

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
UTILITIES COMPANY AND LOUISVILLE GAS)	
AND ELECTRIC COMPANY FOR)	CASE NO. 2025-00045
CERTIFICATES OF PUBLIC CONVENIENCE)	
AND NECESSITY AND SITE COMPATIBILITY)	
CERTIFICATES)	

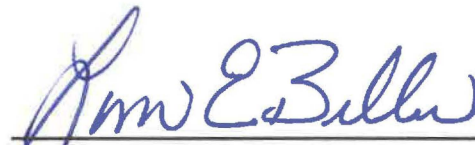
RESPONSE OF
KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION
DATED MAY 23, 2025

FILED: JUNE 6, 2025

VERIFICATION

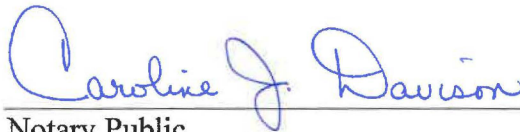
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Executive Vice President of Engineering, Construction and Generation for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 30th day of May 2025.



Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22, 2027



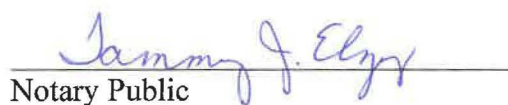
VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.


Robert M. Conroy

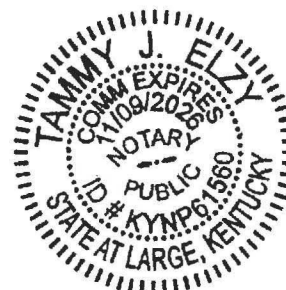
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4th day of June 2025.


Notary Public

Notary Public ID No. KYNP61560

My Commission Expires:

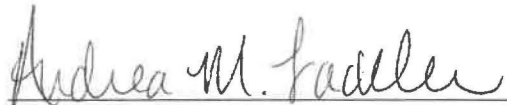
November 9, 2026



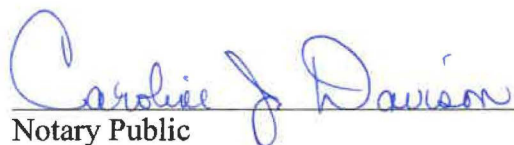
VERIFICATION

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 LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.


Andrea M. Fackler

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4th day of June 2025.


Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Vice President – Financial Strategy & Chief Risk Officer for PPL Services Corporation and he provides services to Kentucky Utilities Company and Louisville Gas and Electric Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 3rd day of June 2025.

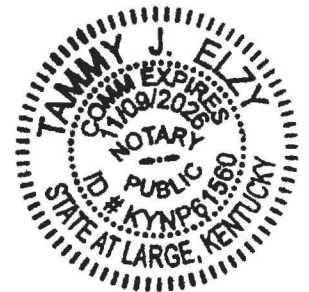


Notary Public


Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026



COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

Chief. 
Philip A. Imber

Caroline J. Davison
Notary Public

January 22, 2027



VERIFICATION

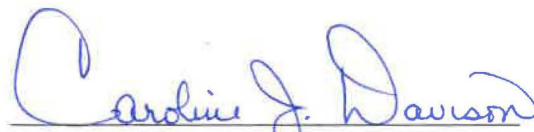
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lana Isaacson**, being duly sworn, deposes and says that she is Manager – Energy Efficiency Programs for LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.



Lana Isaacson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 2nd day of June 2025.



Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)


Charles R. Schram

Caroline J. Davison
Notary Public

January 22, 2027



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 Kentucky Utilities Company and Louisville Gas and Electric Company and is an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.


David L. Tummonds

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4th day of June 2025.


Notary Public

Notary Public, ID No. KYNP 4577

My Commission Expires:

April 1, 2028



VERIFICATION

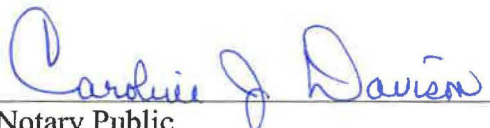
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Stuart A. Wilson**, being duly sworn, deposes and says that he is Director – Power Supply for Kentucky Utilities Company and Louisville Gas and Electric Company and is an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 2nd day of June 2025.

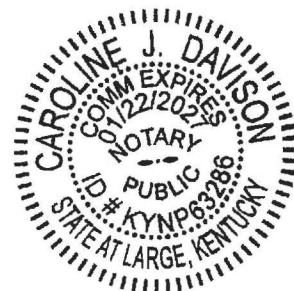


Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 1

Responding Witness: Stuart A. Wilson

- Q-1. Refer to Case No. 2024-00326.¹ Hearing Testimony of Michael Sebourn on May 14, 2025. Provide the presentation(s) prepared to compare actual information to the forecasted information as well as all work papers used to compile the information in the presentations for the years 2022, 2023, and 2024.
- A-1. The Companies review PROSYM results, including comparisons of prospective forecasts to historical data, as part of their annual business planning process. These comparisons demonstrate the reasonableness of the Companies' forecasts. The Companies do not compare actual metrics to PROSYM forecasts for concurrent years because the variances between assumed and actual inputs make such a comparison less useful. Relevant slides from the Companies' annual business plan presentations and the supporting workpapers are attached. See the attachment being provided in a separate file. Certain information is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

¹ Case No. 2024-00326, *Electronic 2024 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 2

Responding Witness: Lonnie E. Bellar / Stuart A. Wilson

- Q-2. Refer to LG&E/KU's Response to Southern Renewable Energy Association's (SREA) Second Request for Information (SREA's Second Request), Item 2(b). Confirm that transmission upgrades were excluded in Stage One of the evaluation as a possible alternative. If not confirmed, explain the response.
- A-2. Confirmed. The Companies did not consider transmission upgrades as an alternative to resource options.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 3

Responding Witness: Charles R. Schram / David L. Tummonds

Q-3. Refer to LG&E/KU's Response to the Attorney General's Second Request for Information (Attorney General's Second Request), Item 11a.

- a. Provide a detailed summary of the lessons learned from the research battery facility installed at the E.W. Brown Generating Station.
- b. Provide a summary of how the research battery facility performed during extreme weather events, including but not limited to Winter Storm Elliott.

A-3.

- a. Lessons learned associated with the noted battery facility have focused on understanding and preventing thermal runaway – the precursor to battery fires. Additionally, the Companies have studied minute-by-minute data to model potential dispatching of renewable assets as well as simulated charging operations and conditions to further optimize operational safety and efficiency. Each of these three efforts resulted in the published reports attached as separate files.
- b. The system has performed as expected during cold weather events, including Winter Storm Elliott ("WSE"). In addition to the lessons noted in the response to part (a), the Companies overcame challenges with the LG Chem battery technology in the research battery during WSE. Because the research battery is small (1 MW), the Companies do not dispatch it the same way as other system resources monitored in their Energy Management System. However, the Companies' R&D team monitored the battery during WSE and actively managed charge and discharge parameters to maintain availability during this period and better understand its cold weather performance. The Companies will use the lessons learned from operating their research battery during WSE and other extreme weather events in creating protocols for monitoring and operating larger BESS systems, which will help optimize their performance during similar future weather conditions.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 4

Responding Witness: Lana Isaacson / Stuart A. Wilson

- Q-4. Refer to LG&E/KU's Response to Kentuckians for the Commonwealth, Kentucky Solar Energy Society, Metropolitan Housing Coalition, and Mountain Association's (collectively, Joint Intervenor) Second Request for Information (Joint Intervenor's Second Request), Item 44. Specifically, "[t]he Companies conducted additional cost-effectiveness testing in 2023, which used avoided capacity based on Simple Cycle Combustion Turbine (SCCT) for demand response and avoided capacity based on Natural Gas Combined Cycle (NGCC) for energy efficiency."
- a. Explain why, knowing what generation LG&E/KU had proposed to construct next, LG&E/KU used the SCCT in its demand response calculations for avoided capacity costs.
 - b. Provide a basis for the accuracy and authority of this method of avoided capacity calculation.
- A-4.
- a. Because demand response programs' demand reductions are typically peaking in nature, the Companies use the least cost peaking resource option to calculate avoided capacity cost for demand response programs. At the time of the additional cost-effectiveness testing in mid-2023, the least cost peaking resource option was SCCT. Also, the Commission's September 24, 2021 Order in Case Nos. 2020-00349 and 2020-00350 adopted a simple cycle CT as the proxy for avoided generation capacity and stated that a CT is the best generic substitute because it is generally regarded as the least-cost capacity resource.²

² *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*

- b. The Companies define “avoided cost” for the purpose of cost-effectiveness testing for DSM/EE programs in the same way it is defined in the Commission’s Qualifying Facilities regulation – “incremental costs to an electric utility of electric energy or capacity or both which, if not for the purchase from the qualifying facility, the utility would generate itself or purchase from another source.”³ To align the characteristics of the avoided capacity with the characteristics of the DSM/EE program being evaluated, the Companies use least cost peaking capacity resources to calculate avoided capacity costs for DSM programs with energy reductions that are typically peaking in nature, such as demand response programs, and least cost intermediate capacity resources to calculate avoided capacity costs for DSM/EE programs with energy reductions that are typically intermediate in nature.

Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00349 and *Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*, Case No. 2020-00350, Order at 34 (Ky. PSC Sept. 24, 2021).

³ 807 KAR 5:054 Section 1(1)

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 5

Responding Witness: Stuart A. Wilson

Q-5. Refer to LG&E/KU's Response to Commission Staff's Second Request for Information (Staff's Second Request), Item 2.

- a. Provide the second least cost portfolio to the chosen portfolio.
- b. Explain for the chosen portfolio, why each individual generating unit is considered-least cost, and what alternatives were considered.

A-5.

- a. To develop more optimal resource plans, the Companies choose settings in PLEXOS to develop resource plans with more detailed granularity. PLEXOS cannot produce a second least-cost portfolio with these settings. However, to consider alternative portfolios, the Companies developed resource plans over a range of fuel price scenarios in their 2025 Resource Assessment (see Tables 10 and 11 at pages 31-32 in Exhibit SAW-1). The table below contains the first and second least-cost portfolios for each load scenario from that analysis.

Least-Cost 2030 Portfolios

Data Center Load in Load Scenario	Least-Cost Portfolio	Second Least-Cost Portfolio
2,030 MW	Brown 12; Mill Creek 6; Generic NGCC; 300 MW 4hr BESS; GH2 SCR	Brown 12; Mill Creek 6; Generic NGCC; 300 MW 4hr BESS; GH2 Non-Ozone; 265 MW Solar
1,890 MW	Brown 12; Mill Creek 6; Generic NGCC; 100 MW 4hr BESS; GH2 Non-Ozone; 265 MW Solar	Brown 12; Mill Creek 6; Generic NGCC; 100 MW 4hr BESS; GH2 Non-Ozone; 815 MW Solar
1,750 MW (2025 CPCN Load Forecast)	Brown 12; Mill Creek 6; 600 MW 4hr BESS; GH2 SCR	Brown 12; Mill Creek 6; 600 MW 4hr BESS; GH2 Non-Ozone; 815 MW Solar
1,610 MW	Brown 12; Mill Creek 6; 400 MW 4hr BESS; GH2 SCR	Brown 12; Mill Creek 6; 400 MW 4hr BESS; GH2 Non-Ozone; 815 MW Solar
1,470 MW	Brown 12; Mill Creek 6; 200 MW 4hr BESS; GH2 SCR	Brown 12; Mill Creek 6; 400 MW 4hr BESS; GH2 Non-Ozone; 600 MW Solar

- b. To serve economic development load growth, the Companies evaluated a range of new supply- and demand-side resources as possible additions or replacement resources for their generation portfolio. These resources are summarized in Section 3.1 beginning at page 18 of Exhibit SAW-1. Considering all the resource plans developed in the 2024 IRP and the 2025 CPCN Resource Assessments, NGCC and BESS are consistently the most economical resource additions for supporting high load-factor economic development loads. NGCC is the most economical new resource for producing around-the-clock energy and is included in each of the load scenarios above to serve a significant portion of the new economic development load. The remainder of the economic development load is

served by existing resources and BESS. BESS is lower cost than other peaking resources with the federal tax credit, can be constructed faster than NGCC, requires no gas or coal supply considerations, and will enable the Companies to more fully utilize existing resources, including coal-fired generation, for charging energy.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 6

Responding Witness: Stuart A. Wilson

Q-6. Refer to LG&E/KU's Response to Staff's Second Request, Item 3, Attachment 1. Refer also to the Direct Testimony of Stuart A. Wilson (Wilson Direct Testimony), Exhibit SAW-1 Table 13, page 34.

- a. For Item 3, Attachment 1, explain whether the portfolio on line 40 (No LFC, Mid Gas, Mid CTG, 1,610 MW) corresponds to the 2028 portfolio in Exhibit SAW-1, Table 13.
- b. Explain the difference between the full year LOLE of 0.51 (row 40, column O) and the LOLE of 1.07 in Table 13.

A-6.

- a. The generation portfolio on line 40 (No LFC; Mid Gas, Mid CTG) is the same as the third generation portfolio in Exhibit SAW-1 Table 13, namely, "2028 Portfolio + BR12 NGCC + MC6 NGCC + 400 MW CR BESS". As noted in the paragraph above Table 13, the "2028 Portfolio" refers to the Companies' resource portfolio in 2028 and reflects the retirement of Mill Creek 1 (2024), the planned retirement of Mill Creek 2 (2027), the assumed retirement of the small-frame SCCTs (2026), the planned additions of Brown BESS (2027), Mill Creek 5 (2027), two company-owned solar facilities in 2026 (Mercer County) and 2027 (Marion County), and dispatchable demand response program from the Companies' 2024-2030 DSM-EE Program Plan.
- b. The LOLE on line 40 (0.51) is computed with a data center load of 1,610 MW and is lower than the LOLE in Table 13 (1.07), which is computed with a data center load of 1,750 MW. In both cases, the generation portfolios are the same.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 7

Responding Witness: David L. Tummonds

- Q-7. Refer to LG&E/KU's Response to Staff's Second Request, Item 39. Detail all costs that comprise the fixed O&M for the BESS.
- A-7. The referenced O&M provides for the following:
- Long term service agreement ("LTSA") for the battery and electrical equipment provided by the original equipment manufacturer ("OEM")
 - Annualized cost of potential OEM augmentation of battery modules following initial years of operation
 - Maintenance of heating, ventilation, and air conditioning ("HVAC") systems associated with battery component cooling
 - Additional maintenance costs for material not covered by the LTSA.
 - Costs for company labor and overhead costs associated with the facility.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 8

Responding Witness: Lonnie E. Bellar / Stuart A. Wilson

- Q-8. Refer to LG&E/KU's Response to Staff's Second Request, Item 47.
- a. Provide the completed study in full.
 - b. If not included in the study, explain how a change in the assumptions regarding the retirement of Mill Creek 2 would affect LG&E/KU's chosen portfolio in this case.
- A-8.
- a. See the Companies' Supplemental Response to KCA 1-4 filed on May 30, 2025.
 - b. See attachments being provided in separate files. Workpapers for this analysis are provided as Attachments 2 (PLEXOS files), 3 (PROSYM files), 4 (Financial Model files), and 5 (Screening Model files). Certain information in Attachments 2-4 and all information in Attachment 5 is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 9

Responding Witness: Lonnie E. Bellar / Stuart A. Wilson

Q-9. Refer to Wilson Direct Testimony, Exhibit SAW-1, Section 6.3.1, Table 17. Provide the stay-open costs, including identifying the specific projects for each unit identified in Table 17.

A-9. For stay-open costs related to Brown 3, see Exhibit SAW-2 at "FinancialModel\Support\StayOpenCosts\20240726_StayOpenDetail_BR_STE AM_0336.xlsx." Project-level detail is available on the '2050 Scenario' tab.

For stay-open costs related to Ghent 1-4, see Exhibit SAW-2 at "FinancialModel\Support\StayOpenCosts\20240726_StayOpenDetail_GH_0336.xlsx." Project-level detail is available on the 'Capital – Scenario 4' and 'Scenario 4 – NonLabor' tabs.

For stay-open costs related to Trimble County 1-2, see Exhibit SAW-2 at "FinancialModel\Support\StayOpenCosts\20240726_StayOpenDetail_TC_STE AM_0336.xlsx." Project-level detail is available on the 'Non Outage MAINT' tab.

For stay-open costs related to Mill Creek 2, see Exhibit SAW-2 at "FinancialModel\Support\StayOpenCosts\20240726_StayOpenDetail_MC2_CR 7_Hydro_0336.xlsx." Project-level detail is available on the '2024 BP Generation – 10 Years' and '10 Years Capital' tabs.

For stay-open costs related to Mill Creek 3-4, see Exhibit SAW-2 at "FinancialModel\Support\StayOpenCosts\20240726_StayOpenDetail_MC_0336.xlsx." Project-level detail is available in the attached file.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 10

Responding Witness: Stuart A. Wilson

Q-10. Refer to Wilson Direct Testimony, SAW-1, page 34-35.

- a. Explain whether LG&E/KU has the capacity to serve the Campground Data Center without any new additions to generation.
- b. Explain whether a denial of a CPCN for the Cane Run BESS in 2028- 2029 would impact the ability of LG&E/KU to reliability service Campground Data Center's load.

A-10.

- a. With 2022 CPCN-approved resources (Mill Creek 5 NGCC, Brown BESS, two company-owned solar facilities, and the 2024-2030 DSM-EE Program Plan) and the retirement of Mill Creek 2 ("2028 Portfolio"), the Companies cannot reliably serve the 525 MW Camp Ground Road Data Center. Note that, based on current TSRs, the size of the Camp Ground Road Data Center has increased from 402 MW to 525 MW.

With a short-term life extension of Mill Creek 2, the Companies could reliably serve the 525 MW Camp Ground Road Data Center load until the proposed NGCC units are in service. But the Companies would require additional capacity to reliably serve the Camp Ground Road Data Center plus two 50 MW planned expansions by existing customers. See the table below for details. Lastly, as noted in the Supplemental Response to KCA 1-4 filed on May 30, 2025, if Brown BESS is unavailable due to trade tariff or tax incentive uncertainties, the Companies can serve only 500 MW of data center load with an extension of Mill Creek 2. Workpapers for this response are attached in separate files. Astrapé Consulting, the entity that licenses the SERVVM software, has denied the Companies' permission to disclose the native file format (.bak) of the Companies' SERVVM database and other proprietary files to any person or party who lacks an active SERVVM license. Therefore, the Companies will provide these files to any

party to this proceeding who has an active SERV license and enters into a confidentiality agreement with the Companies.

Portfolio	Economic Development Load Growth (MW)	LOLE (days in 10 years)
2028 Portfolio	525 (Campground)	1.86
2028 Portfolio + Mill Creek 2	525 (Campground)	0.76
2028 Portfolio + Mill Creek 2	625 (Campground + two 50 MW projects)	1.19

- b. The denial of Cane Run BESS alone is insufficient for the Companies to determine if they can reliably serve Camp Ground Road Data Center load. As shown in the attachment to the Companies' Supplemental Response to KCA 1-4, the third and fourth portfolio in Table 2 can reliably serve the 525 MW of Camp Ground Road Data Center with the extension of Mill Creek 2, Brown 12 NGCC, or Mill Creek 6 NGCC, but not until Brown 12 is commissioned.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 11

Responding Witness: Stuart A. Wilson

- Q-11. Refer to LG&E/KU's Response to Joint Intervenor's First Request, Item 4. Provide the estimated revenue requirement for the proposed BESS assuming that the ITC credit is not available.
- A-11. The estimated revenue requirement for the first full year of operation of Cane Run BESS if the ITC is unavailable is \$128 million. The workpapers for this response are attached as a separate file. The information is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 12

Responding Witness: Andrea M. Fackler

- Q-12. Concerning the rate of return on the environmental compliance plan, calculate any true-up adjustment needed to recognize changes in KU cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in KU's jurisdictional capital structure as of May 31, 2025. Include all assumptions and other supporting documentation used to make this calculation. Provide all exhibits and schedules in the response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.
- A-12. Rate of return true-up adjustments are calculated based on each six-month period being reviewed by the Commission pursuant to KRS 278.183(3) to true-up the return on rate base component of KU's jurisdictional revenue requirement. The six-month periods are September through February and March through August for expense period purposes (i.e., November through April and May through October for billing period purposes). The rate of return calculated to true-up the return on rate base component of KU's jurisdictional revenue requirement in the review period is based on average daily balances and daily interest rates for debt over the six-month expense period pursuant to the terms of the Settlement Agreement approved by the Commission for KU's 2011 ECR Plan (Case No. 2011-00161). Calculating a rate of return for a period ended May 31, 2025, does not align with KU's six-month periods and thus would not be used in an ECR review case to true-up the actual rate of return. The rate of return to true-up KU's return on rate base for its proposed 2025 ECR Plan will not be calculated until the Commission approves the 2025 ECR Plan for cost recovery through the ECR surcharge *and* the Commission opens a review case that covers October 2025 or any future expense month that contains costs related to the 2025 ECR Plan.

Unless the Commission were to open and complete a new review case prior to the Order being issued in this case, consistent with past practice the Company would apply the rate of return approved by the Commission in Case No. 2023-00376 to be used on a going forward basis in the ECR monthly reporting forms. The rate of return would be 8.73%, which is based in part on the currently authorized 9.35% return on equity approved in KU's most recent base rate case (Case No. 2020-00349), and will be trued up to the actual rate of return in the

applicable six-month or two-year review cases. See the attachment being provided in a separate file from Case No. 2023-00376.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 13

Responding Witness: Christopher M. Garrett

- Q-13. Explain whether there has been a change in depreciation rates since the last environmental surcharge recovery review case and if that affects the request to amend the environmental compliance plan and corresponding recovery mechanism.⁴
- A-13. There has been no change in depreciation rates since the last environmental surcharge recovery review case. KU has requested the approval of new depreciation rates in its base rate application filed in Case No. 2025-00113 on May 30, 2025. The updated depreciation rates would be effective upon Commission approval with any resulting impacts incorporated into the recovery mechanism prospectively. See also the response to Question No. 15.

⁴ Case No. 2023-00376, *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* (Ky. PSC Aug. 30, 2024).

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 14

Responding Witness: Robert M. Conroy / Andrea M. Fackler

Q-14. Refer to the Application filed April 30, 2025, in Case No. 2025-00105⁵ (ECR Application). Provide the statutory support for recovery of administrative expenses as part of the surcharge recovery mechanism.

A-14. The Commission has twice approved Big Rivers Electric Corporation's ("Big Rivers" or "BREC") request to establish a regulatory asset for its costs associated with its environmental compliance plan and environmental cost recovery surcharge cases and to amortize and recover those regulatory assets through Big Rivers' Environmental Surcharge Mechanism, first in 2012 and again in 2020-2021.⁶

In Case No. 2012-00063, the Commission's Oct. 1, 2012 Order stated:

4. The establishment of a regulatory account for Big Rivers' actual costs associated with this case, for expenses incurred by Big Rivers up through and including August 31, 2012, which are estimated not to exceed \$900,000, is approved.

⁵ Case No. 2025-00105, *Electronic Application of Kentucky Utilities Company for Approval of its 2025 Compliance Plan for Recovery by Environmental Surcharge Plan*.

⁶ *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). 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 MRSB Credit*, Case No. 2021-00061, Order at 12 (Ky. PSC June 9, 2021).

5. The amortization of the regulatory account over three years, including the recovery of those costs through the environmental surcharge tariff, is approved.⁷

The Commission did not explicitly cite statutory authority for these approvals, but it did generally address Kentucky's environmental surcharge statute, KRS 278.183, in the Order.

In Case No. 2019-00435, the Commission's August 6, 2020 Order stated in relevant part:

With respect to expenses incurred by BREC in developing the instant application and prosecuting the matter, BREC states that these costs stem from the retention of experts in the legal, regulatory, and engineering professions to assist BREC in evaluating compliance options. BREC notes that these costs are significant relative to the level of outside service costs built into its base rates, but that they are necessary and prudent and that BREC should have an opportunity to recover these costs consistent with KRS 278.183. Accordingly, BREC requests authority to establish a regulatory asset for its actual costs associated with this case, to amortize the costs over three years, and to recover the costs through the environmental surcharge. BREC states that this method was approved as part of its 2012 Environmental Compliance in Case No. 2012-00063.⁸

...

The Commission finds that BREC has established that the costs to prepare and prosecute its 2020 Environmental Compliance Plan fall into the second category of expenses appropriate for deferral [i.e., an expense resulting from a statutory or administrative directive]. The Commission further finds that BREC should be allowed to defer the actual costs of preparing and prosecuting this case, net of any amounts included in its base rates or otherwise capitalized as part of a project. ... The Commission further finds that BREC should submit information regarding this regulatory asset for Commission review as part of its next annual filing to adjust its Member Rate Stability Mechanism rates.⁹

⁷ Case No. 2012-00063, Order at 19 (Ky. PSC Oct. 1, 2012).

⁸ Case No. 2019-00435, Order at 15-16 (Ky. PSC Aug. 6, 2020).

⁹ *Id.* at 24.

In Big Rivers' next Member Rate Stability Mechanism case, Case No. 2021-00061, the Commission's June 9, 2021 Order stated:

[T]he Commission allowed BREC to defer the actual costs of preparing and prosecuting the 2020 ECP, net of any amount included in its base rates or otherwise capitalized as part of a project. Costs include the retention of legal counsel and a regulatory expert. ... [T]he actual costs totaled \$289,407.25. BREC proposes to amortize these costs over three years and to recover the costs through the ESM [Environmental Surcharge Mechanism], or alternatively, authority to include the 2020 ECP regulatory asset in the list of regulatory assets recovered in BREC's MRSM tariff.¹⁰

...

The Commission finds that BREC should be authorized to amortize over three years the regulatory asset associated with the expenses incurred in developing and pursuing the relief requested in Case No. 2019-00435 and to recover these costs through the ESM.¹¹

Therefore, the statute the Commission has previously cited in connection with allowing recovery of environmental compliance plan-related case preparation and prosecution costs is KRS 278.183.

Notably, the Commission approved this cost recovery for Big Rivers even though Big Rivers' Environmental Surcharge provisions did not address such cost recovery. In this case, KU is seeking to add an explicit provision to its Environmental Cost Recovery Surcharge tariff sheets to allow for such cost recovery if approved by the Commission.

Also, KRS 278.183 states the categories of costs utilities are *entitled* to recover by environmental surcharge, but it does not explicitly limit environmental surcharge cost recovery *exclusively* to the stated cost categories.¹² Indeed, as

¹⁰ Case No. 2021-00061, Order at 9 (Ky. PSC June 9, 2021).

¹¹ *Id.* at 11-12.

¹² KRS 278.183 states in relevant part:

- (1) Notwithstanding any other provision of this chapter, effective January 1, 1993, 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. These costs shall include a reasonable return on construction and other capital expenditures and reasonable

shown above, the Commission has authorized Big Rivers to have environmental surcharge cost recovery of costs not explicitly addressed in KRS 278.183, though the Commission did find Big Rivers' cost to prepare and prosecute its 2019 environmental compliance plan case to be "an expense resulting from a statutory or administrative directive."¹³

Moreover, the Kentucky Supreme Court has held the Commission possesses plenary ratemaking authority concerning cost recovery mechanisms under KRS 278.030 and 278.040.¹⁴

Finally, KU is seeking in this proceeding environmental surcharge recovery only of customer notice costs, i.e., a subset of the costs the Commission has twice approved Big Rivers to recover through its ESM. KU believes terming such costs and other costs the Commission might approve for future environmental surcharge recovery "Administrative Expenses" is appropriate, but KU does not object if the Commission believes another term would be more apt.

operating expenses for any plant, equipment, property, facility, or other action to be used to comply with applicable environmental requirements set forth in this section. Operating expenses include all costs of operating and maintaining environmental facilities, income taxes, property taxes, other applicable taxes, and depreciation expenses as these expenses relate to compliance with the environmental requirements set forth in 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.

¹³ Case No. 2019-00435, Order at 23-24 (Ky. PSC Aug. 6, 2020).

¹⁴ *Kentucky Public Service Com'n v. Com. ex rel. Conway*, 324 S.W.3d 373, 380-81 (Ky. 2010).

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 15

Responding Witness: Christopher M. Garrett

- Q-15. Refer to the ECR Application. Confirm that KU will update the depreciation rates in this matter as soon as it files the application in Case No. 2025-00113.¹⁵ If not confirmed, explain why not.
- A-15. Not confirmed. KU will not begin recovering depreciation expense for the Ghent 2 SCR until it goes in service in 2028, at which time KU will begin depreciating the actual capitalized cost of the Ghent 2 SCR at the appropriate approved depreciation rate then in effect. Therefore, because the depreciation rates KU has proposed in Case No. 2025-00113 may not be the depreciation rates the Commission eventually approves in that case, which also may change again by 2028, KU is not proposing to update depreciation rates until new rates are approved by the Commission.

¹⁵ Case No. 2025-00113, *Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric Rates and Approval of Certain Regulatory and Accounting Treatments*.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 16

Responding Witness: Philip A. Imber

- Q-16. Refer to the ECR Application, Direct Testimony of Phillip Imber (Imber Direct Testimony). Provide an update to the testimony based on federal administrative actions since January 1, 2025.
- A-16. The ECR Application testimony is dated April 30, 2025. The testimony incorporated evaluation of all federal actions up to the date of the testimony. Since the testimony, there are no published proposals or final actions related to environmental regulations. The Ozone National Ambient Air Quality Standards ("NAAQS") remain in place. The EPA submitted proposed changes to the Greenhouse Gas 111 Rules and the National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-Fired Electric Utility Steam Generating Units, also known as the Mercury and Air Toxics Standards ("MATS"), to the Office of Management and Budgeting ("OMB"). It is uncertain what a published proposal will contain and how the comment process will impact a final rule over the next several months. It appears from the President's executive orders and public statements from his administration that continued operation of viable coal units is an objective. Ensuring operating flexibility of Ghent 2, particularly during the ozone season, continues to be a prudent investment for environmental compliance and will help the Companies continue to provide reliable service at the lowest reasonable cost.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 17

Responding Witness: Philip A. Imber

- Q-17. Refer to ECR Application, Imber Direct Testimony, page 7. Explain how the failure to achieve attainment status by the deadline makes it harder to permit economic development projects.
- A-17. Failure to achieve National Ambient Air Quality Standards ("NAAQS") attainment results in implementation of Nonattainment New Source Review ("NSR") for Clean Air Act Title V air permitting.¹⁶ Nonattainment NSR applies to new major sources or major modifications at existing sources (i.e., economic development projects). All nonattainment NSR programs require (1) the installation of the lowest achievable emissions rate ("LAER") for new sources, (2) emissions offsets with increasing offset reduction multipliers based on the level of nonattainment, and (3) the opportunity for public involvement. LAER is the most stringent emission limitation that can be implemented. LAER increases the capital cost and operational complexity of economic development projects. Applying LAER to a project may make that project economically infeasible. Emission offsets are emissions reductions, generally obtained from existing sources located in the vicinity of a proposed new or modified source to offset emissions increases from it. Offset availability is uncertain. Offsets are generally costly and offsets often become a critical path to project permitting and overall project development success. Offsets inject complexity into projects by increasing the number of stakeholders.

¹⁶ 42 U.S.C. 2013, Title 42, Chapter 85, Subchapter I, Part D, Subpart 1, Section 7503: Permit Requirements, available at <https://www.govinfo.gov/content/pkg/USCODE-2013-title42/pdf/USCODE-2013-title42-chap85-subchapI-partD-subpart1-sec7503.pdf>.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 18

Responding Witness: Robert M. Conroy

- Q-18. Refer to the ECR Application. Confirm that KU will update the requested rate of return once the application in Case No. 2025-00113 is filed. If not confirmed, explain.
- A-18. Not confirmed. As stated in KU's Application in Case No. 2025-00105, "KU further applies to the Commission for approval to use its currently authorized return on equity ("ROE") for all ECR Plan cost recovery purposes, including Project 45, until the Commission approves a new ROE for the ECR Surcharge, which KU anticipates requesting in the base rate application it plans to file on May 30, 2025." On May 30, 2025, the Companies filed their base rate applications in Case Nos. 2025-00113 and 2025-00114, in which they have asked to use the return on equity approved by the Commission in those cases for their ECR Surcharges and other cost recovery mechanisms, prospectively. Therefore, the appropriate rate of return for KU's ECR Surcharge will be fully litigated in Case No. 2025-00113, obviating the need to address it in this proceeding.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 19

Responding Witness: Andrea M. Fackler / Philip A. Imber

- Q-19. Refer to ECR Application. Provide a breakdown in table format of each project currently included in the environmental surcharge.
- A-19. See attachment being provided in a separate file.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 20

Responding Witness: Andrea M. Fackler

- Q-20. Refer to ECR Application, page 6, paragraph 11. Provide the actual notice costs to date for that case. Consider this an ongoing request.
- A-20. Actual customer notice costs related to the ECR application filed in Case No. 2025-00105 are \$199,039.73. No additional notice costs are expected to be incurred for the ECR application specifically. KU will file its Certificate of Completed Notice by June 13, 2025.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 21

Responding Witness: Andrea M. Fackler / David L. Tummonds

- Q-21. Refer to ECR Application, Direct Testimony of Andrea Fackler (Fackler Direct Testimony), Exhibit AMF-4, page 2. Provide a breakdown of the projected eligible plant for the years 2025 through 2029.
- A-21. See attachment being provided in a separate file.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 22

Responding Witness: Andrea M. Fackler

- Q-22. Refer to ECR Application, Fackler Direct Testimony, page 7.
- a. Explain why KU is not seeking to recovery any other administrative costs related to the ESM.
 - b. Explain how KU currently recovers its notice costs related to the ESM.
- A-22.
- a. Because of the nature and timing of the ECR application in Case No. 2025-00105, administrative costs other than the customer notice publication cost would be challenging to differentiate from other costs of preparing and advancing the Companies' non-ECR-related CPCN requests in Case No. 2025-00045. Therefore, KU is seeking ECR recovery solely of customer notice costs in this case, but the Companies could seek additional administrative cost recovery in future ECR cases that do not involve non-ECR-related requests.
 - b. KU is not currently recovering any customer notice costs related to the ECR. Such costs could be recovered through base rates if KU forecasted such costs to be incurred during the test year of a base rate case. No such costs were forecasted in the July 2021 to June 2022 test year utilized in KU's last settled base rate case, Case No. 2020-00349, nor are there any costs forecasted in the 2026 test year of KU's pending base rate case, Case No. 2025-00113.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 23

Responding Witness: Andrea M. Fackler

- Q-23. Refer to the ECR Application, Fackler Direct Testimony, page 5, FN 6. State what costs related to Project 45 KU can collect for ECR purposes as a component of base rates.
- A-23. The ECR component of base rates does not recover specific costs related to ECR approved projects but rather uses historical ECR rate base and operating expenses to determine the total amount of ECR revenue the Company can collect in base rates. KU's current ECR component of base rates, as approved in its most recent ECR two-year review case (Case No. 2023-00376), is based on rate base as of February 28, 2023, and operating expenses for the twelve-month period ending February 28, 2023. As such, no costs associated with Project 45 will be recovered through the ECR component of base rates until a future two-year review case is opened covering a period of time in which KU has incurred actual costs related to Project 45 and in which KU would propose to "incorporate surcharge amounts found just and reasonable into the existing base rates of each utility" in accordance with the provisions in KRS 278.183(3).

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Commission Staff's Third Request for Information
Dated May 23, 2025**

Case No. 2025-00045

Question No. 24

Responding Witness: Lonnie E. Bellar / Stuart A. Wilson

Q-24. Refer to Case No. 2006-00206¹⁷. Refer also to LG&E/KU's Response to the Attorney General's Second Request, Item 21d and 27a-f and LG&E/KU's Response to Staff's Second Request, Item 14b.

- a. Confirm that the SCR for Ghent 2 would have been less expensive¹⁸ had it been installed at the time approval had been given. If confirmed, explain why the current request is reasonable. If not, confirmed, explain.
- b. Confirm that KU evaluated the Ghent 2 SCR construction cost annually as discussed in the April 29, 2008 Order.¹⁹ If KU performed that analysis, provide the yearly cost benefit analysis for each year from 2008 through 2024. If not confirmed, explain why KU failed to perform the analysis.

A-24.

- a. Not confirmed. As KU reported to the Commission in its October 25, 2007 motion to reopen Case No. 2006-00206, less than one year after the project was approved, the estimated cost of installing SCR on Ghent 2 in 2009 had increased 21 percent from \$95 million to \$115 million,²⁰ and forecasted NOx allowance prices had decreased by 35 percent.²¹ Based on these and other changes in key assumptions, the Companies demonstrated that delaying the Ghent 2 SCR was a lower-cost option for customers.²² Although the estimated nominal capital cost of installing SCR in 2009 (\$115 million) is less than the estimated nominal capital cost of installing

¹⁷ Case No. 2006-00206, *The Application of Kentucky Utilities Company for A Certificate of Public Convenience And Necessity To Construct A Selective Catalytic Reduction System and Approval of its 2006 Compliance Plan For Recovery by Environmental Surcharge* (Ky. PSC Feb. 28, 2008).

¹⁸ Case No. 2006-00116, Apr. 29, 2008 Order at 1.

¹⁹ Case No. 2006-00116, Apr. 29, 2008 Order at 3-4.

²⁰ Case No. 2006-00206, KU Motion Exh. A at 3-4 (Oct. 25, 2007).

²¹ *Id.* at 2.

²² *See, e.g., id.* at 3 ("After evaluating the impact of this new information, the Companies have decided to delay the construction of the Ghent 2 SCR, subject to at least annual review, in order to provide both short-term and long-term savings for customers.").

SCR on Ghent 2 in 2028 (\$152 million), the present value of the 2028 cost in 2009 dollars is approximately only \$45 million. Thus, on a present value basis, installing SCR on Ghent 2 in 2009 would have been significantly more costly for customers.

The present value of revenue requirements through 2050 for the proposed 2028 Ghent 2 SCR, including capital, ongoing incremental capital, and fixed O&M, totals \$168 million in 2025 dollars. If the Companies had installed the Ghent 2 SCR in 2009 at a capital cost of \$115 million, assuming the same ongoing incremental capital and fixed O&M as current estimates, the present value of revenue requirements through 2050 would have totaled \$441 million in 2025 dollars. Thus, the Companies have saved their customers \$273 million in 2025 dollars by waiting to install the Ghent 2 SCR.

- b. The Companies assume the request intended to refer to the Commission's February 28, 2008 Order in Case No. 2006-00206, which was the last Order the Commission issued in that proceeding. Ordering paragraph 4 of that Order stated, "KU shall supplement subsequent IRP filings to include the most current Ghent Unit 2 SCR evaluation, beginning with its next IRP filing due April 21, 2008." In the 2008 IRP, the Companies indicated that the most current evaluation on the Ghent Unit 2 SCR was the document titled *Ghent 2 Selective Catalytic Reduction (SCR) Analysis Update-Timing of Construction (October 2007(Analysis Update))*. It was not addressed in subsequent IRPs, but as noted in response to part (a) above, not proceeding with the Ghent 2 SCR has resulted in significant savings for customers to date, though it is now least-cost to proceed with it.

Also, the Companies annually perform a business planning exercise to assess future operations, maintenance, and capital forecasts. As part of that exercise, the Companies evaluate the generation forecast and the commensurate emissions forecast. Through the Clean Air Interstate Rule (2009), the Cross State Air Pollution Rule (2015), the Cross State Air Pollution Update Rule (2017), and Revised Cross State Air Pollution Rule (2021), the business planning evaluation determined the fleet was able to comply with the NOx allocations granted to the Companies without additional controls and limited NOx allowance purchases. Because compliance was achievable with existing assets and limited NOx allowance purchases (which ceased after 2014), continued evaluation of the Ghent 2 SCR was unnecessary. See attachments being provided as separate files for the Companies' emissions forecasts and allowance balances, by year, since 2011.

Upon the implementation of the 2015 Ozone NAAQS and the subsequent Good Neighbor Plan's further tightening of NOx emissions, the Companies

evaluated whether a Ghent 2 SCR would be necessary for compliance. The Companies evaluated the Good Neighbor Plan and Ghent 2 SCR in the 2022 CPCN proceeding and further evaluated it prior to this proceeding. Although the Good Neighbor Plan is stayed, Kentucky is deemed a significant contributor to downwind states and ultimately needs to install Reasonably Achievable Control Technology on Ghent 2—an SCR—to ensure availability during the ozone season.