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 CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND SITE COMPATIBILITY CERTIFICATES	))))))	**CASE NO. 2025-00045**

RESPONSE OF
KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE KENTUCKY COAL ASSOCIATION'S SUPPLEMENTAL REQUEST FOR INFORMATION

DATED MAY 2, 2025

FILED: MAY 16, 2025

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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

Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 2025.

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

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Senior Director – Business and Economic Development for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

John Bevington

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 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

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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

Robert M. Conroy

Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 15th day of May 2025.

Tammy J. Elzy

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

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, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Christopher M. Garrett

Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of May 2025.

Tammy J. Elzy

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

VERIFICATION

COMMONWEALTH OF KENTUCKY	**)**
	)
COUNTY OF JEFFERSON	**)**

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

Philip A Imber

Philip A. Imber

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 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

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

Lana Isaacson

Lana Isaacson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 2025.

Caroline J. Davison

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027

CAROLINE J. DAVISON
COMM EXPIRES 1/22/2027
NOTARY PUBLIC
ID # KYNP63286
STATE AT LARGE, KENTUCKY

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Tim A. Jones**, being duly sworn, deposes and says that he is Senior Manager – Sales Analysis and Forecasting for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Tim A. Jones

Tim A. Jones

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of May 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

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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

Charles R. Schram

Charles R. Schram

Subscribed and sworn to before me, a Notary Public in and before said County and State this 13th day of May 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

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, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

David L. Tummonds

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 15th day of May 2025.

Venita M. Dietfreeze
Notary Public

Notary Public, ID No. KYNP4577

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, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Stuart A. Wilson

Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of May 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

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.1

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

Q-2.1. In follow-up to KCA Question 1.1 of its first data requests:

a. Please confirm that the statement that the CCGT selections in the CPCN would be the lowest cost option even if it operated with a 40 percent average capacity factor means that compliance with the GHG Rule was not assumed in the CPCN.

b. Please provide the Companies' justification for assuming the GHG Rule would be appealed given its "Final" status rather than providing full results for two cases, one with the GHG Rule and one without.

c. Please confirm that the Companies did not include the 2024 Effluent Limitation Guidelines (ELG) in their modeling.

d. Please identify whether there were other regulations not included in the CPCN analysis.

e. Did the Companies prepare a full case assuming the Final GHG Rule survived legal challenges? If so, please provide a write-up of the case with full results.

f. Have the Companies prepared a complete analysis assuming no GHG Rules, no 2024 ELG Rule, not IRA tax credits, etc.?

g. Did the Companies run a case that included a "must-run" requirement for existing coal plants that could be part of the Trump Administration's Executive Orders? If so, please provide. If not, do the Companies plan to update their CPCN analysis if such a mandate is provided?

h. If the Commission mandated that a CPCN be reassessed in light of a potential economic recession, higher than expected pricing of materials, and lower demand, what assumptions would the Companies make with respect to load growth, cost of new generation, loss of key tax credits, etc.?

i. Did the Companies include a full case in which there was a two-year delay in the compliance schedules for GHG and MATS? If so, please provide.

j. The Companies did not indicate they considered the impact of stagflation (high unemployment, rising inflation, and stagnant economic growth). If not, could the Companies prepare such an analysis?

A-2.1.

a. The CPCN analysis did not evaluate the GHG Rule. See the responses to JI 2-72(b), PSC 1-94, and PSC 1-95.

b. The Companies assume the request intended to say "repealed" rather than "appealed." Please see the Direct Testimony of Philip A. Imber at 13-15 concerning why the Companies did not model the GHG Rule in their 2025 CPCN Resource Assessment analysis. Note also that at the time of the CPCN filing, litigation of the GHG Rule was in process. Although an emergency stay in the U.S. Supreme Court was denied, Justices Kavanaugh and Gorsuch stated:

> [T]he applicants have shown a strong likelihood of success on the merits as to at least some of their challenges to the Environmental Protection Agency's rule. But because the applicants need not start compliance work until June 2025, they are unlikely to suffer irreparable harm before the Court of Appeals for the D.C. Circuit decides the merits. So this Court understandably denies the stay applications for now. Given that the D.C. Circuit is proceeding with dispatch, it should resolve the case in its current term. After the D.C. Circuit decides the case, the nonprevailing parties could, if circumstances warrant, seek appropriate relief in this Court pending this Court's disposition of any petition for certiorari, and if certiorari is granted, the ultimate disposition of the case.[1]

Moreover, the CPCN analysis is focused on immediate resource needs and expected environmental compliance requirements. The IRP demonstrated that NGGC and BESS are immediate needs in all environmental scenarios for serving economic development load growth. Although the CPCN analysis is not specifically inclusive of the GHG Rules, the proposed NGCCs comply with the phase 1 combustion turbine efficiency standards, and the GHG Rule

[1] *West Virginia v. Environmental Protection Agency,* 604 U.S. ___ (2024), available at https://www.supremecourt.gov/opinions/24pdf/24a95_n7ip.pdf (accessed May 11, 2025). Justice Thomas noted he would have granted the stay. *Id.*

not only supports the proposed Brown 12 and Mill Creek 6 NGCCs, the GHG rule drives the need for additional generation in subsequent years.

See also the Companies' response to JI 1-38 in Case No. 2024-00326.

c. Confirmed. See the response to part (b) and Mr. Imber's testimony at 15-17. Although the CPCN model analysis is not specifically inclusive of the 2024 ELG, compliance with the ELG results in the implementation of controls at existing coal electric generating units or retirement and the implementation of additional generation in subsequent years. The 2024 ELG compliance timeline affords time for further planning and development.

d. See the response to part (b). The CPCN analysis included the regulations necessary to identify immediate resource needs for serving economic development load. Compliance activity for the various environmental regulations identified in the IRP do not impact the decision-making process to implement additional generation to support economic development load growth. Consideration of other environmental rules was unnecessary in the CPCN.

e. Yes. See the 2024 IRP, Volume III, Resource Assessment.

f. The CPCN analysis assumes no GHG Rules and no 2024 ELG Rule. Regarding IRA tax credits, see the response to PSC 2-47.

g. No. The CPCN analysis did not result in any near-term coal unit retirements that may otherwise be subject to such a potential executive order.

h. See the response to PSC 2-47.

i. No. See the response to part (b).

j. See the Companies' assumptions and results of the Low Load scenario in the 2024 IRP.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.2

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

Q-2.2. In follow-up to question 1.2 of KCA's first set of data requests:

a. What assumptions are being made regarding compliance with PPL's 2050 net zero commitment if the new CCGT's operate at a maximum 40 percent capacity factor and have a 40-year life?

b. In the Companies' analyses, did the Companies assume the costs associated with the new CCGT investments would be depreciated over a shortened life based upon achieving the PPL commitment to net-zero emissions by 2025? If not, please provide the depreciation periods and the justification for extending the retirements beyond 2050.

c. In performing the analyses, did the Companies consider the possibility of a future requirement to include Scope 3 emissions?

A-2.2.

a. PPL's 2050 net zero goal did not affect the Companies' analysis.

b. No. Please note that PPL's net zero goal is for 2050, not 2025. The Companies assumed a 40-year book life for NGCC units. See the response to part (a).

c. No.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.3

Responding Witness: Lonnie E. Bellar / Stuart A Wilson

Q-2.3. In follow-up to KCA question 1.4 of its first set of data requests:

a. Please describe the status of the Companies' review of whether to reconsider retirement of Mill Creek 2 including the factors that are being considered, the date by which a final decision must be made, and whether the Companies intend to share the study with the Commission and stakeholders before reaching a final decision.

b. Please confirm that the Companies will make this analysis available for review by the Commission and stakeholders.

c. Please indicate whether the Companies have solicited coal bids as part of this effort from coal suppliers to have accurate coal price estimates for this analysis.

A-2.3.

a. See the response to PSC 2-47.

b. Confirmed.

c. The Companies have not solicited new coal bids specifically for this analysis. The Companies' existing fuel forecasts will support this analysis.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.4

Responding Witness: John Bevington / Tim A. Jones

Q-2.4. In follow-up to KCA question 1.5 of its first set of data requests, please confirm that the Companies are ultimately uncertain as to the impact of DeepSeek and other technologies on data center demand and costs.

A-2.4. Confirmed. As the Companies noted in response to KCA 1-5, "there is still a lot of uncertainty about what DeepSeek will actually do in terms of efficiency." This means that the impact of DeepSeek and other technologies could cause electricity load to be higher or lower than forecasted. The Companies are evaluating scenarios as outlined in PSC 2-47.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.5

Responding Witness: John Bevington / Robert M. Conroy / Counsel

Q-2.5. In follow-up to KCA question 1.6 of its first set of data requests:

a. Please confirm that the allocation of financial liability associated with data centers is **not** a settled matter in many jurisdictions.

b. Please indicate in detail how in the Companies' business model current ratepayer classes will not be exposed to costs if the "data center" fails prior to the Companies' recovery of the associated expenses including transmission upgrades.

c. What is the current position of the Companies as to the benefits of data centers vis-à-vis long-term good-paying jobs post construction?

d. If the Commission concludes it is not in ratepayer interests to include data centers as a "customer" in rates, do the Companies have a Plan B in which the data centers would be responsible for their financial obligations related to the construction of generation and transmission and the Companies would provide back-up power on a contracted basis?

A-2.5.

a. The Companies object to this request insofar as it requests a legal opinion or conclusion. Without waiving that objection, the Companies state they are unaware if the allocation of financial liability associated with data centers is or is not a settled matter in many jurisdictions.

b. The Companies' agreements for engineering, procurement and special equipment and construction include surety obligations for recovery of costs (incurred to date or in full) should a data center fail to execute an electric service contract. A deposit of some measure associated with the electric service contract will further ensure recovery of costs related to the retail service to the customer.

c. The Companies have not established a "position" on the long-term benefits of data center jobs post construction. For discussion and examples of possible job impacts post construction, see the direct testimony of Mr. Bevington, pages 9 – 11.

d. No.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.6

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

Q-2.6. In follow-up to KCA question 1.7 of its first set of data requests:

a. Please explain why the Companies have not performed a substantive cost or functionality update of dual fuel options despite prior testimony of the importance of this issue.

b. Do the Companies agree that the increased reliance on natural gas in its plants increase the impact of a natural gas supply disruptions due to lack of on-site inventory?

A-2.6.

a. The Companies performed this analysis in the Natural Gas Fuel Security Analysis provided in Volume III of the 2024 IRP.

b. No, it is not appropriate to make such a generalized risk assessment without additional specific information about the potential "disruptions" cited.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.7

Responding Witness: Charles R. Schram / Stuart A. Wilson / Counsel

Q-2.7. In follow-up to KCA question 1.8 of its first set of data requests:

a. For each case, please explain the assumptions reflected in the case titles.

b. Please provide the basis for the coal and gas numbers including the documentation and explanation of the correlation between the two.

c. Please provide the Companies' analyses of the demand for natural gas by sector by year for the forecast period. The sectors should be industrial, commercial, residential, power, and export markets.

d. Please confirm in the formulation of the correlations, the Companies did not reflect in the current year coal price the diversified contract portfolio that is used by the Companies in the procurement of coal. If not confirmed, please provide the calculations reflecting the average price that the Companies would pay under the standard diversified portfolio.

e. For each forecast case, please confirm these numbers are third party and/or government forecasts.

f. For each case, please provide the basis for the natural gas prices assumed in the case including the annual demand by sector for natural gas, i.e., residential, industrial, commercial, power, and exports.

g. Even if historically there was a connection between coal and natural gas prices (which KCA does not believe to be the case), please explain the rationale for not evaluating a scenario where coal and gas prices undergo decoupling as a result of the increase in natural gas demand by the other sectors.

h. For each forecast case, please provide the shape of the curve of the natural gas price assumed in each year.

i. Please provide the latest bids received for coal either under RFP's conducted by the Companies or unsolicited bids.

j. If third party sources for the coal prices are used, please provide documentation that the third parties provided and to the extent appropriate whether the third party also assumed a correlation between coal and natural gas prices.

k. For each case, please add columns identifying: $/Ton FOB Mine, $/Ton Transportation Costs, and Btu/lb for each month, year, and power plant.

l. For each case, please provide the delivered natural gas prices for each month and plant.

A-2.7.

a. The components of the case titles reflect the following assumptions
   - "20240716" notes the date of the file (July 16, 2024).
   - "2025BP" notes that the file was developed for the Companies 2025 Business Plan
   - "CoalforPROSYMPLEXOS" notes that these are coal prices developed for the Companies' modeling software, PROSYM and PLEXOS.
   - "2024-2050" notes the time frame of the forecast.
   - "DelInvSplit" notes that both delivered and inventory coal prices are included.
   - "Excl Fixed" notes that fixed coal delivery costs are excluded.
   - "HGLR" notes the High Gas Low CTG ratio scenario.
   - "HGMR" notes the High Gas Mid CTG ratio scenario.
   - "LGHR" notes the Low Gas High CTG ratio scenario.
   - "MGMR" notes the Mid Gas Mid CTG ratio scenario.
   - "LGMR" notes the Low Gas Mid CTG ratio scenario.

b. See Exhibit SAW-1, Section 6.6 Commodity Prices and the workpapers referenced in the response to KCA 1.8(a) and (b).

c. The Companies have not performed this analysis, because it is unnecessary.

d. Correlation is not an input to the Companies' fuel forecasts. The Companies' fuel forecasts assume that the ratio of coal and gas over a long period of time will fall within a particular range. The Companies evaluated the historical ratio of market coal and gas prices over a 10-year period to derive these ratios. This historical period does not include the current year.

e. As explained in Exhibit SAW-1, Section 6.6.2 Natural Gas Price Forecast Methodology, the gas price forecasts are based on market prices in the near term and EIA's long-term forecasts. Coal prices are not based on 3rd party or government forecasts, as discussed in Exhibit SAW-1, Section 6.6.3 ILB Coal Price Forecast Methodology.

f. See Exhibit SAW-1, Section 6.6.2 Natural Gas Price Forecast Methodology and the response to part (c).

g. The Companies do not believe this scenario is reasonable. Over a long period with sustained high gas prices, the Companies would expect coal prices to also increase because 90% of domestic coal production is focused on the power market and coal and NGCC energy are economic substitutes.

h. See the workpapers referenced in the response to KCA 1.8(b) on tab "Monthly Price Summary."

i. See attachment provided in a separate file. Information requested is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection. Because some of KCA's and KIUC's members and others provide confidential coal bids to the Companies, and because some of KCA's and KIUC's members are coal suppliers to the Companies, the Companies cannot grant KCA or KIUC access to this information without potentially significant commercial harm to the Companies' customers. The Companies will provide access to this confidential information to Commission Staff and all other parties with whom the Companies have a confidentiality agreement in this case.

j. Not applicable. See the response to part (e).

k. For $/Ton FOB Mine and $/Ton Transportation Costs, see the workpaper previously provided in Exhibit SAW-2 at 2025PlanInputs\CONFIDENTIAL_CommodityPriceForecasts\20240712 2025 BP Coal Price Forecast.xlsx. For, each fuel price scenario, see the tabs "LGHR", "LGMR", "MGMR", "HGMR", and "HGLR", as described in part (a).

   For Btu/lb, see the workpapers referenced in the response to KCA 1.8(a), on the tab "DataFromFuels_5YR." The Companies assumed the values for 2027 would continue through the remainder of the study period.

l. See the response to part (h).

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.8

Responding Witness: Charles R. Schram

Q-2.8. In Commission Staff question 1-14, Staff asked the Companies about their strategy for ensuring adequate natural gas supply. The Companies response did not mention concerns about supply or growth in demand from other sectors, industry procurement practices, volatile prices, and operating without on-site inventory. Gas transactions are typically priced at market and to the extent that they are hedged require significant credit support. The Companies acknowledge this in the 2024 PPL Annual Report the "natural gas supply arrangements include pricing provisions that are market-responsive". Please expand upon the response on to include how the Companies will manage the price risk of volatile gas pricing and the credit risk associated with a hedging program. Please also provide the costs included in the CPCN related to a hedging program and credit concerns and any corporate restrictions related to hedging[2]

A-2.8. The Companies note that the reference provided by KCA is related to a 1998 Wall Street Journal article about LG&E Energy Corp. shutting down a merchant (non-utility) electricity trading business.

The cited quote from the 2024 PPL Annual Report was contained in the report's *Natural Gas Distribution Supply* section and is not applicable to any current forward gas purchases for the Companies' gas generation units. Prices for existing forward physical gas purchases for generation are fixed at the time of purchase agreement execution and not indexed to subsequent market movements. Therefore, the statement that the pricing provisions are "market-responsive" is not accurate for any time after the execution of the purchase agreement.

The Companies' guidelines currently call for the purchase of 40 to 60 percent of the minimum natural gas usage for the Cane Run 7 NGCC for Year 1, 20 to 40 percent for Year 2, and zero to 20 percent for Year 3 to reduce the effect of natural gas price volatility on customers' bills.[3] Furthermore, the Companies purchase

[2] https://www.wsj.com/articles/SB901675167386510000
[3] Year 1 is currently March through December of 2026, Year 2 is currently January through December of 2027, and Year 3 is currently January through December of 2028.

up to 50 percent of the forecast Cane Run 7 NGCC usage for the current year.[4] The Companies will revisit these guidelines prior to the Mill Creek 5 NGCC's commercial operation. The Companies purchase gas on the spot market for the Companies' peaking units due to the significant impact of weather on load and the varied timing of the need to operate these units. The Companies do not currently use financial hedging for natural gas purchases.

The Companies have successfully managed credit risks related to forward gas purchases since these purchases began with the commercial operation of Cane Run 7 in 2015. Appropriate credit requirements for the counterparties providing forward physical gas are established by the Companies' Credit Department considering the volume and term of the fixed price purchases. These credit requirements, along with a goal of diversifying the supplier base, are considered during the selection of offers for forward gas purchases.

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[4] The current year also includes January through February of the subsequent year to fully capture the winter months.

KENTUCKY UTILITIES COMPANY
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LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.9

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

Q-2.9. Please explain the justification for the Cane Run BESS provided in the testimony of Company Witness Bellar justifying the Brown BESS when it was proposed was to learn whether the BESS technology was a good and cost-effective option for peak power. Given the Brown BESS is not expected to go into commercial operation until at least July 2026, what is the basis to support another BESS at Cane Run is timely.

A-2.9. The increase in economic development load is driving the need for the new resources proposed in this proceeding. See Mr. Wilson's testimony, pages 22-29, and Exhibit SAW-1.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.10

Responding Witness: Christopher M. Garrett / David L. Tummonds

Q-2.10. Please provide the net government support realized or expected to be realized for the Brown BESS.

A-2.10. The Companies assume "government support" means tax credits. The CPCN analysis assumed an Investment Tax Credit ("ITC") of 50%, about $135 million. An ITC of 40% now appears more likely (an ITC of 10% was for domestic content, which now appears unlikely to be obtainable).

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.11

Responding Witness: Christopher M. Garrett / David L. Tummonds

Q-2.11. Please provide the Companies' estimated government support for the Cane Run BESS.

A-2.11. The Companies assume "government support" means tax credits. The CPCN analysis assumed an Investment Tax Credit ("ITC") of 50%, about $387 million. An ITC of 40% now appears more likely (an ITC of 10% was for domestic content, which now appears unlikely to be obtainable).

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information
Dated May 2, 2025

Case No. 2025-00045

Question No. 2.12

Responding Witness: David L. Tummonds

Q-2.12. Please provide all assumptions supporting the represented annual cost to operate the Cane Run BESS.

A-2.12. See the response to PSC 2-39.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Kentucky Coal Association's Supplemental Request for Information Dated May 2, 2025

Case No. 2025-00045

Question No. 2.13

Responding Witness: Lana Isaacson

Q-2.13. Please provide a status report on the load reduction program through DSM-EF that was approved in the prior CPCN. Specifically, how many MW's have been reduced thus far and what is the expectation that the represented load reduction will be realized?

A-2.13. The Companies have approximately 148 MW of connected or enrolled demand response as of April 30, 2025. Demand savings (from energy efficiency programs only) of 9.3 MW have been achieved since January 1, 2024. The Companies expect to achieve the 7-year program period targets.

KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 2.14

Responding Witness: Stuart A. Wilson

Q-2.14. Please provide the assumed production tax credits in the capacity expansion modeling.

A-2.14. The CPCN analysis reflected a Production Tax Credit ("PTC") of $27.50/MWh in 2024 dollars and projects that met certain criteria qualified for a 10% energy community bonus, bringing the total credit to $30.25/MWh. The PTC is assumed to be available for the first 10 years of operation of eligible solar and wind projects.