

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
LONNIE E. BELLAR
EXECUTIVE VICE PRESIDENT, ENGINEERING, CONSTRUCTION AND
GENERATION FOR PPL SERVICES CORORATION
ON BEHALF OF
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: July 18, 2025

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1 **INTRODUCTION**

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

3 A. My name is Lonnie E. Bellar. I am the Executive Vice President, Engineering,
4 Construction and Generation for PPL Services Corporation, which provides services to
5 Kentucky Utilities Company (“KU”) and Louisville Gas and Electric Company
6 (“LG&E”) (collectively, the “Companies”). My business address is 2701 Eastpoint
7 Parkway, Louisville, Kentucky 40223.

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

9 A. The purpose of my rebuttal testimony is to address intervenor testimony that: (1)
10 suggests construction of the Companies’ proposed natural gas combined cycle
11 (“NGCC”) units should be denied or delayed until data centers make financial
12 commitments; (2) supports the construction of Brown 12, the Ghent 2 SCR, and
13 conditional approval of Mill Creek 6; (3) criticizes the Companies for not evaluating
14 the effects the proposed resources in this case will have on local and adjacent
15 transmission systems; (4) claims data centers can cause problems for transmission
16 systems; and (5) questions whether the proposals in this case are consistent with PPL’s
17 net-zero emission policy.

18 **NOTHING IN THE INTERVENOR TESTIMONY ESTABLISHES GROUNDS FOR**
19 **DENYING OR DELAYING THE PROJECTS IN THIS CASE**

20 **Q. How would you characterize the intervenor testimony that advocates denying the**
21 **Companies’ CPCN requests because the Companies have “put the cart before the**
22 **horse” by seeking CPCNs while data center load is overstated and speculative?¹**

¹ Wellborn at 30-31. *See also, e.g.*, Wellborn at 6-11; Hotaling at 5-20; Fisher at 2-15; Stanton at 13-40; O’Leary at 11-18.

1 A. I strongly disagree with these views and would characterize them as reflecting a
2 fundamental misunderstanding regarding how long it takes to construct a data center
3 compared to how long it takes to construct generation facilities to serve that data center.
4 The facts are simple. Data centers can be built and operational in as little as 18 months.²
5 Thus, it is possible that a single data center requiring hundreds of MW could be online
6 and in need of power in 2027. The NGCCs proposed in this case cannot be constructed
7 and operational until 2030 (Brown 12) and 2031 (Mill Creek 6). The Companies
8 remain confident that the projected economic load, including data center load, will
9 materialize as forecasted, and we must have the facilities to serve that load when it is
10 needed. If the Companies do not receive the CPCN authority requested in this
11 proceeding, it is a certainty that data centers will not locate here, which would frustrate
12 the General Assembly's explicit policy to attract data centers to Kentucky as a matter
13 of "paramount importance."³

14 Data center owners and data center developers are watching for the results
15 reached in this case. For these important new customers, speed to market is the first
16 priority,⁴ and that means having energy to serve them as quickly as possible. According

² See, e.g., Ryan Quint, Kyle Thomas, Jiecheng Zhao, Andrew Isaacs, and Casey Baker, "Practical Guidance and Considerations for Large Load Interconnections" at 11 (May 2025) ("While it takes one-and-a-half to two years to build large load facilities like data centers, new generation plants take three to five years."), available at <https://gridlab.org/portfolio-item/practical-guidance-and-considerations-for-large-load-interconnections/> (accessed June 30, 2025).

³ KRS 154.20-222(3).

⁴ See, e.g., Deloitte, "Can US infrastructure keep up with the AI economy?" (June 24, 2025) ("[T]he primary challenge for data center infrastructure build-out is power and grid capacity, which 72% of all respondents consider to be very or extremely challenging"), available at <https://www.deloitte.com/us/en/insights/industry/power-and-utilities/data-center-infrastructure-artificial-intelligence.html> (accessed June 29, 2025); Ryan Quint, Kyle Thomas, Jiecheng Zhao, Andrew Isaacs, and Casey Baker, "Practical Guidance and Considerations for Large Load Interconnections" at 3 (May 2025) ("These potential data center customers are relatively price insensitive, prioritizing fast and reliable *access to electricity as quickly as possible*." (emphasis in original), available at <https://gridlab.org/portfolio-item/practical-guidance-and-considerations-for-large-load-interconnections/> (accessed June 30, 2025).

1 to Data Center Coalition President Josh Levi, “Access to reliable electricity has become
2 the pacing challenge to building out America’s digital infrastructure.”⁵ Given these
3 timing issues, obtaining approval of the requested CPCNs—having these vital tools in
4 the toolbox—must come first. There is no sense doing anything else first. The
5 Companies have made it clear in this case that, if CPCNs are granted, they will not
6 move forward with approved projects unless the need for them remains clear. Instead,
7 we will move forward prudently and make decisions that are best for all customers.

8 **Q. Do you have confidence in the projected amount of data center load in the**
9 **Companies’ forecast?**

10 A. Yes. The Companies have reasonably modeled the amount of projected data center
11 load. According to the Companies’ most recent supplemental response to PSC 2-17(g),
12 the Companies’ economic development pipeline remains robust at 8,500 MW, of which
13 5,700 MW is data center potential. As Tim Jones explains in his rebuttal testimony,
14 the mathematical expected value of the data center load potential is 1,870 MW, well in
15 excess of the Companies’ 1,750 MW load forecast projection. Also, the 2,800 MW of
16 non-data-center load potential remains strong, with an expected value of more than 580
17 MW, which far exceeds the less than 40 MW of such load in the Companies’ 2025
18 CPCN Load Forecast. Thus, the Companies reasonably project that 1,750 MW will
19 come to fruition in the Companies’ service territory based on the Companies’
20 disciplined load forecasting process. We also believe that 1,750 MW is a reasonable
21 incremental amount that the Companies can reliably serve at a reasonable cost. We do

⁵ Derek Robertson, “5 questions for the Data Center Coalition’s Josh Levi,” Politico (May 16, 2025), available at <https://www.politico.com/newsletters/digital-future-daily/2025/05/16/5-questions-for-the-data-center-coalitions-josh-levi-00354319> (accessed June 30, 2025).

1 not have existing or proposed resources capable of serving anything materially larger
2 than the projected 1,750 MW. Thus, our measured proposals in this case are made to
3 serve that reasonably anticipated amount of load.

4 We recognize there is a degree of uncertainty about exactly how much data
5 center load and non-data-center load will come and exactly when it will come. We also
6 recognize that this kind of load growth is unprecedented for Companies, the
7 Commission, and the intervenors in this case. But as I said in my direct testimony,
8 attracting this kind of data center interest is precisely the result the General Assembly
9 intended. In enacting legislation to encourage data center development, the General
10 Assembly stated that “the inducement of the location of data center projects within the
11 Commonwealth is of *paramount importance* to the economic well-being of the
12 Commonwealth.”⁶ The General Assembly has also explicitly recognized:

- 13 • “The current economy and future economic development of the
14 Commonwealth requires reliable, resilient, dependable, and abundant supplies
15 of electrical power”;⁷
- 16 • “The demand for reliable, resilient, dispatchable electrical power is anticipated
17 to significantly increase in the coming decades as the Commonwealth becomes
18 home to additional manufacturing and other economic development projects
19 which increase demand for electrical power”;⁸ and

⁶ KRS 154.20-222(3) (emphasis added).

⁷ KRS 164.2807(d).

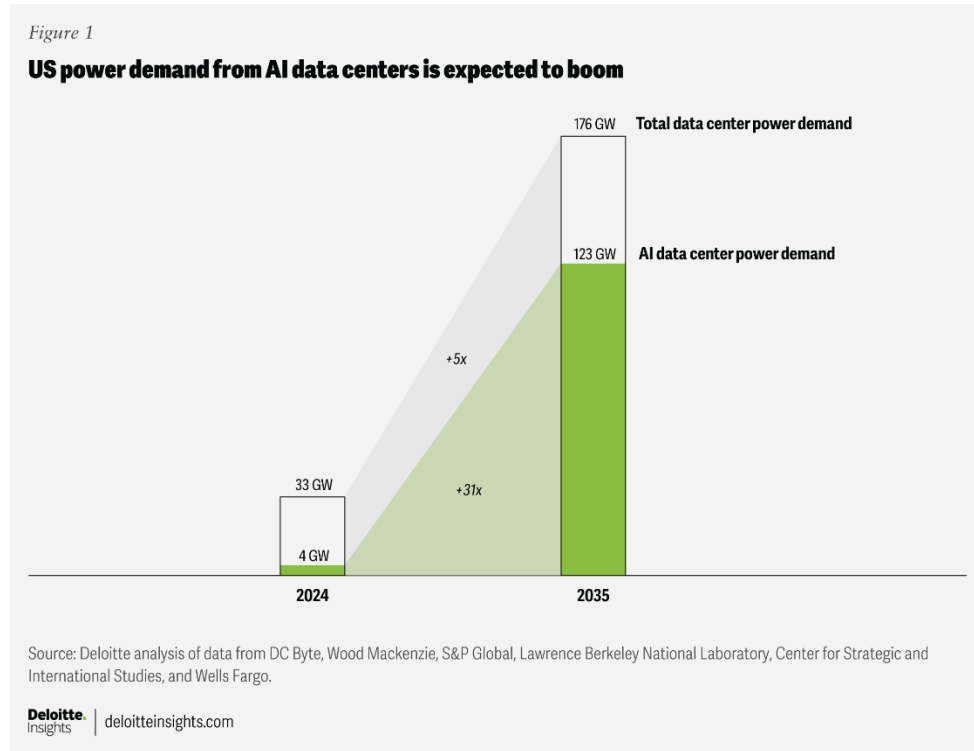
⁸ KRS 164.2807(e).

- 1 • “It is in the interest of the Commonwealth that it be able to generate sufficient
2 electricity within its borders to serve its own industrial, residential, and
3 commercial demand and to power its own economy.”⁹

4 Therefore, although the precise timing, composition, and amount of data center load
5 and non-data-center load is uncertain, denying the Companies’ requested CPCNs will
6 ensure the *worst* kinds of certainty: certainty of no economic development, certainty of
7 no ability for Companies to meet their obligation to serve all customers, and certainty
8 of frustrating the General Assembly’s stated intent. The agenda-driven intervenors
9 who ask the Commission to deny all proposals would have the Commission foreclose
10 any possibility of serving the very customers the General Assembly is trying to
11 attract—causing Kentucky to miss out on the significant benefits Mr. Bevington
12 describes in his rebuttal testimony.

⁹ KRS 164.2807(f).

1 The Companies’ confidence in their data center forecast has ample support in
2 the industry. Just weeks ago, Deloitte issued a comprehensive assessment of projected
3 data center load growth.¹⁰ That assessment included the following chart:



4

5 The projected load growth is enormous: 143 GW of incremental data center load
6 growth by 2035. Also, less than two weeks ago, the U.S. Department of Energy
7 released a report assuming 52 GW of incremental data center load growth by 2030.¹¹
8 Utilities and regulators must consider how this growth will be served. The Companies
9 have proposed the projects in this case to meet their obligation to serve a reasonable

¹⁰ Deloitte, “Can US infrastructure keep up with the AI economy?” (June 24, 2025), available at <https://www.deloitte.com/us/en/insights/industry/power-and-utilities/data-center-infrastructure-artificial-intelligence.html> (accessed June 29, 2025).

¹¹ U.S. Department of Energy, “Resource Adequacy Report: Evaluating the Reliability and Security of the United States Electric Grid” at 16 (July 7, 2025), available at [https://www.energy.gov/sites/default/files/2025-07/DOE Final EO Report %28FINAL JULY 7%29.pdf](https://www.energy.gov/sites/default/files/2025-07/DOE%20Final%20EO%20Report%20FINAL%20JULY%207%29.pdf) (accessed July 8, 2025); see also <https://www.energy.gov/topics/reliability> (“On July 7, 2025, the Department of Energy released its Report on Evaluating U.S. Grid Reliability and Security”).

1 amount of data center load (1,750 MW) we anticipate will locate in the Companies’
2 service territory. Again, this is the amount we believe we can reliably serve at a
3 reasonable cost in the near term.

4 **Q. Do Ms. Hotaling’s and Ms. Stanton’s concerns about the number of transmission**
5 **service requests (“TSRs”) affect your confidence in the Companies’ data center**
6 **load forecast?¹²**

7 A. Not at all. As Mr. Bevington states in his rebuttal testimony, the current volume of
8 TSRs does not reflect the actual level of market interest because the Companies have
9 advised prospective customers not to submit TSRs prematurely to avoid unnecessarily
10 clogging the transmission interconnection queue. Moreover, the Companies’
11 Independent Transmission Organization (“ITO”), which conducts the required TSR
12 studies, requires the Companies to provide generation solutions for submitted TSRs.
13 This necessarily limits the amount of TSRs the Companies may submit and keep active
14 at any given time; the Companies have not submitted TSRs exceeding the generation
15 capacity for which they currently have or have sought Commission approval.
16 Therefore, as Mr. Bevington concludes, the Commission should not interpret the TSR
17 queue as a comprehensive representation of the growing demand for data center
18 interconnection.

19 **Q. What will the Companies do if the Commission approves the requested CPCNs**
20 **and data center load does not come to fruition as expected?**

¹² Hotaling Testimony at 22-25; Stanton Testimony at 18-19.

1 A. We will make prudent decisions at logical times on whether to construct. If it would
2 be imprudent to commence construction, we will not do so.¹³ And we will not have to
3 make “all or nothing” decisions at a single point in time. The proposed NGCCs are
4 staggered in this case with Brown 12 projected for commercial operation in 2030 and
5 Mill Creek 6 in 2031. If it becomes prudent to prioritize the NGCCs based on the
6 circumstances, we will do so. Cane Run BESS provides additional flexibility, with
7 scalable capacity the Companies can adjust down if needed simply by purchasing fewer
8 battery modules and other associated components. We do not anticipate needing to do
9 any of this, but the ability to do so provides flexibility to make the most prudent
10 decisions possible. Finally, the Companies’ neighboring regional transmission
11 organizations, PJM and MISO, are facing significant capacity needs as soon as this year
12 or next year.¹⁴ Thus, although we remain confident in our forecast of data center load,
13 we are equally confident that we can proceed with flexible options and productively
14 use any capacity constructed that data center or other native load customers do not
15 require.

16 As Robert Conroy addresses in his rebuttal testimony, the Companies recognize
17 that cost recovery for the projects proposed in this case will be subject to a prudence
18 review in future base rate cases. We welcome that review. The Companies have a long

¹³ The Companies have a history of not pursuing construction if circumstances change making that construction imprudent. See the Companies’ response to PSC 2-14 regarding the 2006 approval for Ghent 2 SCR and the decision to withdraw a request to for approval of what would have been Green River 5.

¹⁴ NERC, “2024 Long-Term Reliability Assessment” at 6 (Dec. 2024), available at https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Long%20Term%20Reliability%20Assessment_2024.pdf (accessed June 29, 2025); NERC, “Statement on NERC’s 2024 Long-Term Reliability Assessment” (June 17, 2025), available at <https://www.nerc.com/news/Pages/Statement-on-NERC%E2%80%99s-2024-Long-Term-Reliability-Assessment.aspx> (accessed June 29, 2025). See also U.S. Department of Energy, “Resource Adequacy Report: Evaluating the Reliability and Security of the United States Electric Grid” at 1-9 (July 7, 2025), available at https://www.energy.gov/sites/default/files/2025-07/DOE_Final_EO_Report_28FINAL_JULY_7%29.pdf (accessed July 8, 2025).

1 history of making prudent decisions when granted CPCN authority—including
2 deciding not to proceed when it was in customers’ interest. The Companies will
3 similarly proceed prudently with any CPCN authority granted in this proceeding.

4 Finally, as Mr. Conroy also discusses in his rebuttal testimony, when addressing
5 questions of load forecast uncertainty and the possibility of excess capacity regarding
6 a CPCN for Trimble County 2—the very same kinds of issues raised by intervenors
7 here—the Commission granted the CPCN and instructed the Companies to alert the
8 Commission if conditions supporting proceeding with the unit fundamentally
9 changed.¹⁵ It was a wise decision; Trimble County 2 has proven to be a low-cost energy
10 workhorse of the Companies’ fleet. The Companies therefore ask the Commission to
11 take the same approach here and grant the Companies’ requested CPCNs.

12 **Q. Are the Companies encouraged by the AG and KIUC positions as stated in their**
13 **testimony?**

14 A. Yes. The AG-KIUC witnesses support the CPCN for Brown 12 and SCR for Ghent
15 2.¹⁶ The Companies commend the AG and KIUC for their recognition of the load that
16 the Companies must be prepared to serve by supporting those two projects, especially
17 since they are two of the most important customer advocates in Kentucky.

18 For Mill Creek 6, they advocate for a conditional approval. The “condition” is
19 that 85% of the Mill Creek 6 capacity (approximately 550 MW) must be “pre-sold”
20 under the Companies’ Extremely High Load Factor (“EHLF”) tariff currently proposed
21 in the Companies’ pending base rate cases. The AG and KIUC believe such a “pre-

¹⁵ *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the Expansion of the Trimble County Generating Station*, Case No. 2004-00507, Order at 6-7 (Ky. PSC Nov. 1, 2005).

¹⁶ KCA also supports SCR for Ghent 2.

1 sale” is necessary to provide reasonable protections for customers if that load does not
2 materialize. However, the Companies disagree that any “pre-sale” amounts should be
3 required.

4 The Companies are in complete agreement that reasonable protections for
5 customers should exist, which is precisely why they proposed the EHLF tariff in the
6 first place. To ensure that protection, it provides the following: (1) a single, non-time-
7 differentiated demand charge to ensure recovery of all demand-related costs of service;
8 (2) a requirement that the monthly billing demand be the greater of the maximum
9 measured load in the billing period, the highest measured load in the preceding eleven
10 billing period, or 80% of the maximum contract capacity; (3) a minimum initial
11 contract term of 15 years; and (4) significant financial collateral security requirements
12 in the form of cash or a letter of credit. These protections are significant and sufficient
13 and eliminate the need for a “pre-sale” requirement. As for “sales” that happen *after*
14 CPCNs are granted, as discussed above, we recognize that cost recovery for the
15 proposals in this case will be subject to a prudence review in future base rate cases. We
16 welcome that review and agree that the amount of data center load that materializes or
17 is “sold” after the CPCNs are granted in this case will be a relevant part of—but not
18 the only part of—that review.

19 **Q. Does anything in the intervenor testimony cause the Companies to reconsider**
20 **their proposal to construct the Cane Run BESS?**

21 A. No. In fact, as Mr. Tummonds explains in his rebuttal testimony, in light of the fact
22 that the One Big Beautiful Bill Act has passed and imposes timing restrictions on the
23 availability of ITCs for BESS facilities, it is even more important to move forward with

1 Cane Run BESS before ITCs become unavailable. Of course, as I discuss above, if
2 circumstances change after the issuance of a CPCN for Cane Run BESS that make it
3 uneconomical, the Companies will not move forward with that project. But having a
4 CPCN for it will give the Companies another tool in the toolbox to use if it is
5 economical and necessary to serve load, including economic development load and
6 data center load, before the proposed NGCCs can be constructed. As stated above, the
7 scalability of Cane Run BESS provides flexibility. Denial of a CPCN for Cane Run
8 BESS unnecessarily and perhaps uneconomically forecloses the possibility of having a
9 valuable resource.

10 **THE COMPANIES HAVE PROPERLY CONSIDERED TRANSMISSION ISSUES**

11 **Q. Joint Intervenors witness John Chiles raises some issues regarding electric**
12 **transmission related to the Companies' proposals. How do you respond to those?**

13 A. Mr. Chiles opines that the Companies have not adequately considered the effects that
14 their proposed NGCCs will have on local and adjacent transmission systems.¹⁷ He
15 further opines that data centers can create transmission issues such as voltage stability,
16 power harmonics, and electromagnetic transients ("EMTs") and that if the Companies
17 are aware of any risk of these issues, the Companies should study them.¹⁸ For the latter,
18 the Companies are not aware at this time of the risk of those issues,¹⁹ but if such a risk
19 develops as part of serving data center load, the Companies agree that the issues should
20 be studied and if mitigation strategies are necessary to prevent significant issues, the
21 Companies would pursue them.

¹⁷ Chiles Testimony, pp. 12-15.

¹⁸ Chiles Testimony, pp. 19-20.

¹⁹ See the Companies' response to SC 2-15.

1 As for the concern that the Companies have not adequately considered the
2 effects of their NGCCs on local and adjacent transmission systems, I assure the
3 Commission that the Companies will take necessary steps to ensure that any load added
4 to the transmission system (data center load or not) will comply with the governing
5 process that protects against significant unwanted effects. As we have stated, the
6 Companies must rely on their Independent Transmission Organization (“ITO”) for a
7 final determination of necessary upgrades,²⁰ but based on our own estimates we have
8 implicitly assumed approximately \$75 million for transmission system upgrades would
9 be required for any set of resources sufficient to serve the Companies’ projected load
10 that includes 1,750 MW of data centers.²¹ Mr. Chiles has provided no basis for
11 asserting that any other set of resources adequate to serve that projected load would
12 both be more economical and require less transmission upgrade investment than the
13 resource portfolio the Companies have proposed. Thus, his unsupported assertions
14 should have no bearing on the Commission’s approval of the requested CPCNs.

15 **CRITICISM REGARDING PPL CORPORATION’S NET-ZERO CARBON**
16 **EMISSIONS IS UNFOUNDED**

17 **Q. Do you agree with KCA witness Ms. Medine’s criticism regarding PPL**
18 **Corporation’s commitment to net-zero carbon emissions by 2050?**

19 **A.** No. As the Companies have explicitly stated in this case, PPL’s 2050 net-zero goal has
20 had no effect the Companies’ proposals in this case.²² As we have further stated in this
21 case, the Companies do not have an independent greenhouse gas emissions goal, and

²⁰ See the Companies’ response to AG-KIUC 2-38.

²¹ See Wilson Direct, Exhibit SAW-1, Table 22.

²² Companies’ Response to KCA 2-2.

1 PPL has not prescribed one for the Companies; rather, the Companies' actions
2 contribute to and help inform PPL's emissions goals.²³

3 **CONCLUSION**

4 **Q. What is your recommendation for the Commission?**

5 A. Approving the Companies' requested CPCNs will allow the Companies to continue to
6 provide safe and reliable service at the lowest reasonable cost to all customers, existing
7 and new—including the data center customers the General Assembly is seeking to
8 attract as a matter of "paramount importance." In contrast, not approving the requested
9 CPCNs will frustrate the General Assembly's stated intent and prevent the Companies
10 from being able to provide adequate service. Given the Companies' demonstrated need
11 for these resources, their thorough analysis of all reasonable alternatives, and their
12 established history of prudently using CPCN authority, I continue to recommend that
13 the Commission approve CPCNs for the proposed Brown 12, Mill Creek 6, Cane Run
14 BESS, and SCR for Ghent 2 as cost effective methods of ensuring adequate generating
15 capacity while complying with current and proposed environmental laws.

16 **Q. Does this conclude your testimony?**

17 A. Yes, it does.

²³ See Companies' Response to Metro-LFUCG 1-15.

VERIFICATION

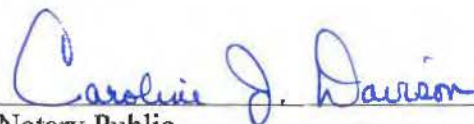
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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 foregoing testimony, and that 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 8th day of July _____ 2025.



Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 27 2027

