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
DAVID L. (DAVE) TUMMONDS
VICE PRESIDENT, POWER GENERATION
ON BEHALF OF
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: July 18, 2025

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1 <u>INTRODUCTION</u> 2 O. Please state your name, position, and business address.

- A. My name is David L. (Dave) Tummonds. I am Vice President, Power Generation 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
- 7 Eastpoint Parkway, Louisville, Kentucky 40223.

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8 Q. What is the purpose of your rebuttal testimony?

9 A. The purpose of my rebuttal testimony is to rebut intervenor testimony suggesting that: 10 (1) construction of the Companies' proposed natural gas combined cycle ("NGCC") 11 units should be delayed; (2) the development of nuclear small module reactors 12 ("SMRs") in Kentucky will make such a delay possible; (3) a request for proposals 13 ("RFP") should be issued for the Companies' proposed Cane Run Battery Energy 14 Storage System ("BESS"); and (4) that the Companies have somehow failed to account 15 for an accurate assessment of transmission costs necessary for their self-build 16 resources.

NOTHING IN THE INTERVENOR TESTIMONY ESTABLISHES GROUNDS FOR DENYING OR DELAYING THE PROPOSED NGCCS

- Q. Is there a cost risk to customers of not moving forward with Brown 12 and Mill Creek 6 on the Companies' proposed timeline?
- A. Yes. For various reasons, some intervenor witnesses take the position that construction of the proposed NGCCs should be delayed. For example, Kentucky Coal Association witness Emily Medine suggests that NGCC construction should be delayed to allow for the possible development of SMRs in light of President Trump's recent executive

orders intending to accelerate the development of SMRs.¹ Other intervenors claim that the NGCC should not be constructed unless and until the Companies' forecasted load (especially data center load) materializes.² But the Companies and their customers cannot afford to wait. First, the proposed NGCCs are necessary by 2030 and 2031 (the commercial operation dates for Brown 12 and Mill Creek 6, respectively) to serve projected load. As Lonnie Bellar testifies, data centers can be constructed much faster than NGCCs can be built. But perhaps more importantly, delaying the construction of NGCCs for any reason will end up costing customers more than adhering to the schedule the Companies have proposed.

Q. Do you have evidence that delaying construction of the proposed NGCCs will cost customers more money?

I do. As I testified in my direct testimony, the Companies estimate the cost of Brown 12 and Mill Creek 6 to be \$1.383 billion and \$1.415 billion, respectively. Just three years ago, in Case No. 2022-00402, the Companies proposed the construction of Brown 12 and Mill Creek 5. In its decision in that case, the Commission approved the construction of Mill Creek 5, but it deferred the construction of Brown 12. The Commission stated, "[T]he Commission reiterates that the denial of the CPCN for Brown 12 is wholly based on the Commission's finding that the construction of Brown 12 should be deferred with the construction beginning on a date that provides for an in service date in 2030." Thus, the Companies could not move forward at that time with plans for Brown 12.

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¹ Medine Testimony, pp. 8-11.

² See, e.g., Wellborn at 6-11; Hotaling at 5-20; Fisher at 2-15; Stanton at 13-40; O'Leary at 11-18.

³ Case No. 2022-00402, November 6, 2023, Order, p. 137.

Unfortunately, costs for NGCCs have risen dramatically since the Commission's decision in Case No. 2022-00402 primarily due to the tightening of the market for acquisition and construction of gas turbines. The last estimated cost for Brown 12 in Case No. 2022-00402 was \$989 million for a 2028 in-service date,⁴ and the current estimated cost is \$1.383 billion for a 2030 in-service date, which is nearly a 40% increase for a two-year delay. In contrast, the last estimated cost for Mill Creek 5 in Case No. 2022-00402 was \$902 million for a 2027 in-service date,⁵ and the current estimated cost of completing it is \$913.4 million, which is a 1% cost increase while remaining on track for a 2027 in-service date. Thus, the delay between the 2022 CPCN case and now has been costly. This highlights the need to move forward with Brown 12 and Mill Creek 6 now.

Do you agree with Joint Intervenors witness Sean O'Leary that the Companies have somehow underestimated the construction costs of the NGCCs by 20-30% due to increased construction costs?

No. Mr. O'Leary does not provide his own construction estimates or offer any study to support his contention that the Companies may be underestimating construction costs of the proposed NGCCs by 20-30%. Instead, he mostly relies on quotations from the CEO of NextEra Energy to dispute the Companies' construction cost estimates on a cost per kilowatt basis.⁶ But reliance on those broad price-per-kilowatt ranges is inferior to the Companies' carefully developed construction cost estimates based on ongoing dialog with gas turbine manufacturers and engineering, procurement, and

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⁴ Case No. 2022-00402, Companies' Response to JI PHDR 4.1(a) fn. 1.

⁵ *Id*.

⁶ O'Leary Testimony, pp. 4, 6-8.

construction contractors. Indeed, the Companies have real-time experience with the current construction material and labor requirements for Mill Creek 5, and the requirement estimates for Brown 12 and Mill Creek 6 are consistent with their Mill Creek 5 experience. Regarding the evolving costs for these requirements, the Companies' recent \$/kW discussions with GE and potential engineering, procurement, and construction ("EPC") contractors continue to support the estimates provided in this case, not the testimony of Mr. O'Leary. No one can predict with perfect certainty what actual construction costs will be two years from now, but our current estimates for Brown 12 and Mill Creek 6 are reasonable and based on the best information currently available, and they include reasonable contingencies to account for construction cost changes. As stated above, I am also confident that if the proposed NGCCs are delayed, costs will rise as a result of that delay.

- Q. Do you agree with Ms. Medine that it is possible that SMRs will be constructed and commercially operational in time to obviate the need to construct the NGCCs?⁷
- A. Absolutely not. SMR, though interesting as a potential supply-side technology *after* it is a proven, reliable resource option, is currently uncertain and unproven, and it is realistically more than a decade away from broad commercial viability. Thus, it is simply not possible that a SMR, even if the Companies had begun work on one last year, could serve the Companies' anticipated need by 2030-2032. Indeed, the Commission just opened an investigation case to "discuss and investigate concerns and

⁷ Medine Testimony, pp. 8-11.

potential areas of opportunity involving nuclear energy."⁸ Thus, the possibility of nuclear power in Kentucky is in its infancy.

The Companies included SMRs as a possible supply-side resource in their 2024 Integrated Resource Plan. As explained there, they assumed a possible in-service year of 2039 for SMRs given, among other things, the novelty and infancy of SMR technology, the lack of any SMR in proven reliable commercial operation anywhere in the world, and that mere *permitting* for a site for an SMR has just begun. Moreover, there are significant challenges in estimating the cost of a technology that does not yet reliably operate in commercial operation anywhere in the world. The initial capital costs of nuclear facilities are so significant that once an entity chooses to make that large investment, it would seek to maximize its use, necessarily decreasing use of existing units, including coal-fired units. Again, the Companies believe SMR is a potentially promising technology, but it is not a plausible solution for serving customers' near-term needs.

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⁸ Electronic Investigation of Nuclear Energy, Generation, Storage, and Related Matters, Case No. 2025-00186, (Order June 16, 2025).

⁹ Electronic Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company, Case No. 2024-00326, Volume III, pp. 15-17.

[&]quot;SHARE%20&%20SAVE,them%20from%20paper%20to%20reality. (accessed July 9, 2025); Oliver Gordon, "Small modular reactors: What is taking so long?: Next-generation nuclear has long been just around the corner, but debate still rages over the silver-bullet credentials of small modular reactors," Energy Monitor (Aug. 2022), available at https://www.energymonitor.ai/sectors/power/small-modular-reactors-smrs-what-is-taking-solong/?cf-view (accessed July 9, 2025).

AN RFP FOR THE BESS FACILITY IS NOT NECESSARY

Do you agree with Southern Renewable Energy Association witness Benjamin Smith's contention that the Companies should issue an RFP for a BESS facility instead of moving forward with their self-build proposal for Cane Run BESS?¹¹

No. Mr. Smith argues generally that BESS systems are valuable and can play an important role in serving the Companies' customers, and I certainly agree with that. But he also argues that the Companies should halt their consideration of a BESS facility and issue an RFP to ensure favorable pricing via competitive procurement. He says competitive procurement "allows a utility who may not have the requisite experience to self-build a new type of asset (like BESS) to review the bids from experienced developers and develop partnerships and a base of knowledge of the asset it has not previously built or has not built that many times."¹²

The Companies routinely use RFPs and competitive procurement; they have a long history of using RFPs to achieve favorable pricing. But specifically for the Cane Run BESS facility, an RFP was not and is not necessary to achieve favorable pricing. Indeed, investment tax credits ("ITCs") for such a facility are at risk given passage of the One Big Beautiful Bill Act. As I understand it, ITCs will become more difficult to obtain after the end of 2025 for BESS systems. The existence of ITCs for a BESS is critical to whether the Companies will pursue one. So timing is critical, and the time it would take to conduct the RFP that Mr. Smith suggests could jeopardize the financial viability of the project.

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¹¹ Smith Testimony, pp. 6-11.

¹² Smith testimony, p. 6.

But aside from ITCs and timing concerns, an RFP is not necessary to achieve favorable pricing. The Companies are in the marketplace *right now* for BESS systems. They are in the process of procuring an EPC contractor for the Brown BESS facility the Commission approved in Case No. 2022-00402. So we are very aware of the pricing for a BESS facility. Additionally, though the Companies themselves do not plan to issue an RFP, competitive pricing will still occur. In fact, this has already happened as the Companies' Owner's Engineer, who has already been retained, did engage in competitive procurement for the batteries themselves for Brown BESS, which informs us of fair pricing for Cane Run BESS batteries. Moreover, going forward, once an EPC contractor is selected, it will be incumbent on that entity to achieve favorable pricing, and it is expected to do so via a competitive bidding process for labor and necessary equipment and materials beyond the batteries themselves. For all of these reasons, I am confident that the Companies will procure favorable pricing for the Cane Run BESS if the Commissions grants a CPCN.

THE COMPANIES HAVE PROPERLY CONSIDERED TRANSMISSION ISSUES

- Q. Do you agree with Joint Intervenors witness John Chiles that the Companies have underestimated the cost of electric transmission projects that will be required as part of the Brown 12 and Mill Creek 6 NGCC projects?¹³
- A. No. Notably, Mr. Chiles provides no project-specific basis for his assertion that the transmission-related costs should be higher for Brown 12 or Mill Creek 6; rather, he makes a blanket assertion that 5% would be more in line with his review of others' integrated resource plans and CPCN applications, though he does not say which ones.¹⁴

¹³ Chiles Testimony, pp. 3-7.

¹⁴ Chiles Testimony, p. 6.

In other words, Mr. Chiles did no work regarding the Companies' actual proposals to support his assertions.

As I stated in my direct testimony, electric transmission costs for Brown 12 and Mill Creek 6 are expected to be approximately 2% of the project costs, i.e., about \$30 million for each NGCC. That is unsurprising because these projects will be at existing generating sites with significant transmission infrastructure already in place; in response to JI 1-25 in this case, the Companies provided the preliminary analysis of necessary transmission work, and the results show no significant upgrades will be required.

Mr. Chiles indicates that his 5% includes transformer costs as part of his transmission calculation. These costs were not a part of the 2% figure in my direct testimony but are included in the total project cost estimates we have included in this case. Treating those costs as transmission costs would raise the transmission-related cost already included in the Companies' cost estimates to about 4%. The difference between this noted 4% and Mr. Chiles's 5% is further reduced when accounting for likely cost efficiencies associated with the existing transmission infrastructure at the recommended sites. It is not clear if Mr. Chiles's 5% includes the network upgrade costs distributed over the transmission system beyond the Companies' customers. As Mr. Bellar notes in his rebuttal testimony, the Companies' economic analysis implicitly accounts for network upgrade costs, but they are not part of the project costs by definition, and, therefore, not included in my original testimony.

As we have stated, the Companies must rely on their Independent Transmission Organization ("ITO") for a final determination of necessary upgrades. An interconnection request for Brown 12 is pending and one will be submitted for Mill Creek 6 in November 2025. We anticipate that, even if the ITO determines transmission network upgrades are necessary beyond our current expectation, the cost of those upgrades will not exceed the overall contingency amounts included in estimated pricing for Brown 12 and Mill Creek 6.

CONCLUSION

- 9 Q. What is your recommendation for the Commission?
- 10 A. I continue to recommend that the Commission approve the proposed NGCCs, Cane
 11 Run BESS, and SCR for Ghent 2 as cost effective methods of ensuring adequate
 12 generating capacity while complying with current and proposed environmental laws.
- 13 Q. Does this conclude your testimony?
- 14 A. Yes, it does.

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¹⁵ See the Companies' response to AG-KIUC 2-38.

VERIFICATION

COMMONWEALTH OF KENTUCKY	
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COUNTY OF JEFFERSON	,

The undersigned, **David L. Tummonds**, being duly sworn, deposes and says that he is Vice President - Generation 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 testimony 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 11th day of 2025.

Notary Public

Notary Public, ID No. KYNP4577

My Commission Expires:

April 1, 2028



