COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

ELECTRONIC JOINT APPLICATION OF KENTUCKY : CASE NO. 20 UTILITIES COMPANY AND LOUISVILLE GAS AND : ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND SITE : COMPATIBILITY CERTIFICATES	025-00045

RESPONSE OF THE KENTUCKY COAL ASSOCIATION, INC. TO THE DATA REQUESTS OF THE COMMISSION STAFF DATED JUNE 20, 2025

Filed: July 3, 2025

VERIFICATION

STATE OF NEWYORK) NEWYORK COUNTY OF ____)

The undersigned, Emily Medine, being duly sworn, deposes and says that she is a Principal with the firm Energy Ventures Analysis, Inc., an energy consultancy, and an expert witness on behalf of the Kentucky Coal Association, Inc, in Case No. 2025-00045 before the Commission and that she has personal knowledge of the matters set forth in the foregoing responses for which she is a witness, and that the information and answers contained therein are true and correct to the best of her information, knowledge, and belief.

Ency Meder

Subscribed and sworn to before me, a Notary Public in and before said County and State,

this <u>03</u> day of July 2025.

Notary Public

Notary Public ID No. 015H0022 453

My Commission Expires:

18 2028

Nafiu Zahid Shoisob Notary Public State of New York 01SH0022463 Qualified in Bronx County Commission Expires March 18, 20

Response to Data Requests of the Commission Staff Dated June 20, 2025

Case No. 2025-00045

Request No. 1

Question 1:	Refer to the Direct Testimony of Emily Medine (Medine Direct Testimony), page 13.		
	a. Provide any studies or supporting evidence that it is not industry practice to tie long-term pricing to each other.		
	 b. State whether Witness Medine is aware of any other utilities or plant operators who utilize correlating gas and coal price in (their) forecasts. If yes, identify those metrics and state whether those metrics are similar to Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company's (KU) (jointly, LG&E/KU) coal to gas ratio. If not, detail how similarly situated utilities forecast gas and coal prices. 		
	c. Confirm whether Witness Medine believes that LG&E/KU decoupling its coal and gas prices in its forecast would materially impact its least cost portfolio in this case. Explain why or why not.		
Response 1:	a. Ms. Medine has stated repeatedly that it believes it is the Companies responsibility to justify its approach which Ms. Medine has challenged. Ms. Medine has worked in these sectors since completing graduate school and is well aware of industry practices. Ms. Medine's clients include producers, utilities, transporters, industrials, regulators, trade associations, the Federal government (Justice Department, Department of Interior), and state governmental agencies.		

Through these engagements, Ms. Medine has gained extensive experience in evaluating utility fuel forecasting practices. For regulatory commissions and their staffs, Ms. Medine has audited fuel forecasting and/or procurement activities for PacifiCorp's operations in seven western states, Arizona Public Service, Tucson Electric Power, all utilities in the state of Ohio prior to deregulation, AEP's operating companies in West Virginia, and Monongahela Power. Ms. Medine has been engaged by utilities directly or as part of a team for matters related to fuel price forecasting including Nova Scotia Power, New Brunswick Power, Southern Company, Jaguar Energy, and AES related to their subsidiaries in Argentina, Chile, Dominican Republic, and Northern Ireland. Ms. Medine has been engaged by multiple parties in fuel-related litigation. Ms. Medine's company Energy Ventures Analysis, Inc. produces regular fuel price forecasts are not based upon correlation.

Ms. Medine's attestation that the Companies' approach is not accepted industry practice combined with the Companies' failure to demonstrate otherwise should be sufficient to confirm Ms. Medine's opinion.

 b. In 2016, Ms. Medine as a consultant to the Indiana Coal Council (ICC) reviewed the Integrated Resource Plan prepared by Northern Indiana Public Service Company (NIPSCO). The ICC's comments on the NIPSCO IRP included the following statement

> "THE NET PRESENT VALUE REVENUE REQUIREMENTS (NPVRR) RESULTS WERE EFFECTIVELY HARD-WIRED THROUGH NIPSCO'S USE OF ONLY CORRELATED COMMODITY PRICE FORECASTS EXCEPT WHERE IT USED EVEN LOWER NATURAL GAS PRICE FORECASTS, BOTH OF WHICH CONTRIBUTED TO IF NOT INSURED GAS-FIRED GENERATION WOULD BE LOWER IN COST THAN COAL GENERATION."1

Although there is no discussion about a subsequent change in fuel price forecasting after the 2016 IRP, it is worth noting that NIPSCO appears to have abandoned this methodology in its 2018 IRP and all those thereafter.²

¹ <u>https://www.in.gov/iurc/files/ICC-Comment-Public-Final-Draft.pdf</u>, page 7

² www.nipsco.com/docs/librariesprovider11/rates-and-tariffs/irp/2018-nipsco-irp.pdf?sfvrsn=83256851_16

c. Ms. Medine believes that given the importance of fuel costs, a proper fuel price forecast would absolutely affect the results of the Companies' analysis. However, the magnitude of the impact cannot be determined on a theoretical basis. More importantly, it would be imprudent to estimate the magnitude of the impact without fully evaluating which is why Ms. Medine recommended the Companies do so.

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Request No. 2

- **Question 2:** Refer to Medine Direct Testimony, pages 6-8. Estimate when the proposed rules and rollbacks will become effective, accounting for among other items, the period of expected litigation.
- **Response 2:** The industry believes that regardless of litigation, the Companies' compliance dates will be adjusted to reflect implementation delays. During the balance of the Trump Administration, the industry expects support for the continued operation of the coal fleet. Under a future administration (re)regulation of carbon emissions is certainly possible. In any event, new rulemaking and associated litigation will likely push-out the time frame for potential carbon and other significant rulemaking. Further, in its efforts to support on-going coal plant operation, there are other policy initiatives including special financing that could be made available to address necessary plant betterment and life extension investment. In light of these developments it is premature to retire coal generation considering affordability and reliability of electric supply.

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Request No. 3

- **Question 3:** Refer to Medine Direct Testimony, page 24. Estimate whether witness Medine has a recommendation for how many MW of data center load growth should be reflected in LG&E/KU's load forecast.
- **Response 3:** Ms. Medine does not have a specific number. Her concern is that no capacity should be committed or built to serve the data center load in any jurisdiction until the parties have firm commitments and have agreed to a Commission-approved rate/tariff in regulated states.

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Request No. 4

- **Question 4:** Refer to Medine Direct Testimony, page 11, lines 19 and 20. Provide an explanation that rationalizes LG&E/KU's projected development cost of \$2,138/kW for the 645 MW CCGT versus the most current development cost estimate of \$8,467/kW for a Small Modular Reactor (SMR).
- **Response 4:** There are a number of reasons Ms. Medine believes the Companies should more seriously consider SMR's which are laid out in her testimony and summarized below.
 - 1. The manner in which the Companies have estimated costs for CCGT's is problematic. The Companies indicated the CCGT's are depreciated over a 40-year life despite PPL's commitment to have Net Zero carbon emissions by 2050. In other words, the depreciation methodology does not capture the potentially significant stranded costs post 2050 if the plant is required to close. For the plants to continue to operate post 2050, in order to meet PPL's commitment, the plant would need to reduce emissions by retrofitting Carbon Capture and Sequestration (CCS) or other technology or, if allowed, purchase carbon offsets. The analysis does not include the costs of any carbon offsets post 2050. Further, the analysis does not include Scope 3 emissions, i.e., emissions related to the production and transport of natural gas, which should be considered as well. If PPL abides by its own schedule and there is a commitment to new CCGTs, the stranded costs, the costs to retrofit CCS, or the costs of offsets should be included in the Companies' analysis if PPL or the Companies expect these costs to be reimbursed.
 - 2. The costs for CCGT's are reportedly continuing to rise as noted in Ms. Medine's testimony. Until there is resolution on tariffs, additional increases are possible. With respect to nuclear it is important to appreciate that while commercial operation of any of the promising SMR designs has not yet

occurred, key stakeholders appreciate the importance of building the development pipeline to drive down the technology cost curve. This could occur as commercial development proceeds and the domestic supply chain expands to be able to manufacture/fabricate key components and reference designs are validated and improved. Early adoption will likely be aided by U.S. government financing support through a re-constituted LPO and other measures.

- 3. The costs for SMR's are coming down with the standardization of design, industry commitments are increasing, and if the Administration's proposed subsidies to support SMR's are realized, the cost difference would be further reduced.
- 4. This is an opportunity to embrace the likely future of utility generation. Almost 70 percent of France's generation is nuclear, over 50 percent of the Province of Ontario's generation is nuclear, and all U.S. submarines are nuclear-powered. Santee Cooper is considering resuming construction of the Summer Nuclear Station.
- 5. This is also an opportunity to move the Companies' fleet to non-carbon emitting generation beyond 2050.
- 6. At least three idled nuclear plants (Three Mile Island, Palisades, and Duane Arnold) are considering reopening to serve data center load.

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Request No. 5

Responding Witness: Emily Medine

Question 5: Refer to Medine's Direct Testimony, page 4, lines 9-14.

- a. Explain why it would not be unduly discriminatory for the companies to request "adequate protections to the Companies traditional ratepayers" for making investments in generator resources when they do not do so for other large industrial and commercial customers seeking service.
- b. Provide examples of other state commissions, including any relevant cases reference, that have issued orders to their incumbent load serving entities (LSEs) to establish large load tariffs that include a requirement for financial commitments to protect customers.
- **Response 5:** a. The answer is scale. For the Companies to commit \$1.5 2.0 billion to build capacity for large users and then expect that the remaining ratepayers back stop that investment if the large users default or walk away after the initial term of their contract, is quite an ask to the Commission. As pointed out in EKPC's filing for a data center rate, the EKPC feels an obligation to limit financial exposure from data centers to traditional customers. Further, the Companies ultimately have a choice. They could also build the Data Center as an independent power producer and assume the risks and benefits for themselves.

As the Companies well know, this is an issue in front of many Commissions and effectively all of them are grappling how to address the risk. A summary of data center regulations prepared by the North Dakota Legislative County provides some information that may be useful to the Companies.

https://ndlegis.gov/sites/default/files/resource/research-document/state-by-statedata-center-regulation-january-2025.pdf

There has been significant discussion of this in the media. The URL's for some useful information are as follows:

https://www.utilitydive.com/news/utilities-subsidize-data-center-growth-ratepayer-cost-shif-harvard-

peskoe/742001/#:~:text=State%20utility%20commissions%20have%20the,Peskoe%20said%20in%20an%20interview.

https://www.gibsondunn.com/when-data-center-developers-have-options-state-regulatory-treatment-is-key-to-success/

https://www.latitudemedia.com/news/the-rules-around-data-center-costallocation-are-getting-clearer/

www.aceee.org/sites/default/files/pdfs/Turning%20Data%20Centers%20into%2 0Grid%20and%20Regional%20Assets%20-

%20Considerations%20and%20Recommendations%20for%20the%20Federal %20Government,%20State%20Policymakers,%20and%20Utility%20Regulator s.pdf

The bottom line is the risks to traditional customers associated with a massive buildout to support Data Centers barring significant safeguards for the ratepayers creates atypical financial considerations.

b. While Ms. Medine has not done a complete survey of all legislation and tariffs, please see the below:

state-by-state-data-center-regulation-january-2025.pdf

https://www.wvlegislature.gov/bill_status/bills_text.cfm?billdoc=sb583%20intr. htm&yr=2025&sesstype=RS&i=583

https://www.utilitydive.com/news/aep-ohio-data-center-agreementstakeholders-indiana-epri/730873/