Percentage of Total Revenues for 12-months ending with the Current Month							

	GROUP 2 (Net Revenues) - Kentucky Jurisdictional Revenues							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Non-fuel Base Rate Revenues	Base Rate Fuel Component	Fuel Clause Revenues Including Off-System Sales Tracker	DSM Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)+(5)+(6)	Total Excluding Environmental Surcharge (7)-(6)	Total Non-Fuel Revenues plus DSM (2)+(5)
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge and Fuel, for 12 Months Ending Current Expense Month.								
Average Kentucky Jurisdictional Revenues excluding Environmental Surcharge for 12-months ending with Current Month =								
GROUP 2 Revenues as a Percentage of Total Revenues for 12-months ending with the Current Month								

ES FORM 3.10

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Reconciliation of Reported Revenues

For the Month Ended:

		Revenues per Form 3.00	Revenues per 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)	Business and Community Solar		
(8)	Total Kentucky Jurisdictional Revenues for Environmental Surcharge Purposes =		
Non -Jurisdictional Revenues			
(9)	Virginia Retail		
(10)	Wholesale		
(11)	InterSystem (Total Less Transmission Portion Booked in Account 447)		
(12)	Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes =		
(13)	Total Company Revenues for Environmental Surcharge Purposes =		
(14)	Jurisdictional Allocation Ratio for Current Month [(8) / (13)] =		
Reconciling Revenues			
(15)	Brokered		
(16)	InterSystem (Transmission Portion Booked in Account 447)		
(17)	Unbilled		
(18)	Provision for Refund		
(19)	Miscellaneous		
(20)	Total Company Revenues per Income Statement =		

Exhibit AMF-4 – KU 2025 Plan Customer Bill Impact

Kentucky Utilities Company
Environmental Cost Recovery Surcharge Summary

	2025	2026	2027	2028	2029
Total E(m) - (in '000s)	$100	$3,209	$10,053	$15,642	$16,115
12 Month Average Jurisdictional Ratio*	92.68%	92.68%	92.68%	92.68%	92.68%
Jurisdictional E(m)	$93	$2,974	$9,317	$14,497	$14,936
Administrative Expenses	$89	$267	$0	$0	$0
Adjusted Jurisdictional E(m) - (in '000s)	$182	$3,241	$9,317	$14,497	$14,936
12 Month Total Jurisdictional R(m) - (in '000s)*	$1,841	$1,841	$1,841	$1,841	$1,841
Incremental Billing Factor Group 1	0.01%	0.18%	0.51%	0.79%	0.81%
Residential Customer Impact (Group 1)					
Monthly bill (1,085 kWh per month)	$0.01	$0.24	$0.68	$1.05	$1.09
Bill Impact for Other Group 1 Rate Schedules					
Residential Time-of-Day - Demand	$0.02	$0.39	$1.12	$1.75	$1.80
Residential Time-of-Day - Energy	$0.01	$0.25	$0.71	$1.11	$1.14
All Electric Schools	$0.30	$5.27	$15.15	$23.57	$24.28
Lighting Energy	$0.02	$0.34	$0.99	$1.54	$1.59
Traffic Energy	$0.00	$0.03	$0.09	$0.14	$0.15
Lighting Service and Restricted Lighting	$0.00	$0.03	$0.08	$0.12	$0.12
Incremental Billing Factor Group 2	0.01%	0.24%	0.68%	1.06%	1.10%
Bill Impact for Group 2 Rate Schedules					
General Service	$0.03	$0.52	$1.50	$2.33	$2.41
General Time-of-Day - Demand	$0.31	$5.48	$15.76	$24.52	$25.26
Power Service - Secondary	$0.39	$7.02	$20.18	$31.40	$32.35
Power Service - Primary	$0.45	$7.99	$22.97	$35.74	$36.82
Time of Day Service - Secondary	$1.54	$27.52	$79.11	$123.10	$126.82
Time of Day Service - Primary	$8.25	$147.22	$423.21	$658.51	$678.42
Retail Transmission Service	$38.91	$694.25	$1,995.79	$3,105.42	$3,199.31
Fluctuating Load Service - Transmission	$237.46	$4,237.00	$12,180.37	$18,952.50	$19,525.53
Outdoor Sports Lighting Service - Secondary	$0.17	$3.01	$8.65	$13.46	$13.87

NOTE: Residential includes Volunteer Fire Department customers. No customers elect service under the General Time-of-Day - Energy, Fluctuating Load Service - Primary, and Outdoor Sports Lighting Service - Primary tariffs.

*Based on Actuals for the 12 Months Ended February 2025

Revenue Requirements Summary
2025 Plan - KU

	2025	2026	2027	2028	2029
Project 45 - Ghent Unit 2 SCR					
Revenue Requirement					
Eligible Plant	$4,575,000	$36,675,000	$114,525,000	$152,352,000	$152,352,000
Less: Retired Plant	$0	$0	$0	$0	$0
Less: Accumulated Depreciation	$0	$0	$0	$(1,411,160)	$(3,193,679)
Plus: Accumulated Depreciation on retired plant	$0	$0	$0	$0	$0
Less: Deferred Tax Balance	$0	$0	$0	$(1,073,359)	$(3,372,694)
Plus: Deferred Tax Balance on retired plant	$0	$0	$0	$0	$0
Environmental Compliance Rate Base	$4,575,000	$36,675,000	$114,525,000	$149,867,481	$145,785,627
Rate of return	8.73%	8.73%	8.73%	8.73%	8.73%
	$99,849	$3,201,728	$9,998,033	$13,083,431	$12,727,085
Operating expenses	$0	$0	$0	$976,038	$1,379,348
Annual Depreciation expense	$0	$0	$0	$1,411,160	$1,782,518
Less depreciation on retired plant	$0	$0	$0	$0	$0
Annual Property Tax expense	$0	$6,863	$55,013	$171,788	$226,411
Total OE	$0	$6,863	$55,013	$2,558,986	$3,388,278
Total E(m) Project 45	**$99,849**	**$3,208,590**	**$10,053,045**	**$15,642,417**	**$16,115,363**

Revenue Requirements Summary
2025 Plan - KU

	2025	2026	2027	2028	2029
Total E(m) - All KU Projects	$99,849	$3,208,590	$10,053,045	$15,642,417	$16,115,363
12 Month Average Jurisdictional Ratio	92.68%	92.68%	92.68%	92.68%	92.68%
Jurisdictional E(m)	$92,540	$2,973,721	$9,317,162	$14,497,392	$14,935,719
Administrative Expenses	$89,101	$267,303	$0	$0	$0
Adjusted Jurisdictional E(m)	$181,641	$3,241,024	$9,317,162	$14,497,392	$14,935,719
Group 1 Avg. % of Total Revenue	41.06%	41.06%	41.06%	41.06%	41.06%
Group 1 E(m)	$74,585	$1,330,819	$3,825,782	$5,952,871	$6,132,855
Group 1 R(m)	$756,061,493	$756,061,493	$756,061,493	$756,061,493	$756,061,493
Group 1 Incremental ECR Surcharge	0.01%	0.18%	0.51%	0.79%	0.81%
Group 2 Avg. % of Total Revenue	58.94%	58.94%	58.94%	58.94%	58.94%
Group 2 E(m)	$107,056	$1,910,206	$5,491,380	$8,544,521	$8,802,864
Group 2 R(m)	$803,057,245	$803,057,245	$803,057,245	$803,057,245	$803,057,245
Group 2 Incremental ECR Surcharge	0.01%	0.24%	0.68%	1.06%	1.10%

Revenue Requirements Detail
2025 Plan - KU

	2025	2026	2027	2028	2029
Project 45 - Ghent Unit 2 SCR- In Service March 2028	$4,575,000	$32,100,000	$77,850,000	$37,827,000	$0
Accumulated Expenditures	$4,575,000	$36,675,000	$114,525,000	$152,352,000	$152,352,000
Book Depreciation rate, per year	0.000%	0.000%	0.000%	1.170%	1.170%
Tax Depreciation rate, per year	0.000%	0.000%	0.000%	3.750%	7.219%
Income tax rate	24.95%	24.95%	24.95%	24.95%	24.95%
Deferred Tax Balance	0	0	0	1,073,359	3,372,694
Book Accumulated Depreciation Balance	0	0	0	1,411,160	3,193,679
Initial Investment -- Book	4,575,000	36,675,000	114,525,000	152,352,000	152,352,000
Book Depreciation	0	0	0	1,411,160	1,782,518
Initial Investment -- Tax total	4,575,000	36,675,000	114,525,000	152,352,000	152,352,000
Bonus Tax Depreciation					
MACRS Tax Depreciation	0	0	0	5,713,200	10,998,291
Allowed Rate of Return	8.73%	8.73%	8.73%	8.73%	8.73%
Book Depreciation expense total	0	0	0	1,411,160	1,782,518
Tax Depreciation expense total	0	0	0	5,713,200	10,998,291
Annual Property Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%
Deferred Tax Activity	0	0	0	1,073,359	2,299,335
Revenue Recovery on Capital Expenditure to date					
Eligible Plant, cumulative capital expenditures	4,575,000	36,675,000	114,525,000	152,352,000	152,352,000
Less: Retired Plant	0	0	0	0	0
Less: Accumulated Depreciation	0	0	0	(1,411,160)	(3,193,679)
Plus: Accumulated Depreciation on Retired Plant	0	0	0	0	0
Less: Deferred Tax Balance	0	0	0	(1,073,359)	(3,372,694)
Plus: Deferred Tax Balance on Retired Plant	0	0	0	0	0
Environmental Compliance Rate Base	4,575,000	36,675,000	114,525,000	149,867,481	145,785,627
Rate of return	8.73%	8.73%	8.73%	8.73%	8.73%
Return on Environmental Compliance Rate Base	$99,849	$3,201,728	$9,998,033	$13,083,431	$12,727,085
Operating Expenses	0	0	0	976,038	1,379,348
Annual Depreciation expense	0	0	0	1,411,160	1,782,518
Less depreciation on retired plant	0	0	0	0	0
Annual Property Tax expense	0	6,863	55,013	171,788	226,411
Total OE	$0	$6,863	$55,013	$2,558,986	$3,388,278
Total E(m) - Project 45	**99,849**	**3,208,590**	**10,053,045**	**15,642,417**	**16,115,363**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY UTILITIES COMPANY FOR APPROVAL OF ITS 2025 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE	))))	**CASE NO. 2025-00105**

DIRECT TESTIMONY OF
DAVID L. TUMMONDS
SENIOR DIRECTOR, PROJECT ENGINEERING
ON BEHALF OF
KENTUCKY UTILITIES COMPANY

Filed: April 30, 2025

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INTRODUCTION

Q. Please state your name, position, and business address.

A. My name is David L. Tummonds. I am the Senior Director of Project Engineering for Kentucky Utilities Company ("KU" or "Company") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies") and an employee of LG&E and KU Services Company, which provides services to the Companies. My business address is 2701 Eastpoint Parkway, Louisville, Kentucky 40223. A complete statement of my education and work experience is attached to this testimony as Appendix A.

Q. Have you previously testified before this Commission?

A. Yes, I testified before the Commission in a number of fuel adjustment clause review proceedings between 2011 and 2012 in my role as Director, Generation Services.[1] More recently, I testified in LG&E's application to recover the retirement costs of Mill Creek Unit 1 through LG&E's Retired Asset Recovery Rider.[2] Most recently, I submitted testimony in the ongoing proceeding concerning the Companies' 2025 application for certificates of public convenience and necessity ("CPCNs") and site compatibility certificates ("2025 CPCN Case").[3] The Companies' application in the 2025 CPCN Case requests a CPCN for a selective catalytic reduction ("SCR") facility

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[1] *See, e.g.*, *An Examination of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 2011 through April 30, 2012*, Case No. 2012-00321, Notice of Filing (Ky. PSC Oct. 22, 2012), available at https://psc.ky.gov/pscscf/2012%20cases/2012-00321/20121022_psc_notice%20of%20filing%20hearing%20documents.pdf.

[2] *Electronic Application of Kentucky Utilities Company for Approval of its 2020 Compliance Plan for Recovery by Environmental Surcharge*, Case No. 2020-00060, Application (Mar. 31, 2020); *Electronic Application of Louisville Gas and Electric Company for Approval of Retired Asset Recovery Rider Cost Recovery for the Retirement of Mill Creek Unit 1 and of Retired Asset Recovery Rider Tariff Revisions and Monthly Reporting Forms*, Case No. 2024-00317, Application (Oct. 4, 2024).

[3] *Electronic Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates* Case No. 2025-00045 Application (Feb. 28, 2025).

for Ghent Generating Station Unit 2 ("Ghent 2"), for which KU is seeking Environmental Cost Recovery ("ECR") Surcharge cost recovery in this proceeding.

Q. What is the purpose of your direct testimony?

A. I sponsor KU's 2025 Environmental Compliance Plan ("2025 Plan"), which consists of a single project (Project 45) to construct, operate, and maintain the Ghent 2 SCR to reduce emissions of nitrogen oxides ("NOx") from the unit. In addition, I support the timeline, capital cost, and operation and maintenance ("O&M") expenses for the project.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring Application Exhibit 1, which contains the Company's 2025 Plan.

KU'S 2025 ENVIRONMENTAL COMPLIANCE PLAN

Q. Please summarize the single project in KU's 2025 Plan, Project 45.

A. Application Exhibit 1, attached to KU's application herein, sets forth the 2025 Plan. The 2025 Plan consists of Project 45 to construct, operate, and maintain the Ghent 2 SCR. The Ghent 2 SCR is designed to reduce NOx emissions, a precursor of ozone. As Philip A. Imber explains, reducing NOx emissions from Ghent 2 will help ensure ongoing compliance with the U.S. Environmental Protection Agency's ("EPA") 2015 National Ambient Air Quality Standards for Ozone ("2015 Ozone NAAQS") promulgated under the federal Clean Air Act as amended.

CONSTRUCTION OF SCR AT GHENT 2

Q. Please describe the proposed SCR system.

A. The Companies propose to self-build the Ghent 2 SCR, which is a technology that has been used globally for decades to reduce NO_x, thereby reducing ozone levels at fossil fuel plants. SCR works by injecting ammonia into the exhaust gas upstream of a catalyst. This results in a chemical process that turns the NO_x into harmless nitrogen and water. The Companies' Project Engineering team will lead the effort to develop, permit, and enter into an engineering, procurement, and construction ("EPC") contract for the SCR facility. The Companies have experience operating and maintaining SCR systems. From 2002 to 2013, Project Engineering constructed SCRs on eight coal-fired units in the Companies' generation fleet. All of those projects met construction, operations, and reliability expectations.

Q. Please describe the construction process for the SCR system.

A. The Companies' Project Engineering group is in the process of performing the engineering planning necessary for the development of this project. They plan to issue an EPC contract by the end of 2025. That timing will allow for commencement of construction in August 2026. Commercial operation is planned to begin in May 2028.

Q. Will the Ghent 2 SCR cause any retirement or replacement of any existing systems or facilities?

A. No. Because the Ghent Generating Station has SCR systems installed on other units, the only physical infrastructure required to build the Ghent 2 SCR will be direct modifications to Ghent 2, and no existing physical infrastructure will be retired or replaced as a result of the Ghent 2 SCR.

COSTS OF THE SCR

Q. How much will it cost to construct the SCR at Ghent Unit 2?

A. The capital cost of an SCR for Ghent 2 is estimated at $152.3 million for a 2028 commissioning.

Q. How much will it cost to operate and maintain the SCR system?

A. The projected annual fixed operation and maintenance ("O&M") and variable costs are shown on page 2 of Application Exhibit 1, which the Company projects will be $1.0 million in 2028 when the SCR is placed in service and $1.4 million in 2029. These values do not include reoccurring capital investments for catalyst replacements, the first of which will occur after 2029.

<u>CONCLUSION</u>

Q. What is your recommendation for the Commission?

A. I recommend the Commission approve KU's 2025 Plan, consisting of Project 45 to construct, operate, and maintain the proposed Ghent 2 SCR.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **David L. Tummonds**, being duly sworn, deposes and says that he is Senior Director - Project Engineering for LG&E and KU Services Company, and that he 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 his information, knowledge and belief.

David L. Tummonds

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of April 2025.

Notary Public

Notary Public, ID No. KYNP4577

My Commission Expires:

April 1, 2028

VENITA M. DeFREEZE
NOTARY PUBLIC
COMM. # KYNP4577
MY COMMISSION EXPIRES 04-01-2028
KENTUCKY STATE AT LARGE

APPENDIX A

David L. (Dave) Tummonds
Senior Director, Project Engineering
LG&E and KU Services Company
2701 Eastpoint Parkway
Louisville, Kentucky 40223

Relevant Work and Professional Experience

LG&E and KU Services Company	
Senior Director, Project Engineering	2022 – Present
General Manager, Ghent Generating Station	2020 – 2022
General Manager, Cane Run Generating Station (Natural Gas Fired)	2015 – 2020
General Manager, Cane Run Generation Station (Coal Fired)	2013 – 2015
Director, Generation Services	2011 – 2013
Manager, Generation Engineering	2010 – 2011
Deputy Director, Center of Competence (Fossil)	2008 – 2010
Production Supervisor, E.W. Brown Generating Station	2006 – 2008
Production Supervisor, E.W. Brown Combustion Turbines	2002 – 2006
Alstom Power, Richmond, Virginia	
Thermal Commissioning Engineer	2000 – 2002

Professional and Trade Memberships

Combustion Turbine Operations Technical Forum (CTOTF) Member	2003 – Present
National Chairman	2021 – Present

Education and Training

Executive Development Program Graduate	
Northwestern University, Kellogg School of Management	2013
Strategic Business Integration Training	2011
Personal Awareness and Effective Leadership Training	2011
Six Sigma and Advanced Statistics Trainings	2000
Bachelor of Science in Mechanical Engineering	
United States Military Academy, West Point, New York	1994

Civic Activities

Louisville Zoo Foundation, Chairman of Exhibits and Facilities Committee	2020
Carroll County Community Development Corporation, Industrial Chairman	2020
Leadership Louisville, Bingham Fellowship	2017

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY	**)**	
UTILITIES COMPANY FOR APPROVAL OF ITS	**)**	**CASE NO.**
2025 COMPLIANCE PLAN FOR RECOVERY BY	**)**	**2025-00105**
ENVIRONMENTAL SURCHARGE	**)**	

DIRECT TESTIMONY OF
PHILIP A. IMBER
DIRECTOR, ENVIRONMENTAL COMPLIANCE
ON BEHALF OF
KENTUCKY UTILITIES COMPANY

Filed: April 30, 2025

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INTRODUCTION

Q. Please state your name, position, and business address.

A. My name is Philip A. Imber. I am the Director of Environmental Compliance for PPL Services Corporation, which provides services to Kentucky Utilities Company ("KU" or "Company") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies"). My business address is 820 West Broadway, Louisville, Kentucky 40202. A complete statement of my education and work experience is attached to this testimony as Appendix A.

Q. Have you previously testified before this Commission?

A. Yes, I have testified before this Commission several times. I testified in the Companies' 2022 certificate of public convenience and necessity ("CPCN") and demand-side management and energy efficiency plan proceeding.[1] Also, I was involved in the preparation of and have responded to a number of data requests in the Companies' ongoing 2024 Integrated Resource Plan proceeding.[2] Most recently, I submitted testimony in the ongoing proceeding concerning the Companies' 2025 application for CPCNs and site compatibility certificates ("2025 CPCN Case").[3] The Companies' application in the 2025 CPCN Case requests a CPCN for a selective catalytic reduction ("SCR") facility for Ghent Generating Station Unit 2 ("Ghent 2"),

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[1] *See., e.g., Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generation Unit Retirements*, Case No. 2022-00402, Direct Testimony of Philip A. Imber (Dec. 15, 2022).

[2] *Electronic 2024 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Case No. 2024-00326.

[3] *Electronic Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates*, Case No. 2025-00045, Direct Testimony of Philip A. Imber (Feb. 28, 2025).

for which KU is seeking Environmental Cost Recovery Surcharge cost recovery in this proceeding.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to explain why constructing, operating, and maintaining the Ghent 2 SCR, which is Project 45 in KU's 2025 Environmental Compliance Plan ("2025 Plan"), will help ensure ongoing compliance with the National Ambient Air Quality Standards ("NAAQS") for ozone ("Ozone NAAQS"), which the U.S. Environmental Protection Agency ("EPA") promulgated under authority granted to it by the federal Clean Air Act as amended ("CAAA"). I conclude that, because the 2025 Plan will help KU comply with the Ozone NAAQS, the Commission should find that the costs of the 2025 Plan are costs of complying with the CAAA.

ENSURE ONGOING COMPLIANCE WITH OZONE NAAQS REQUIRES CONSTRUCTING, OPERATING, AND MAINTAINING THE GHENT 2 SCR (2025 PLAN PROJECT 45)

Q. Will ensuring compliance with Ozone NAAQS require constructing, operating, and maintaining the Ghent 2 SCR as set forth in the 2025 Plan as Project 45?

A. Yes. As I explain below, the Companies must comply with Ozone NAAQS, the most recent version of which is the 2015 Ozone NAAQS.[4] Constructing, operating, and maintaining an SCR on Ghent 2 will help ensure ongoing compliance with Ozone NAAQS.

Q. What are the NAAQS?

A. Under the CAAA, the EPA has authority to prescribe the maximum concentration of certain pollutants allowed in ambient air under NAAQS. There are six pollutants

[4] 80 Fed. Reg. 65292 (Oct 26, 2015).

addressed by NAAQS, sometimes called "criteria pollutants." Ozone is one such pollutant, and nitrogen oxides ("NOx") are a precursor to ozone. Therefore, reductions in permissible ozone levels under Ozone NAAQS require reduced NOx emissions, including from coal-fired electric generating units.

The primary tool to both attain and maintain compliance with the NAAQS is the State Implementation Plan ("SIP"), which is prepared by the state under the oversight of the EPA.[5] The SIP specifies necessary emission limitations for various emission sources, including electric generating units. The CAAA requires a state's SIP to address NAAQS compliance within the state,[6] but it also includes a good-neighbor provision that requires each SIP to address any significant contribution to NAAQS nonattainment in, or interference with NAAQS maintenance by, any other state.[7]

Under Section 110(k)(5) of the CAAA, the EPA has the authority to issue a "SIP call" whenever it finds that a current SIP is "substantially inadequate" to attain or maintain compliance with the NAAQS, adequately mitigate interstate pollutant transport, or otherwise comply with any requirement of the CAAA.[8] Under Section 110(c) of the CAAA, the EPA is required to issue a Federal Implementation Plan ("FIP") when a state fails to submit a SIP or the EPA disapproves a SIP as not meeting CAAA requirements such as NAAQS attainment or maintenance.[9] From time to time, the EPA has issued SIP calls and FIPs to compel emission reductions it has deemed necessary to achieve NAAQS compliance.

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[5] *See* 42 U.S.C. §7410, "State implementation plans for national primary and secondary ambient air quality standards" (also known as Clean Air Act Section 110).
[6] 42 U.S.C. §7410(a)(1).
[7] 42 U.S.C. §7410(a)(2)(D).
[8] 42 U.S.C. §7410(k)(5).
[9] 42 U.S.C. §7410(c).

A notable recent set of FIPs is the Revised Cross-State Air Pollution Rule ("CSAPR") Update, which, among other things, the EPA issued to address NOx emissions from electric generating units to achieve compliance with 2008 Ozone NAAQS through state-level emissions budgets and an emission allowance trading system. Collections of FIPs issued together to achieve good neighbor compliance (i.e., to address upwind states' substantial contributions to downwind states' nonattainment) are also called "transport rules."

The EPA's 2023 Good Neighbor Plan, which now does not apply to Kentucky for reasons I discuss below, was a transport rule designed to aid in compliance with the 2015 Ozone NAAQS. It revised and tightened the existing CSAPR NOx allowance trading program with revised NOx emissions budgets for fossil fuel-fired power plants in 23 states, including Kentucky. The rule's emissions budgets initially assumed the consistent operation of emissions controls already installed, not the installation of any additional controls. But beginning in 2026, emissions budgets would assume installation of SCR controls at all coal-fired generating units, regardless of whether units actually have SCRs. Without access to additional NOx emissions allocations, the Good Neighbor Plan effectively would have required non-SCR-equipped coal units to cease operating or operate only at very minimal levels during each year's ozone season (currently the months of May through September) beginning in 2026. Although the Companies had assumed that trading for NOx allowances would allow Ghent 2 to operate as needed through the 2028 ozone season, eventually NOx allocations thereafter would likely have become rare because of the Good Neighbor Plan's trading program restrictions (for instance, bank recalibration, dynamic budgeting, variability limits, and backstop limits). Without an SCR, Ghent 2 would have to have ceased ozone-season operations no later than 2030 under the Good Neighbor Plan's backstop provision.

Q. What is the current status of the Good Neighbor Plan?

A. The EPA disapproved several SIPs at the beginning of 2023, including Kentucky's SIP, and published the Good Neighbor Plan on June 5, 2023. Following disapproval of the SIPs, several states, including Kentucky, requested review of that action and won stays of their SIP disapprovals.[10] These stays resulted in the EPA not being able to implement the Good Neighbor Plan in those states because the EPA cannot enforce a FIP if a SIP has not been deemed insufficient to achieve the NAAQS requirements. Because the EPA was unable to implement the Good Neighbor Plan in those states with stays of their SIP disapproval, the EPA issued an interim final rule on July 31, 2023, essentially reverting those states back to implementation of the Revised CSAPR Update Rule.

On December 6, 2024, the U.S. Court of Appeals for the Sixth Circuit vacated the EPA's dismissal of Kentucky's SIP and remanded the SIP to the EPA.[11] Thus, the Good Neighbor Plan does not apply to Kentucky, and the EPA now must act to approve or deny the Kentucky SIP.

Q. Regardless of the fate of the Good Neighbor Plan, is the EPA obligated to drive attainment of the 2015 Ozone NAAQS?

[10] *Kentucky v. EPA*, 2023 WL 11871967, at *5 (6th Cir. July 25, 2023) (order staying Good Neighbor Plan as applied to Kentucky).
[11] *Kentucky v. U.S. EPA*, 123 F.4th 447 (6th Cir. Dec. 6, 2024).

A. Yes. The 70 parts per billion ("ppb") ozone standard of the 2015 Ozone NAAQS remains in effect, and the EPA must drive attainment of that standard, including any state's significant contribution to downwind states' nonattainment or interference with any state's maintenance of attainment.

Q. Please provide an update regarding 2015 Ozone NAAQS attainment.

A. On September 8, 2022, the Louisville Metro Air Pollution Control District ("LMAPCD"), in conjunction with the Kentucky Division for Air Quality ("KYDAQ"), submitted a request to the EPA to redesignate the Louisville-Jefferson County, Kentucky marginal nonattainment area to attainment for the 2015 eight-hour Ozone NAAQS based on certified ozone monitoring data from 2019 through 2021. On September 15, 2022, the EPA finalized actions on non-attainment designations for the 2015 ozone NAAQS. In that action, the EPA reclassified 25 "marginal" nonattainment areas—including Louisville-Jefferson County—to "moderate" nonattainment areas.

In a parallel action, on April 18, 2023, in response to LMAPCD's September 8, 2022 request, the EPA proposed to finalize the redesignation of the Louisville-Jefferson County area to attainment status based on the 2019 through 2021 data, but it has not yet finalized the redesignation. On October 16, 2024, the Kentucky Energy and Environment Cabinet filed suit to compel the EPA to act on the proposed attainment designation from September 2022. This challenge is ongoing, and the results are uncertain.

This litigation appears to have spurred the EPA to action: on January 3, 2025, the EPA proposed to withdraw the April 18, 2023 attainment redesignation and deny the attainment request. The Kentucky Attorney General, the Energy and Environment

Cabinet, Louisville Metro, and Greater Louisville Inc. all commented against the January 3, 2025 proposed actions. As a "moderate" non-attainment area, the deadline for achieving attainment with the 2015 Ozone NAAQS was August 3, 2024. Not achieving attainment status by the deadline leads to redesignation to "serious" non-attainment, making it harder to permit economic development projects, impacting federal transportation fund distribution to Kentucky, and possibly leading to vehicle emissions testing.

Q. What is the status of Kentucky's possible significant contribution to downwind states' nonattainment or interference with downwind states' maintenance of attainment?

A. The fundamental ground on which the Sixth Circuit Court of Appeals rejected the EPA's denial of Kentucky's SIP for 2015 Ozone NAAQS was that the EPA "threw out … [its prior] guidance when it disapproved Kentucky's plan."[12] But the court did *not* say that the EPA's changed approach to either the threshold for determining what constituted a "significant contribution" (1 ppb vs. 1% of the NAAQS, i.e., 0.7 ppb) or its changed modeling approach for determining downwind impacts was problematic per se; rather, the court stated:

> In short, we have no idea how the EPA would have acted if it had not committed the legal errors that we have identified. The agency thus has failed to show that the errors did not prejudice Kentucky. Yet nothing we have said in this opinion would prohibit the EPA from properly raising any new concerns in additional administrative proceedings on remand.[13]

[12] *Id.* at 469.
[13] *Id.* at 472.

Moreover, the court further noted that "EPA opines that it would have denied Kentucky's plan even if it had judged the plan using Kentucky's 2011 modeling and 1 ppb threshold. Under those datapoints, Kentucky still contributed to a Maryland monitor at Step 2."[14] The court found this assertion unavailing only because the EPA had not previously raised it as a justification for denying Kentucky's SIP,[15] not because it would have been an inadequate ground for denying the SIP.

Thus, it is entirely possible that the EPA could deny Kentucky's 2015 Ozone SIP on remand. This would likely require Kentucky to make further NOx reductions. For the reasons I address below, adding an SCR to Ghent 2 would be a likely measure any revised SIP or Kentucky-specific FIP would require because SCR is a reasonably available control technology for achieving such emission reductions. Indeed, as I explain below, Ghent 2 is one of a small minority of coal-fired generating units not expected to retire in the next few years that lacks post-combustion NOx controls.

Q. In addition to actions the EPA might undertake on its own, could other states petition the EPA to require emissions reductions from Kentucky under the Ozone NAAQS?

A. Yes. Under Section 126 of the CAAA, states are authorized to petition the EPA to require emission reductions in states that are the sources of interstate pollution transport that substantially contribute to nonattainment or interfere with maintenance of NAAQS compliance in downwind states.[16] Some states have a history of filing Section 126 petitions with the EPA to compel emission reductions in upwind states, including

[14] *Id.* at 471.
[15] *Id.*
[16] *See* 42 U.S.C. §7426(b).

Kentucky, which the downwind states allege are substantially contributing to their nonattainment status.

Q. When will the EPA revisit the Ozone NAAQS?

A. The CAAA requires the EPA to review the Ozone NAAQS every five years. In 2020, the EPA under the prior Trump administration retained the 2015 Ozone NAAQS of 70 ppb. To meet the CAAA's requirement, the EPA is required to publish another review of the Ozone NAAQS in 2025. In June 2023, the Clean Air Scientific Advisory Committee, whose review and advisory functions are mandated by section 109(d)(2) of the CAAA, published a request to lower the Ozone NAAQS to between 55 and 65 ppb.[17] On August 21, 2023, EPA Administrator Reagan announced a new review of the Ozone NAAQS.[18] If the EPA adopted a lower Ozone NAAQS, it is likely a Ghent 2 SCR would be part of a Kentucky SIP for all the reasons I explained above.

Q. Does relaxing the 2015 Ozone NAAQS appear to be a priority of the Trump Administration?

A. No. Although the EPA could relax the Ozone NAAQS in its upcoming review, it seems unlikely that it would do so. President Trump has issued multiple executive orders that suggest a focus for this administration on domestic energy production and fossil fuel generation, but as I discuss below, the primary target of regulatory rollbacks suggested or required by the executive orders is greenhouse gas regulation and policy, not Ozone NAAQS. The absence of Ozone NAAQS from the recent executive orders, as well as an absence of any campaign commitment directed toward NOx or ozone, indicates that

[17] Attached as Exhibit PAI-1.

[18] "EPA Initiates New Review of the Ozone National Ambient Air Quality Standards to Reflect the Latest Science", EPA (August 21, 2023), available at https://www.epa.gov/newsreleases/epa-initiates-new-review-ozone-national-ambient-air-quality-standards-reflect-latest (accessed Feb. 13, 2025).

Ozone NAAQS may not be a focus for this administration. The EPA's decision to maintain the 2015 Ozone NAAQS during the last Trump administration also suggests that this administration may again not attempt to relax this standard.

If anything, EPA Administrator Lee Zeldin's recent announcement of EPA's "Powering the Great American Comeback" Initiative suggests that the agency might consider tightening Ozone NAAQS while still seeking to advance the goals of "energy independence and energy dominance" and making the United States preeminent in artificial intelligence:

> **Pillar 1: Clean Air, Land, and Water for Every American**
>
> Every American should have access to clean air, land, and water. I will ensure the EPA is fulfilling its mission to protect human health and the environment. In his first term, President Trump advanced conservation, reduced toxic emissions in the air, and cleaned up hazardous sites, while fostering economic growth for families across the country. We remain committed to these priorities in this administration ….
>
> …
>
> **Pillar 2: Restore American Energy Dominance**
>
> Pursuing energy independence and energy dominance will cut energy costs for everyday Americans who are simply trying to heat their homes and put gas in their cars. … I look forward to working with the greatest minds driving American innovation, to ensure we are producing and developing the cleanest energy on the planet ….
>
> …
>
> **Pillar 4: Make the United States the Artificial Intelligence Capital of the World**
>
> As we rapidly advance into this new age of AI, it is important that the United States lead the world in this field. Those looking to invest in and develop AI should be able to do so in the U.S., while we work to ensure data centers and related facilities can be powered and operated in a clean manner with American-made energy. Under President Trump's

leadership, I have no doubt that we will become the AI capital of the world ….[19]

Thus, although the Trump administration has not said what it plans to do concerning Ozone NAAQS, tightening the current standard to some extent would be consistent with allowing coal-fired units like Ghent 2 to continue to operate while achieving reduced emissions.

Q. How does Ghent 2 factor into the Companies' compliance efforts to the Ozone NAAQS?

A. To drive attainment to the various iterations of the Ozone NAAQS (1997, 2008, and 2015), the EPA proposed and the Kentucky SIP has implemented ozone season NOx mass emissions allowances. The ozone season NOx mass emissions allowances have decreased in relation to the decreases in the Ozone NAAQS. To date, the Companies have successfully complied with NOx mass emissions allowances without the capital expenditure for Ghent 2 post combustion controls by over-controlling NOx at the other units in the fleet.

Today, the Companies are complying with the interim final rule the EPA issued on July 31, 2023,[20] essentially reverting Kentucky back to compliance with the 2021 Revised CSAPR Update ozone season NOx mass emissions that support attainment for the 2008 Ozone NAAQS. The 2021 Revised CSAPR Update created a group of twelve states, including Kentucky, which the EPA referred to as "Group 3." These twelve states are now referred to as "Group 2E" in the interim final rule.[21] There are 83 "large"

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[19] "EPA Administrator Lee Zeldin Announces EPA's 'Powering the Great American Comeback' Initiative," EPA (Feb. 4, 2025), available at https://www.epa.gov/newsreleases/epa-administrator-lee-zeldin-announces-epas-powering-great-american-comeback (accessed Feb. 9, 2025).
[20] 88 Fed. Reg. 49295 (Jul. 31, 2023).
[21] *Id.*, 88 Fed. Reg. 67102 (Sep. 29, 2023), and 89 Fed. Reg. 87960 (Nov. 6, 2024).

coal fired generating units in Group 2E. According to the EPA's National Electric Energy Data System Model, all but seven Group 2E units have post-combustion controls. Of those seven units, six are projected to cease coal operation by 2030 (including LG&E's Mill Creek 1 and 2). Ghent 2 will be the only large coal unit in Group 2E states that does not operate post-combustion NOx controls, thus making it a natural target for compliance.

Q. Do all of the current facts and regulatory circumstances reasonably support the proposition that additional NOx reductions will likely be required of the Companies in the near term?

A. Yes. As explained in the Sixth Circuit Court of Appeals opinion rejecting EPA's denial of Kentucky's 2015 Ozone NAAQS SIP, there are at least two different ways the EPA could again deny the SIP on remand: (1) interference with Maryland's maintenance of attainment using the 1 ppb standard and older modeling Kentucky used in submitting its SIP and (2) significant contribution to nonattainment in Connecticut using the 1% (i.e., 0.7 ppb) standard and updated modeling. Moreover, there is no obvious reason for the current EPA to relax the existing Ozone NAAQS, but there are grounds for *tightening* restrictions on NOx emissions.

CONCLUSION

Q. What is your recommendation for the Commission?

A. For all the reasons I have provided in my testimony, the Ghent 2 SCR will help ensure ongoing compliance with the 2015 Ozone NAAQS. Therefore, I recommend the Commission find that the costs of KU's 2025 Plan, which consists only of Project 45 to construct, operate, and maintain the Ghent 2 SCR, are costs of KU's compliance with the federal Clean Air Act as amended.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Philip A. Imber**, being duly sworn, deposes and says he is the Director – Environmental Compliance for PPL Services Corporation and he provides services to Kentucky Utilities Company, and that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Philip A Imber

Philip A. Imber

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 21 day of April 2025.

Caroline J. Davison

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027

CAROLINE J. DAVISON
COMM EXPIRES 01/22/2027
NOTARY PUBLIC
ID # KYNP63286
STATE AT LARGE, KENTUCKY

APPENDIX A

Philip A. Imber
Director, Environmental Compliance
PPL Services Corporation
820 West Broadway
Louisville, Kentucky 40202

Professional Experience

PPL Services Company:

Director, Environmental Compliance	Mar. 2024 - present

LG&E and KU Energy Services Company:

Director, Envir. & Federal Regulatory Compliance	Nov. 2021 – Mar. 2024
Director, Environmental Affairs	July 2021 – Nov. 2021
Manager, Land, & Water – Environmental Affairs	Feb. 2019 – July 2021
Manager, Air – Environmental Affairs	Mar. 2016 – Feb. 2019
Manager, Major Capital Projects, Project Engineering	Dec. 2010 – Mar. 2016
Sr. Chemical Engineer, Project Engineering	May 2007 – Dec. 2010
Chemical Engineer III, Project Engineering	Oct. 2001 – May 2007

Professional/Trade Memberships

Power Generators Air Coalition – Board of Directors
Utility Information Exchange of Kentucky – Chair
Edison Electric Institute – Environmental Advisory Committee
Midwest Ozone Group – Past Chair of Technical Committee

Education

M.B.A., Bellarmine University, 2000
B.S.E., Chemical Engineering, University of Michigan, 1996

Civic Activities

Leadership Louisville – Bingham Fellow & Board of Directors
Bellarmine University Board of Overseers
University of Michigan Alumni Association, Past President - Louisville Chapter
Volunteer for various LG&E and KU civic activities