

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)	CASE NO.
CONVENIENCE AND NECESSITY AND SITE)	2022-00402
COMPATIBILITY CERTIFICATES AND)	
APPROVAL OF A DEMAND SIDE MANAGEMENT)	
PLAN)	

COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION
TO LOUISVILLE GAS AND ELECTRIC COMPANY
AND KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company and Kentucky Utilities Company (jointly, LG&E/KU), pursuant to 807 KAR 5:001E, shall file with the Commission an electronic version of the following information. The information requested is due on May 11, 2023. The Commission directs LG&E/KU to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

Each response shall include the question to which the response is made and shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

LG&E/KU shall make timely amendment to any prior response if LG&E/KU obtain information that indicates the response was incorrect or incomplete when made or, though correct or complete when made, is now incorrect or incomplete in any material respect.

For any request to which LG&E/KU fail or refuse to furnish all or part of the requested information, LG&E/KU shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied and scanned material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, LG&E/KU shall, in accordance with 807 KAR 5:001E, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to the Direct Testimony of Stuart A. Wilson (Wilson Direct Testimony), Exhibit SAW-2 Confidential Workpapers Folder, 02_Plesox, 01_Results,

CONFIDENTIAL_20221212_Combined_Solution_Views_2061-2073.xlsx, Summary tab.

Explain the significance of the colored cells in this Excel file.

2. Refer to Stuart Direct Testimony, Exhibit SAW-2, Public Workpapers Folder, 02_PLEXOS\ folder, RetirementSavings.csv.

a. Provide a detailed explanation of how these savings were calculated, including a breakdown of all associated savings.

b. Explain whether the savings were calculated prior to Stage One, Step One and then used as inputs in the PLEXOS model (or other step/model) or whether those savings are calculated based on model outputs.

c. Provide all additional workpapers that support this calculation in a live, unlocked Excel document with all formulas and links intact.

d. This spreadsheet includes retirement savings values for all LG&E/KU's coal units. Confirm that the only units that the model was given the option to retire were Brown 3, Ghent 2, and Mill Creek 2. If not confirmed, list any other units that were available for the model to retire.

3. Refer to Wilson Direct Testimony, Exhibit SAW-2 Confidential Workpapers folder, 02_Plexos, CONFIDENTIAL_20221212_2022RFP_PLEXOS_Screening_Inputs_0308.xlsx, DataTable tab. Also refer Wilson Direct Testimony, Exhibit SAW-2 Confidential Workpapers folder, 02_Plexos, 01_Results, CONFIDENTIAL_20221212_Combined_Solution_Views_2061-2073.xlsx, NewUnits tab.

a. Explain why Brown battery energy storage system (BESS) (Project ID: 15a-B) is not marked as "In_Plexos" in the RFP screening workbook but is included in the combined solution views workbook.

b. Confirm that Brown BESS was not included as a resource option in either of the PLEXOS modeling steps. If not, explain when the decision was made to include it among the resources proposed in this case, and provide the reasoning behind that decision.

c. State whether there were any other resources that were similarly eliminated during the screening step and still entered into PLEXOS and, if so, provide a list of those resources.

4. Refer to Wilson Direct Testimony, Exhibit SAW-2 Confidential Workpapers folder, Confidential_03_PROSYM, Modelinputs, Support, 20221208_NGCC_SCCT_Specs_0308.xlsx, PROSYM Inputs tab. Explain the assumptions regarding the cost adder for each of the resources modeled.

5. Refer to Wilson Direct Testimony, Exhibit SAW-2 Confidential Workpapers folder, Confidential_03_PROSYM, ModelInputs, ExpPlans folder. List the information that can be found in each of the files with the .dat extension.

6. Refer to Wilson Direct Testimony, Exhibit SAW-2 Public Workpapers folder, 02_Plexos, 2022RFP (8.300 R08)_PLEXOS_Database_Export_ExcelFormat.xlsx.

a. Confirm that this file represents the inputs for Stage One, Step One.

b. Provide a description of the contents of each of the tabs listed below:

- (1) Objects;
- (2) Categories;
- (3) Memberships;
- (4) CustomColumns;
- (5) Attributes;

- (6) Properties;
- (7) Reports; and
- (8) Config.

c. Provide a similar file for Stage Two, Step Two.

7. Refer to Wilson Direct Testimony, Exhibit SAW-2 Public Workpapers folder, 02_PLEXOS, 2022RFP (8.300 R08)_PLEXOS_Database_Export_ExcelFormat.xlsx.

Explain why the following two battery options are not included in the file:

- a. NewStorage4_15a-B;
- b. NewStorage4_6g-SB_st.

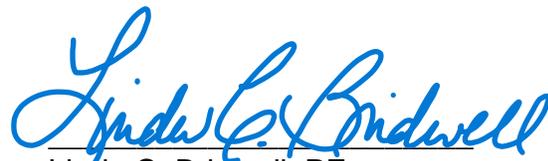
8. Refer to Wilson Direct Testimony, Exhibit SAW-2 Public Workpapers folder, 02_PLEXOS, 2022RFP (8.300 R08)_PLEXOS_Database_Export_ExcelFormat.xlsx.

When filtering data for “Spinning Reserves,” the only objects that show up are thermal resources including existing and new resources.

- a. Describe all the ancillary services modeled in PLEXOS (capacity expansion) and provide the required levels for all portfolios.
- b. Provide a list of all resources that can provide each of the ancillary services.
- c. If energy storage is not allowed to provide ancillary services, explain why.
- d. Explain whether ancillary service requirements differ in PROSYM.
- e. Explain whether the ability to provide ancillary services differs by resource between PLEXOS and PROSYM.

9. Refer to Wilson Direct Testimony, Exhibit SAW-2 Public Workpapers folder, 02_PLEXOS, 2022RFP (8.300 R08).xml. Confirm that this file is the same as 2022RFP (8.300 R08)_PLEXOS_Database_Export_ExcelFormat.xlsx. If not confirmed, provide this file in Excel format.

10. Refer to the Direct Testimony of Tim A. Jones (Jones Direct Testimony), CONFIDENTIAL-Exhibit TAJ-3, Confidential Workpapers folder, Hourly_Forecast_Updates, PV, Price Needed to Meet Total Project Costs, Price Needed for Energy Exported to Grid to Meet Total Project Costs_SAW.xlsx, Model tab. Provide the source and justification for the assumptions in capital escalation for solar capital cost.



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DATED APR 17 2023

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