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

REBUTTAL TESTIMONY OF
CHARLES R. SCHRAM
VICE PRESIDENT, ENERGY SUPPLY AND ANALYSIS
ON BEHALF OF
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: July 18, 2025

TABLE OF CONTENTS

INTRODUCTION

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

A. My name is Charles R. Schram. I am the Vice President of Energy Supply and Analysis for Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies") and an employee of LG&E and KU Services Company, which provides services to KU and LG&E. My business address is 2701 Eastpoint Parkway, Louisville, Kentucky 40223.

Q. What is the purpose of your rebuttal testimony?

A. First, I rebut Southern Renewable Energy Association witness Benjamin W. Smith's recommendation that the Commission should "[r]equire the Companies to execute firm gas supply contracts to meet their entire gas fleet needs" because obtaining gas supply is not and has not been a concern for the Companies. Second, I demonstrate why Mr. Smith's assertions that the Companies are proposing to rely too heavily on natural gas and are overlooking the importance of fuel diversity are incorrect. Third, I correct Kentucky Coal Association ("KCA") witness Emily Medine's misstatement of my testimony in the Companies' 2024 Integrated Resource Plan ("IRP") case hearing concerning coal contract price indexing. Fourth and finally, I explain why, contrary to the assertions of Joint Intervenors witness John W. Chiles, the Companies' request for proposals ("RFP") condition prohibiting respondents from assuming access to the Companies' generating sites is both reasonable and consistent with relevant Commission precedent.

OBTAINING FIRM GAS TRANSPORTATION, NOT GAS SUPPLY, IS A VITAL CONCERN REGARDING THE COMPANIES' PROPOSED GAS-FIRED RESOURCES, AND IT IS AN IMPORTANT REASON THE COMMISSION SHOULD APPROVE CPCNS FOR BROWN 12 AND MILL CREEK 6

Q. How do you respond to Southern Renewable Energy Association witness Benjamin W. Smith's recommendation that the Commission should "[r]equire the Companies to execute firm gas supply contracts to meet their entire gas fleet needs"?[1]

A. Obtaining gas *supply* is not and has not been a concern for the Companies, including during Winter Storm Elliott.[2] (Interestingly, Mr. Smith seems to understand that the challenge the Companies faced concerning their gas-fired units during Winter Storm Elliott was a lack of adequate *pressure* on the Texas Gas Transmission pipeline,[3] but his recommendation is that the Commission should require the Companies to obtain firm gas supply contracts "to meet their entire gas fleet needs."[4]) As I testified previously in this case, there is no reason to expect gas supply to be a problem for the Companies even after adding their two proposed NGCC units (Brown 12 and Mill Creek 6) and their already-approved Mill Creek 5: "My team has communicated with all of the Companies' current and potential pipeline suppliers about the Companies' planned generation capacity additions and expanded gas supply requirements, and the consistent response the Companies have received is that there is ample gas supply available for the Companies' units. That confidence is reasonable considering the U.S.'s enormous domestic proved gas reserves, production capability, and technically

[1] Smith at 20.
[2] *See* Smith at 17.
[3] *Id.*
[4] *Id.* at 20.

recoverable resources."[5] As I further testified, the Companies currently purchase up to 50 percent of Cane Run 7's expected gas burn on a forward basis for the current year, and for the following years one, two, and three, the Companies purchase 40-60 percent, 20-40 percent, and 0-20 percent, respectively, of the unit's minimum expected burn on a forward basis, but I anticipate the Companies will seek to increase their forward gas purchases as their NGCC fleet grows.[6] This should help reduce price volatility for customers and ensure reliable service at the lowest reasonable cost.

Notably, Mr. Smith provides no support for his recommendation to execute "firm gas supply contracts" for the Companies' "entire gas fleet."[7] I do not support this recommendation. First, as I explained above, such an approach is unnecessary to ensure reliable gas supply to the Companies' gas fleet. Second, the Companies do not enter into forward contracts for gas supply for their simple-cycle combustion turbines because, due to being peaking units, their gas use is typically highly variable based on weather; entering into forward contracts for their entire anticipated usage in addition entering into forward contracts for 100% of the NGCCs' projected usage could result in significant excess purchases and suboptimal fuel prices for customers. Therefore, I recommend the Commission reject Mr. Smith's recommendation.

Q. Is there a gas-related issue Mr. Smith's testimony raises that is important?

A. Yes. Although Mr. Smith does not provide a recommendation concerning obtaining firm gas transportation service, he does acknowledge it is a concern.[8] I agree it is a concern, and it is one reason why obtaining a CPCN for Mill Creek 6 in this proceeding

---

[5] Schram Direct at 19-20.
[6] *Id.* at 20-21.
[7] Smith at 20.
[8] Smith at 17.

is vitally important. Commissioning Mill Creek 6 in 2031 will enable the Companies to bid for gas transportation through Texas Gas Transmission's ("TGT") proposed Borealis project, which will be TGT's last opportunity for significant capacity additions on its existing rights-of-way within a five- to eight-year horizon.[9] The narrow window of time to obtain firm gas transportation service for Mill Creek 6 via the Borealis project will likely be the fourth quarter of this year.[10] That is why it is crucial for the Companies to have clear CPCN authority for Mill Creek 6 no later than the end of this October.

The same concern exists for Brown 12. There is currently firm gas transportation available on the Tennessee Gas pipeline that would serve the unit, but the Companies cannot guarantee firm transportation will remain available indefinitely. That is a key reason why receiving a CPCN for Brown 12 in this proceeding is important.

THE COMPANIES' PROPOSED GAS-FIRED RESOURCES WILL HELP BALANCE THEIR RESOURCE PORTFOLIO

Q. Mr. Smith asserts the Companies are proposing to rely too heavily on natural gas and are overlooking the importance of fuel diversity.[11] Will the Companies' resource portfolio be adequately diverse if the Commission approves the proposed resources?

[9] *See* Companies' Supplemental Response to KCA 1-4, Supplemental Attachment 1 at 8 (May 30, 2025) ("A key advantage to commissioning Mill Creek 6 in 2031 is that it will enable the Companies to bid for gas transportation through Texas Gas Transmission's ("TGT") proposed Borealis project, which will be TGT's last opportunity for significant capacity additions on its existing rights-of-way within a five- to eight-year horizon. … TGT expects Borealis to be fully subscribed, with subscriber commitments to the project likely taking place during the fourth quarter of 2025.").
[10] *Id.*
[11] Smith at 16-18.

A. Yes. I agree with Mr. Smith that fuel diversity matters, but that is a benefit, not a flaw, of the Companies' proposed resources. Absent Brown 12 and Mill Creek 6, the Companies' fossil fuel baseload resource mix in 2032 will consist of 76% coal capacity (4,270 MW summer net) and 24% NGCC capacity (1,342 MW summer net).[12] Adding the two proposed 645 MW NGCCs will change that weighting to 62% coal capacity and 38% NGCC capacity. This would result in a *more* balanced, not a *less* balanced, baseload portfolio. Even accounting for 2,007 MW (summer net) of gas-fired peaking resources, the Companies' proposed 2032 fossil fuel portfolio would consist of 48% coal capacity and 52% gas capacity, which is a reasonable and balanced resource mix. Therefore, there is no merit to Mr. Smith's assertions about the Companies' proposed resource portfolio being weighted too heavily toward gas.

Q. Does Mr. Smith's point concerning fuel diversity support granting a CPCN for the Cane Run BESS?

A. Yes, it does. Absent Cane Run BESS, the Companies' 2032 peaking fleet will consist of 2,007 MW (summer net) of SCCT capacity and 125 MW of four-hour BESS capacity (Brown BESS). The Companies' SCCTs have been and should continue to be highly reliable and economical peaking resources, but adding BESS capacity—if it can be done economically—would add portfolio and fuel diversity to the Companies' peaking resource mix. Because BESS can be powered by any electric-generating resource and is therefore fuel-agnostic, it can help make more complete use of existing coal, gas, and renewable resources, effectively amplifying the benefits of fuel diversity. Although the Companies acknowledge the economics of BESS are subject to trade tariff issues,

[12] Direct Testimony of Stuart A. Wilson, Exh. Saw-1, Appendix A, Table 16. The Companies will also have 2,007 MW (summer net) of SCCT peaking capacity.

granting a CPCN for Cane Run BESS in this proceeding will position the Companies to be able to timely take advantage of favorable economics if the right conditions eventuate. Therefore, I recommend the Commission grant the requested CPCN for Cane Run BESS.

<u>KENTUCKY COAL ASSOCIATION WITNESS EMILY MEDINE MISCONSTRUES THE COMPANIES' 2024 IRP HEARING TESTIMONY CONCERNING COAL CONTRACTS' LINKS TO GAS PRICES</u>

Q. Kentucky Coal Association ("KCA") witness Emily Medine states, "In the current IRP, Company Witness Schram argued that coal and natural gas prices are correlated because the escalators in the coal contracts are tied to the price of natural gas."[13] Is that what you said?

A. No. In response to a series of questions from KCA's counsel at the hearing in the Companies' 2024 IRP proceeding, in which counsel cited two of the Companies' multi-year fixed-price coal contracts,[14] I observed that the Companies have other coal contracts with indexed pricing, part of which is a link to the producer price index for the middle Atlantic region for industrial power, which closely correlates to the price of natural gas.[15] In response to a follow-up question, I stated there was one contract with a large number of potential price index items, some of which would tend to correlate with gas prices, but I explicitly stated, "I wasn't claiming there was a direct linkage to a natural gas price, but there is an influence in terms of the potential impact of that

---

[13] Medine at 14, lines 4-6.

[14] Case No. 2024-00326, 5-14-2025 V.R. 9:39:19-9:40:31.

[15] Case No. 2024-00326, 5-14-2025 V.R. 9:40:05-9:40:31. Unlike certain coal contracts, the Companies do not have any indexed-price forward gas contracts. *See* Companies' Response to KCA 2-8 ("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.").

index to the final price for coal."[16] Thus, in response to a series of questions suggesting there is no relationship between coal and gas prices because the Companies have a number of large, long-term, fixed-price coal contracts, I observed that the premise of that *non sequitur* inference could not fully hold precisely because the Companies do have a number of indexed-price coal contracts, at least one of which has links to natural gas prices. But at no time did I "argue[] that coal and natural gas prices are correlated because the escalators in the coal contracts are tied to the price of natural gas"; indeed, it is unclear what the referents of "*the* escalators in *the* coal contracts" are supposed to be.

Q. Does Ms. Medine herself state that in at least one instance coal prices and gas prices were related?

A. Yes; indeed, she asserts *causation* in the instance she cites, not merely a relationship:

> Prompt year coal prices from these regions going into COVID had been relatively flat. There was an initial bump in pricing during early COVID which was not sustained and then a significant increase in pricing from mid-2022 through the first half of 2023. *The reasons for the significant bump were increased demand due to COVID recovery, a delayed response from the coal industry in restarting idled production,* ***and higher gas prices*** due to strong global pricing resulting in part from the war in Ukraine.[17]

This limited concession reflects a broader underlying economic reality: Natural gas and thermal coal are largely economic substitutes. Thus, it is unsurprising that if the demand for one increases, its price will tend to rise and cause market participants who can switch between coal and gas—like many utilities—to seek to consume more of the other fuel, tending to put upward pressure on its price, tending to maintain a linkage

[16] Case No. 2024-00326, 5-14-2025 V.R. 9:41:35-9:42:43.
[17] Medine at 20, lines 1-6 (emphases added).

between the prices of the two goods over time. It is certainly true that coal prices do not fluctuate as quickly as natural gas prices, particularly for a given utility with fixed-price long-term contracts and at least partially due to the nature of the two commodities (e.g., one cannot buy same-day or day-ahead delivered coal). But that does not affect the validity of the long-term correlation of coal and natural gas prices that Stuart A. Wilson and his team have shown in their analyses in this case, the 2024 IRP, and the Companies' 2022 CPCN proceeding in which the Commission accepted the Companies' coal-to-gas approach.[18] Therefore, I continue to believe the Companies' coal-to-gas methodology is reasonable for the purposes of this proceeding, which necessarily involve making long-term resource investment decisions, not day-to-day, month-to-month, or even year-to-year fuel purchasing decisions.

THE COMPANIES' RFP CONDITION PROHIBITING RESPONDENTS FROM ASSUMING ACCESS TO THE COMPANIES' GENERATING SITES IS REASONABLE AND CONSISTENT WITH COMMISSION PRECEDENT

Q. Joint Intervenors witness John W. Chiles asserts the Companies placed RFP respondents at a disadvantage by instructing respondents that they "should not assume access to, or utilization of, existing sites owned by the Companies for siting proposed project(s)."[19] How do you respond?

A. Mr. Chiles is mistaken for several reasons. First, RFP respondents typically already have projects in various stages of development that they submit in response to the RFP; they do not attempt to develop a proposal from scratch. This is true for all supply-side

[18] *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, Order at 93-94 (Ky. PSC Nov. 6, 2023).
[19] Chiles at 7.

resource types. That means the respondents will already have selected sites and done preliminary project development, making the Companies' instruction of no effect.

Second, although it is true that the Companies instructed respondents in this regard, the Companies routinely receive and evaluate nonconforming responses. If a respondent submitted a viable project for an existing site owned by the Companies, nothing would preclude the Companies from considering it. Similarly, if a respondent submitted a viable project the Companies believed would be better suited to one of their own existing sites, nothing would prevent the Companies from working with the respondent on a modified proposal.

Third, the Companies' instruction is not arbitrary or intended to give any party a competitive advantage or disadvantage; rather, it reflects the Commission's longstanding position that generating station land is finite and not to be sold, leased, or otherwise used by third parties without Commission approval.[20] Moreover, it makes little sense for a third-party respondent to invest time and money to develop a proposal for site with such a limitation, which could only be submitted to and possibly used by the Companies; most developers are interested in having more than one possible buyer for a project under development.

[20] *Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Acquisition of Two Combustion Turbines*, Case No. 2002-00029, Order at 6 (Ky. PSC June 11, 2002) ("The Commission recognizes that the land available for new generation at the utilities existing generating sites is finite. We also realize this land is very valuable to the utilities and their customers due to the existing infrastructure that includes both natural gas pipelines and electric transmission lines. Because of the finite nature and value of these sites, we find that LG&E and KU should seek Commission approval prior to entering into the sale or lease of any land located on an existing generation site"). *See also, e.g., Electronic Tariff Filing of Kentucky Utilities Company for Approval of a License Agreement with North American Stainless Concerning Ghent Generating Station*, Case No. 2025-00016, Order (Ky. PSC Mar. 25, 2025); *Application of Louisville Gas and Electric Company for Approval of License Agreement with Charah, Inc. Concerning Mill Creek Generating Station*, Case No. 2012-00385, Order (Ky. PSC Nov. 2, 2012).

Therefore, Mr. Chiles is entirely incorrect in his criticism of the Companies' RFP instruction.

Q. Does this conclude your testimony?

A. Yes, it does.

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 an employee of LG&E and KU Services Company, 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 helief.

Charles R. Schram

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 8th day of July 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