

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY )	
KENTUCKY, INC. TO BECOME A FULL )	
PARTICIPANT IN THE PJM INTERCONNECTION )	CASE NO.
LLC, BASE RESIDUAL AND INCREMENTAL )	2024-00285
AUCTION CONSTRUCT FOR THE 2027/2028 )	
DELIVERY YEAR AND FOR NECESSARY )	
ACCOUNTING AND TARIFF CHANGES )	

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION  
TO DUKE ENERGY KENTUCKY, INC.

Duke Energy Kentucky, Inc. (Duke Kentucky), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on October 18, 2024. The Commission directs Duke Kentucky to the Commission's July 22, 2021 Order in Case No. 2020-00085<sup>1</sup> 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 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

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<sup>1</sup> 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).

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.

Duke Kentucky shall make timely amendment to any prior response if Duke Kentucky obtains 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 Duke Kentucky fails or refuses to furnish all or part of the requested information, Duke Kentucky 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, Duke Kentucky shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to the Application, page 4. As a Fixed Resource Requirement (FRR) participant in PJM Interconnection LLC (PJM), Duke Kentucky's generation units are required to be available and submitted into the PJM's Duke Energy Ohio Kentucky (DEOK) zonal capacity market to satisfy its load obligations. If Duke Kentucky is long on

capacity and its participation in the Reliability Pricing Model (RPM) construct to sell excess capacity is limited, explain how it is compensated for its excess capacity.

2. Refer to the Application, page 5. Explain the degree to which Duke Kentucky is allowed to procure bilateral capacity from outside the DEOK zone. Include in the response whether the constraints are related to the availability of uncommitted capacity, excessive costs, or some other factor.

3. Refer to the Application, page 5. List the anticipated changes to PJM's FRR construct that would negatively impact Duke Kentucky's participation as an FRR entity.

4. Refer to the Application, page 8. Describe the bilateral markets that Duke Kentucky would participate in outside of the PJM RPM auctions.

5. Refer to the Application, pages 8–9. Explain why Duke Kentucky proposes to increase the sharing percentage for capacity markets.

6. Refer to the Direct Testimony of John D. Swez (Swez Direct Testimony) page 7, footnote 7. Explain whether the 3 percent collar or hold back on excess capacity is in addition to Duke Kentucky's required reserve margin.

7. Explain Duke Kentucky's load, net summer and winter capacity ratings, required reserve margin and hold back for the present and six upcoming PJM capacity years.

8. Under the RPM construct, explain whether there is a reliability mechanism analogous to 3 percent collar. If not, explain why there is no need for a similar mechanism.

9. Refer to the Swez Direct Testimony page 9, lines 20–23 and page 10, lines 1–2.

a. Provide the minimum size and timing of a growth in load that would outpace Duke Kentucky's ability to procure baseload generation.

b. Explain whether Duke Kentucky is aware of any pending large and sudden load growth such as from a data center in the DEOK zone.

c. Explain whether and how the expected location of data centers or other sudden large loads are located within adjacent PJM load zones, but not in the DEOK zone, would affect the capacity market in the DEOK zone.

10. Refer to the Swez Direct Testimony page 10, lines 2–6.

a. Provide a list of all participants in the DEOK zone with generating assets. Identify which entities have announced unit retirements, and provide the unit names and locations, the respective unit capacity, and the announced or expected retirement dates.

b. Explain whether these entities that announced unit retirements participate as PJM FRR or RPM entities (if known) and are or will be required to find replacement capacity for their respective unit retirements.

c. Since the DEOK zone has been constrained in three of the last six years, explain whether Duke Kentucky's transition to an RPM construct have an effect on future constraints, if at all.

d. Explain whether Duke Kentucky has been purchasing or anticipates purchasing capacity through a bilateral contract at any time this calendar year and for each of the next five years.

e. With respect to the DEOK zone, explain what actions Duke Kentucky has either seen, has taken, are in the process of being implemented, or have been announced over the last six years that would alleviate the capacity constraints in future.

11. Refer to the Swez Direct Testimony page 7, lines and Attachment JDS-1, Tab Inputs.

a. On page 7, explain how the net summer capacity of 1,076 MW and the 1,300 MW figures were derived.

b. Explain why on page 7, Duke Kentucky discusses its base load requirements in terms of net summer capacity ratings (1,076 MW) and in the cost benefit study, generation capacity appears to be nameplate (1,300 MW).

c. In the Inputs Tab, explain why the RPM reserve margin declines as the BRA price increases and how that is different from the reserve margin requirement for FRR entities.

12. Refer to the Swez Direct Testimony Attachment JDS-1, Tab All Outputs. The study appears to ignore any dynamic changes over time and to assume that each result is unchanged over time. Confirm that this is the case. If not confirmed, explain why this conclusion is not accurate.

13. Refer to the Swez Direct Testimony Attachment JDS-1 generally. Refer also to Case No. 2024-00197,<sup>2</sup> Figure 7.1, page 61. Explain how the cost benefit study results would change if it were to be conducted reflecting Duke Kentucky's estimated

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<sup>2</sup> Case No. 2024-00197, *Electronic 2024 Integrated Resource Plan of Duke Energy Kentucky, Inc.* (filed June 21, 2024).

generation portfolio changes as derived and presented in the Integrated Resource Plan (IRP).



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DATED   OCT 04 2024  

cc: Parties of Record

Case No. 2024-00285

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