

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION OF)	
KENTUCKY UTILITIES COMPANY AND)	
LOUISVILLE GAS AND ELECTRIC)	
COMPANY FOR CERTIFICATES OF)	
PUBLIC CONVENIENCE AND NECESSITY)	CASE NO. 2022-00402
AND APPROVAL OF A DEMAND SIDE)	
MANAGEMENT PLAN AND APPROVAL OF)	
FOSSIL FUEL-FIRED GENERATING UNIT)	
RETIREMENTS)	

RESPONSE OF
KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
JOINT FOURTH DATA REQUESTS OF THE ATTORNEY GENERAL AND
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.
DATED JUNE 27, 2023

FILED: JULY 7, 2023

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **David S. Sinclair**, 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, 220 West Main Street, Louisville, KY 40202, and that he has personal knowledge of the matters set forth in the responses 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 S. Sinclair

David S. Sinclair

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 5th day of July 2023.

Caroline J. Davison

Notary Public

Notary Public ID No. KYNPL63286

My Commission Expires:

January 22, 2027



**KENTUCKY UTILITIES COMPANY
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**Response to Joint Fourth Data Requests of the Attorney General and Kentucky
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Case No. 2022-00402

Question No. 1

Responding Witness: Counsel

- Q-1. Explain whether any Federal Courts of Appeal have issued stays of the EPA's Good Neighbor Rule. If so, provide the docket numbers and links to the orders.
- A-1. While the U.S. Courts of Appeals for the 5th, 6th, and 8th Circuits have issued orders regarding EPA's disapprovals of State Implementation Plans relating to the Good Neighbor Rule, to date, no court has issued a stay of the rule itself.

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Question No. 2

Responding Witness: Lonnie E. Bellar

- Q-2. Describe the impact of the continued operation of Ghent Unit 2 on the Companies' transmission system, assuming the addition of an SCR to Ghent Unit 2 and assuming that only the MC 5 NGCC is added as reflected in the request for CPCN, but that the Brown 12 NGCC is delayed until the subsequent retirement date of Ghent Unit 2. Describe the transmission upgrades or expansions that would be required, if any, and the estimated cost for those upgrades and/or expansions. Provide a copy of all support developed and/or relied on for your response.
- A-2. As shown in Table 35 of the Resource Assessment in Exhibit SAW-1, the incremental transmission system costs of a scenario where Mill Creek 1-2 and Brown 3 are retired, but an NGCC is only added at Mill Creek would be \$35,035,000 in 2022 dollars. The projects required for this scenario are detailed in Scenario 4 of "\04_FinancialModel\Support\TransmissionCapital\CONFIDENTIAL_Generation Replacement Scenarios - Impacts on the Transmission System_2022.docx" in Exhibit SAW-2. This scenario was evaluated as Portfolio 2 of Stage Two of the Resource Assessment and was found to be higher cost than the portfolio where Ghent 2 is retired and NGCCs are built at both Mill Creek and Brown.

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Question No. 3

Responding Witness: David S. Sinclair

- Q-3. Describe the capability and/or practical ability of the Companies to sell the capacity and energy output of Ghent Unit 2 to Kentucky Power Company and/or any other electric utility located in the Commonwealth through one or more bi-lateral unit power agreements (UPAs), assuming the addition of an SCR to Ghent Unit 2 and assuming that the MC 5 NGCC and Brown 12 NGCC are added and operated as reflected in the request for CPCN. Describe in detail the limitations on such sales, if any, and describe the Companies' capability and/or practical ability to resolve any such limitations, the steps that would be necessary, and the costs to do so, including transmission upgrades or expansions, if necessary. Provide all support developed and/or relied on for your response.
- A-3. Assuming the Mill Creek Unit 5 and Brown Unit 12 NGCC projects are constructed and operated as proposed in this case and that Ghent Unit 2 is not retired, the Companies will seek to minimize costs to their customers related to Ghent Unit 2's future. Possible actions could include issuing an RFP for the sale of the unit or power from the unit to a third party. The potential economics, issues, risks, and ability to execute such a hypothetical transaction are uncertain but would likely include all of the typical items that would have to be addressed in any sale of a generation unit or unit-specific purchase power agreement including transmission upgrades or expansions.

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Question No. 4

Responding Witness: Lonnie E. Bellar

- Q-4. Reference the response to AG-KIUC Joint DR-3-1 (b). Explain whether, based on the Companies' experience, the Companies believe that the cost of constructing a new SCR unit at Ghent Unit 2 would be less costly than removing and decommissioning the SCR at Brown Unit 3, and then transporting, storing, modifying, and redesigning and reconstructing that SCR to fit onto Ghent Unit 2. Provide a copy of all support developed and/or relied on for your response.
- A-4. Based on the Companies' experience, the cost to construct a new SCR at Ghent Unit 2 would be less than deconstructing, transporting, storing, modifying, redesigning, and re-constructing the Brown Unit 3 SCR to fit onto Ghent Unit 2.

The potential cost savings to reuse Brown Unit 3 SCR reactor casing & internals, some of the ductwork, and major equipment is estimated at \$15-\$20M. The cost savings would be offset by an estimated \$30-\$40M for costs related to deconstructing, transporting, storing, modifying, and redesigning the Brown Unit 3 SCR. This hypothetical work requires 24-36 months which carries reliability risk due to necessary unavailability of the affected units.

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Question No. 5

Responding Witness: Lonnie E. Bellar

- Q-5. Refer to the response to AG DR-2-2 and the Joint Reliability Coordination Agreement. Describe what effects, if any, the Joint Reliability Coordination Agreement will have on the capability and/or practical ability to transmit power from Ghent Unit 2 to Kentucky Power Company and/or any other electric utility located in the Commonwealth, assuming the addition of an SCR to Ghent Unit 2 and assuming that the MC 5 NGCC and Brown 12 NGCC are added and operated as reflected in the request for CPCN. Provide a copy of all support developed and/or relied on for your response.
- A-5. Transmitting power from Ghent Unit 2 to Kentucky Power Company or any other electric utility located in the Commonwealth or both would require OATT transmission service on the LG&E/KU transmission system as well as on the receiving system. The JRCA should not be impactful to the capability or practical ability to obtain such OATT service and thereby transmit power.

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Question No. 6

Responding Witness: Lonnie E. Bellar / Charles R. Schram

Q-6. Provide an update on the status of: (i) the Mercer and Marion solar projects; and (ii) the four solar PPA projects.

A-6. Mercer Solar – The Companies have purchased 858 acres (Southern Land) from Ceres Farms and the assets of Savion’s Mercer Solar II project. The Companies have also executed an agreement with Savion to acquire approximately 1,007 acres of additional property (Northern Land), contingent on Commission approval of the Mercer Solar project. See the June 9, 2023 supplemental response to PSC 2-58. The Companies, with the assistance of an Owners Engineer, are currently developing the Request for Proposal (“RFP”) package. The RFP will be issued upon Commission approval of the Mercer Solar project.

Marion Solar – Bright Night has secured the necessary land to support the project, is advancing the development of the project, and working with multiple authorities to attain project approval. Bright Night and the Companies have started negotiating the Build Transfer Agreement (“BTA”). Bright Night indicated the project is on schedule and no critical flaws have been identified.

Solar PPAs: BrightNight (Gage project), Clearway (Song Sparrow project), and ibV Energy Partners (Grays Branch and Nacke Pike projects) have indicated they expect to file applications with the Siting Board by 3/31/25, 9/30/23, and 8/31/24, respectively.

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Question No. 7

Responding Witness: Charles R. Schram

- Q-7. Reference the response to PSC-DR-1-27 (c). Explain whether the time frames for the filing of applications with the Siting Board have changed.
- A-7. Yes. See the response to Question No. 6.

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Question No. 8

Responding Witness: Lonnie E. Bellar

- Q-8. Reference the June 9, 2023 Supplemental Response to PSC-DR-2-58.
- a. Given the shift of the proposed Mercer County solar facility from the previous choice of the “Southern Land” to the “Northern Land,” explain whether this increases the cost estimates for the project. If so, explain whether the Companies’ modeling needs to be revised to reflect any such additional cost.
 - b. Based on the response to subpart a. of this question, if there are increased costs, explain whether ratepayers or shareholders will be responsible for them.
 - c. Confirm that the Companies have already paid Savion for its site development work on the Southern Land.
 - d. Explain whether it is the Companies’ intent to sell the Southern Land to Mercer County, or to give it to the County. If the latter, confirm that this will be a shareholder expense.
 - e. Confirm that Savion will incur additional expense for site development work on the Northern Land. If confirmed, explain whether Marion County, or the Companies will pay Savion for this work.
 - f. Explain what will happen in the event Savion is unable to close on the remaining tracts in the Northern Land needed for the proposed Mercer County Solar Facility.
 - e. Explain the role of the State Economic Development Cabinet in this matter, including whether any grants or loans are involved in this transaction.
 - f. In light of the new developments which the Companies provided in this updated response, explain whether shareholders or ratepayers bear the

financial risk of any and all additional costs that could arise in the event the Companies are unable to proceed with the solar facility, as proposed in the CPCN filing.

A-8.

- a. No additional modeling is needed. This potential shift would include additional cost, but property acquisition is a minor component of the overall project cost and expected incremental costs would be covered by project contingency. At this time, it is not anticipated that the increase in property acquisition cost will increase total project costs as modeled. Additionally, the Companies are evaluating the possibility that a shift in the project location would allow the Mercer County Solar project to be eligible for the Energy Community Tax Credit Bonus.
- b. The Companies will seek recovery of all prudently incurred costs associated with the project at its final determined location.
- c. Confirmed.
- d. See the response to Mercer County 4-1(vi).
- e. The Companies are not privy to Savion's expenses. As noted in the Supplemental Response referenced in this question, the purchase price for the Northern Land includes \$10,000,000 for development work. If both parties to the agreement meet all conditions, the Companies will pay Savion for the work associated with the Northern Land.
- f. The agreement transfers Option 1 and Option 2 from Savion to the Companies.
- e. The Economic Development Cabinet is interested in conversations that involve possibilities of new industrial sites and buildings that may be suited for economic development projects. In this case, the Cabinet is aware of the possibility of a new site in Mercer County that could be suited for economic development activity, the Cabinet has submitted the site for prospect consideration, and the Cabinet has been in communication with the Companies and the community to understand the availability of acreage and certainty of ownership as prospect evaluation continues.

The Companies assume the question is referring to grants or loans from the Economic Development Cabinet. There are no grants or loans from the Economic Development Cabinet involved in this transaction.

- f. The Companies' acquisition of the Southern Land is the only additional financial development. Prior to Commission approval of cost recovery for

this land purchase, shareholders carry the risk associated with that acquisition.