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

SIERRA CLUB'S RESPONSE TO JOINT DATA REQUESTS OF KENTUCKY UTILITIES COMPANY AND LOUISVILLE GAS AND ELECTRIC COMPANY PROPOUNDED TO SIERRA CLUB

Sierra Club hereby submits this Response to the Joint Data Requests of Kentucky Utilities Company and Louisville Gas and Electric Company (collectively referred to as "LG&E/KU" or the "Companies").

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.1 Case No. 2025-00045

Request 1.1

General: All Witnesses

In Excel spreadsheet or other format, with all formulas, columns and rows unprotected and fully accessible, please provide all workpapers and source documents not previously provided.

Response

Please see Attachment SC Workpaper - JIF 1 - Data Center EcDev Pipeline.xlsx.

Persons responsible

Jeremy Fisher, Chelsea Hotaling, Stacy Sherwood

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.2 Case No. 2025-00045

Request 1.2

Witness: Chelsea Hotaling

Please refer to Ms. Hotaling's testimony at page 16. Why is Ms. Hotaling not taking a position on whether data center load will ever materialize in the Companies' service territories?

Response

The level of load included in the Companies' 2025 CPCN Load Forecast is unprecedented and there is very little historical data upon which to base a forecast such as this. Therefore, Ms. Hotaling's recommendations were intended to point out ways in which the Companies can improve their forecast, weed out less serious requests, ensure that significant stranded assets are not incurred, and bring more transparency to the large load interconnection queue. It is not necessary for Ms. Hotaling to take a position about whether large loads will ever appear on the Companies' systems. Instead, the issues at hand are whether the current prospects for those loads warrant the approval of the proposed generators at this time.

Person responsible

Chelsea Hotaling

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.3 Case No. 2025-00045

Request 1.3

Witness: Chelsea Hotaling

If the proposed NGCCs are constructed and data centers never materialize in the Companies' territories, identify all options the Companies could pursue to sell or otherwise utilize the power produced by the NGCCs.

Response

Objection: Sierra Club objects to this request as vague, ambiguous, and overbroad, in that it asks for "all options." Sierra Club further objects to the extent that the request seeks to require Sierra Club to conduct an analysis that does not otherwise exist.

Notwithstanding this objection, page 45 of Ms. Hotaling's testimony includes a reference to the option for the Companies to sell the capacity, which the Companies identified themselves through a discovery response. As Ms. Hotaling notes, there is no guarantee that such a sale would cover the costs of the construction of these facilities. Page 46 of Ms. Hotaling's testimony identifies another course of action, which is to identify existing units for retirement.

Persons responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.4 Case No. 2025-00045

Request 1.4

Witness: Chelsea Hotaling

Please refer to Ms. Hotaling's testimony at footnotes 40, 41, 43, 44, 45, and 46. The links in these footnotes do not lead to the referenced PDF files. Please provide the referenced PDF files.

Response

Counsel for Sierra Club confirmed that the cited links in the Public version of Ms. Hotaling's testimony each worked. The links are listed below and the pdfs are attached hereto.

Footnote	Link					
40, 41	https://www.pjm.com/-/media/DotCom/planning/res-adeq/load-					
	forecast/aep-documentation.pdf					
43	https://www.pjm.com/-/media/DotCom/planning/res-adeq/load- forecast/dominion-documentation.pdf					
44	https://www.pjm.com/-/media/DotCom/planning/res-adeq/load-forecast/exelon-documentation.pdf					
45, 46	https://www.pjm.com/-/media/DotCom/planning/res-adeq/load-forecast/ppl-documentation.pdf					

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.5 Case No. 2025-00045

Request 1.5

Witness: Chelsea Hotaling

Please refer to Ms. Hotaling's testimony at page 30. Provide a listing of all potential customer loads in the Companies' queue that are also in another utility's queue. For each item listed, please provide all citations, documents, and other information supporting Ms. Hotaling's assertions concerning such customer load.

Response

Objection: Sierra Club objects to this request as vague, ambiguous, and overbroad. Sierra Club also objects to the extent the request seeks to require Sierra Club to provide "other information" or analysis that does not otherwise exist. In addition, responding to this request would require Ms. Hotaling to reveal confidential information that Ms. Hotaling is not permitted to disclose in this proceeding. Furthermore, Ms. Hotaling cannot speak to all of the customers because the names of all the prospective customers have not been provided. Notwithstanding this objection, the concern of customers being in more than one utility queue is a well-known problem and has been discussed in many different forums. For example, Georgia Power's large load model explicitly includes a variable to capture whether or not Georgia is the state selected as the location for a new load project. As Georgia Power stated, "Customers often evaluate sites in multiple states before finalizing the location of a project." In order to capture the risk of the project selecting another location, Georgia Power assigned a probability to this variable in its large load model to reflect the likelihood that Georgia is selected. In addition, the GridLab and Elevate Consulting paper referenced on page 35 of Ms. Hotaling's testimony discusses this issue and provides recommendations on how utilities can manage this concern through their load interconnection queue process. It says in part, "Currently, there is often no formal or transparent load interconnection queue, and the barriers to entry in terms of time, technicality, and financial commitment are quite low. This environment encourages developers to submit multiple requests for potential projects, seeking out least-cost connection locations and leading to inflated demand projections and inefficiencies." Senate Bill 6 introduced in Texas, also includes a provision related to addressing the concern about duplicative customer requests. The language of Bill 6 says, "The standards must require each large load customer subject to Subsection (c) to disclose to the interconnecting electric utility or municipally owned utility whether the customer is pursuing a substantially similar request for electric service in this state the approval of which would result in the customer materially changing, delaying, or withdrawing the interconnection request."2

¹ Georgia Power 2025 IRP Technical Appendix. Budget 2025 Load and Energy Forecast at 104.

² Texas SB6. Retrieved from legiscan.com/TX/text/SB6/2025

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.6 Case No. 2025-00045

Request 1.6

Witness: Chelsea Hotaling

Please refer to Ms. Hotaling's testimony at page 37, line 4. Identify all of the "other jurisdictions," provide the name of the utility involved in those other jurisdictions, cite the case number in which Ms. Hotaling's experience occurred, and the specific documents in that case(s) supporting Ms. Hotaling's assertions.

Response

Objection: Sierra Club objects to this question as it misstates Ms. Hotaling's testimony. The reference to "other jurisdictions" is a reference to jurisdictions around the country to which Ms. Hotaling is aware, not just the jurisdictions in which Ms. Hotaling has provided testimony. Notwithstanding this objection, Ms. Hotaling's testimony contains examples that can be cited publicly. For instance, page 38 – 40 of Ms. Hotaling's testimony outlines the data that Georgia Power collects, and reports to the Commission on a quarterly basis. This data includes changes to the announced load level, ramp rates, and projects leaving the load queue. Ms. Hotaling's testimony also includes a reference to ERCOT's 2025 Load Forecast, where a downward adjustment was applied to the load forecast to capture data observed by ERCOT related to the difference in the load requested from data centers and the peak consumption for those data centers when they were online. PJM has also noted differences between the load requested and load that materializes. A recent presentation from PJM indicates that multiple entities have reported a range of 70-90% as a materialization rate.³ As it relates to the risk of projects dropping out of a utility's load queue, the Public Service Company of Colorado ("PSCo") saw seven customers, or approximately 4 GW of load, withdraw their interconnection requests. 4 This led to PSCo dropping the level of new large load reflected in its Base load forecast.

Person responsible

³ Incorporating Data Center Loads in PJM Long-Term Load Forecast. April 15, 2025. Retrieved from https://www.esig.energy/wp-content/uploads/2025/04/PJM-Existing-Practices-Presentation-041525.pdf

⁴ Rebuttal Testimony of Witness Thomas L. Bailey at 32. Proceeding No. 24A-0442E.

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.7 Case No. 2025-00045

Request 1.7

Witness: Stacy Sherwood

Please refer to Ms. Sherwood's testimony at page 7, lines 8-9: "However, the \$3 million savings in rate case cost would come at the carrying cost expense of \$406 million." Please explain in detail why it is reasonable to compare these two values.

Response

The Companies are requesting Commission approval for a regulatory asset for the treatment of post-in-service costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense. As part of their request for a regulatory asset, the Companies would earn a return, equivalent to their weighted average cost of capital, on these expenses until they decide to file a rate case. They would essentially treat the expenses as deferred expenses with the added benefit of a return for the Companies. Expenses, whether deferred or not, should not earn a return. The Companies should only receive a reasonable return on their capital investments. Therefore, it is reasonable to compare the two values as the Companies are seeking to earn a return on expenses, which will be paid for by ratepayers, to avoid incurring additional rate case cost. The comparison of the values highlights the trade off to ratepayers if the rate case costs are avoided.

Person responsible

Stacy Sherwood

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.8 Case No. 2025-00045

Request 1.8

Witness: Jeremy Fisher

Please refer to Mr. Fisher's testimony at page 6. Identify the 17 utility parent companies that purport to have over 409 GW of data center load in their economic development pipeline. Identify the amount of load stated for each parent company totaling the 409 GW. Provide copies of or cites to the documents supporting the 409 GW total Mr. Fisher states. Provide all workpapers supporting this analysis.

Response

Refer to Attachment SC Workpaper - JIF 1 - Data Center EcDev Pipeline.xlsx, included as an attachment.

The 17 parent companies listed in Column A of Tab "Economic Pipeline - DCs" are: Ameren, Black Hills Corporation, Dominion (VA), DTE Energy, Exelon Corporation, FirstEnergy Corp., NiSource, Northwestern Energy, NV Energy, Oncor, Otter Tail Corporation, PacifiCorp, PG&E, PPL Corporation, Rappahannock Electric Cooperative, WEC Energy Group, and Xcel.

Column D provides the potential data center load, in MW, associated with each parent company, and the total MW.

Column C provides links to supporting documentation for each.

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.9 Case No. 2025-00045

Request 1.9

Witness: Jeremy Fisher

Please refer to Mr. Fisher's testimony at pages 6-7. Identify the 6 utility parent companies that purport to have over 300 GW of unspecified economic development pipeline load. Identify the amount of load stated for each parent company totaling the 300 GW. Provide copies of or cites to the documents supporting the 300 GW total Mr. Fisher states. Provide all workpapers supporting this analysis.

Response

Please refer to Attachment SC Workpaper - JIF 1 - Data Center EcDev Pipeline.xlsx.

The six parent companies listed in Column A of Tab "Economic Pipeline - Generic" are: Alliant Energy, American Electric Power, CenterPoint Energy, CMS Energy, Evergy, and Southern Company.

Column D provides the load, in MWs, associated with each parent company, and the total MW.

Column C provides links to supporting documentation for each.

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.10 Case No. 2025-00045

Request 1.10

Witness: Jeremy Fisher

Please refer to Mr. Fisher's testimony at pages 11-12. Identify the 64 primarily large investor-owned utilities. The 396 GW stated is not the total of the numbers that follow. Identify the amount of load stated for each of the 64 companies' studies and provide copies of or citations to the documents supporting the 396 GW Mr. Fisher states.

Response

Please refer to Attachment SC Workpaper - JIF 1 - Data Center EcDev Pipeline.xlsx.

Upon review, it was determined that this statement should have been updated.

First, the assessment was updated subsequent to finalization of testimony, and the 64 utilities noted should be corrected to 59, as five of the utilities did not have substantive recent information available for review. The 59 utilities are listed in Column A of Tabs labelled "Economic Pipeline - DCs" (17 utilities), "Economic Pipeline - General" (6 utilities), and "No Response" (36 utilities).

Second, the reporting utility total values should have been updated to match the information referenced in Responses to Requests 1.8 and 1.9, above. Specifically, there are 17 utility companies or parent companies that report over 409 GW of data center load in their economic development pipelines, and 6 utility companies or parent companies that report over 300 GW of unspecified economic development pipeline load. In total, the sum of these two categories is 711 GW. A corrected testimony will be provided in conjunction with this response.

Please refer to Responses to Requests 1.8 and 1.9.

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.11 Case No. 2025-00045

Request 1.11

Witness: Jeremy Fisher

Please refer to Mr. Fisher's testimony at pages 11-12. Identify the five utilities cited at p. 11, line 18. Provide documentation supporting the statement that "many implied that these inquiries were heavily influenced by data centers."

Response

Please refer to the Response to Request 1.10 and the corrected testimony. The reference to "five" utilities should read "six."

Also refer to Attachment SC Workpaper - JIF 1 - Data Center EcDev Pipeline.xlsx. The evidence for the statement "many implied that these inquiries were heavily influenced by data centers" is found in Tab "Economic Pipeline - Generic" Column F, which indicates where specific information may be found in each source linked to in Column C.

Person responsible

LG&E/KU's Joint Requests for Information to Sierra Club LG&E/KU-1.12 Case No. 2025-00045

Request 1.12

Witness: Jeremy Fisher

Please refer to Mr. Fisher's testimony at page 12, lines 3-4. Identify the 20 utilities referenced and provide the amount each one contributes to the stated 697 GW. Provide copies of or cites to the documents supporting the 697 GW total Mr. Fisher states. Provide all workpapers supporting this analysis.

Response

Please see the Response to Request 1.10, above. The reference to "20" utilities and "697" GW of load should read "23" utilities and "711" GW, respectively, and has been corrected in the revised testimony provided along with these responses.

Person responsible

Dated: July 3, 2025

Respectfully submitted,

/s/ Joe F. Childers
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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Response to the Joint Data Requests of Kentucky Utilities Company and Louisville Gas and Electric Company in this action is being electronically transmitted to the Commission on July 3, 2025, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

/s/ Joe F. Childers
JOE F. CHILDERS

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: ELECTRONIC APPLICATION OF KENTUCUTILITIES COMPANY AND LOUISVILLE OF AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCY AND NECESSITY AND SITE COMPATIBIL CERTIFICATES	GAS)) CE) Case No. 2025-00045						
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State of Ohio County of Mahoning	Chelsea Hotaling Chelsea Hotaling						
SUBSCRIBED, ACKNOWLEDGED, AND this 2nd day of July, 2025.	Notary ID No.:10083734						
My Commission expires: 12/18/2029	CHRISTOPHER CASTALDO Notary Public, State of Ohio My Commission Expires:						

Notarized Online with NotaryLive.com

Dec. 18, 2029

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: ELECTRONIC APPLICATION OF KENT UTILITIES COMPANY AND LOUISVILE AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIE AND NECESSITY AND SITE COMPATII CERTIFICATES	LE GAS)) ENCE) Case No. 2025-00045
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COMMONWEALTH OF) KENTUCKY)	
State of Virginia County Of Hampton	Jeremy Fisher
SUBSCRIBED, ACKNOWLEDGED, A	AND SWORN to before me by Jeremy Fisher
this 2nd day of July, 2025.	
	Notary ID No.: 7730964
My Commission expires: 02/29/2028	Tiphany Griffith REGISTRATION NUMBER 7730964 COMMISSION EXPIRES February 29, 2028

Notarized remotely online using communication technology via Proof.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of	•				
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County of Newport News		Stacy Lynn Sherwood			
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	REGISTRATION NUMBER 8040550	Nota	ry Public		
My Commission	COMMISSION EXPIRES February 28, 2027	Nota	ary ID No.: _	8040550	
My Commission	expires: 02/28/2027				

Notarized remotely online using communication technology via Proof.