

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	
KENTUCKY, INC. FOR A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY TO)	
CONVERT ITS WET FLUE GAS)	
DESULFURIZATION SYSTEM FROM A)	
QUICKLIME REAGENT PROCESS TO A)	CASE NO.
LIMESTONE REAGENT HANDLING SYSTEM AT)	2024-00152
ITS EAST BEND GENERATING STATION AND)	
FOR APPROVAL TO AMEND ITS)	
ENVIRONMENTAL COMPLIANCE PLAN FOR)	
RECOVERY BY ENVIRONMENTAL)	
SURCHARGE MECHANISM)	

COMMISSION STAFF'S THIRD 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 November 15, 2024. The Commission directs Duke Kentucky 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.

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. Provide a status update associated with the negotiations of the supply offer for the lime reagent referenced in the motion for stay of proceeding filed October 11, 2024.

a. If Duke Kentucky has reached a final agreement, provide the agreement.

b. If Duke Kentucky has not reached a final agreement, provide a monthly update of the ongoing evaluation of the supply offer until this case is final or the Commission orders otherwise. Include in the monthly updates the status of negotiations, the date of the next meeting to discuss the offer and provide any updated drafts of the agreement.

c. Confirm that, should Duke Kentucky reach an agreement prior to a final Order being issued in this matter, it intends to withdraw this application. If not confirmed, explain the response.

2. If the Commission were to approve Duke Kentucky's application and proposed current and future projects, provide a timeline, using both specific month and year, with the information set forth below. Include in the response, considerations for PJM approval, Commission approval, and procurement/construction of the projects.

a. When the Wet Flue Gas Desulfurization conversion project construction would begin;

b. When the Wet Flue Gas Desulfurization conversion project would be fully constructed and useful;

c. When Duke Kentucky would file an application with the Commission to convert East Bend to a dual fuel unit and the date for when the unit would be fully

constructed and useful as proposed in Duke Kentucky's 2024 Integrated Resource Plan (IRP);²

d. When Duke Kentucky would file an application with the Commission to convert East Bend from a dual fuel unit to a natural gas combined cycle (NGCC) unit; and

e. When the East Bend NGCC unit would be fully constructed and useful as proposed in Duke Kentucky's 2024 IRP.

3. Refer to Duke Kentucky's 2024 IRP page 4;

a. Provide a summary of the costs of the East Bend Dual Fuel Operation Project that is included in the plan;

b. Provide a detailed analysis of the impact the Dual Fuel Operation Project is expected to have on the economic viability of the East Bend Facility.

c. Explain how Duke Kentucky's proposed environmental compliance plan would be utilized at East Bend if the unit is converted to dual fuel. Include in the response whether Duke Kentucky would anticipate refiling an updated environmental compliance plan before the East Bend conversion or if Duke Kentucky's current environmental compliance plan would comply with the East Bend conversion.

4. Refer to Duke Kentucky's response to Commission Staff's Second Request for Information, Item 8. Provide a detailed explanation for the limestone conversion project cost difference between the Midwest Resource Planning Model of \$58 million verses Duke Kentucky's estimate of \$125.8 million.

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

5. Refer to the Application, page 6, paragraph 15, and the Direct Testimony of John Verderame, pages 14–16. Provide the cost estimate details for each of the three alternatives considered including:

- a. Limestone conversion project;
- b. Alternative lime source; and
- c. On-Site mixing of a Mag-Lime product.

6. Refer to the Direct testimony of Sierra Club witness Chelsea Hotaling, page 6, line 15, detailing the analysis of Duke Kentucky provided data which indicates that the East Bend facility incurred negative net revenue. Provide for years 2018 through 2024 year to date, the following revenue and cost profile for the East Bend facility:

- a. Total gross revenue;
- b. Total costs; and
- c. Total net revenue.

7. Refer to Duke Kentucky's response to Sierra Club's First Request for Information, Item 15. Provide specific references, including page numbers, to indicate that the \$125.8 million cost associated with the limestone conversion project are included in the 2024 IRP base case scenario.

8. If the Commission approves Duke Kentucky's proposal to convert East Bend to dual fuel generation as proposed in Duke Kentucky's 2024 IRP, provide the cost estimate for the conversion. Include in this estimate a specific breakdown for each portion of the project.

9. If Duke Kentucky's proposed environmental compliance project is not approved, provide the estimated expense to convert the current East Bend generation

unit to a dual fuel generation unit as described in Duke Kentucky's 2024 IRP. Include in this estimate a specific breakdown for each phase of the project, including permitting, engineering, and construction.

10. Provide the estimated expense to convert East Bend from a dual fuel generation unit to an NGCC as proposed in Duke Kentucky's 2024 IRP. Include in this estimate a specific breakdown for each portion of the project.

11. Specifically, provide a cite to the record in Case No. 2024-00197, where the estimated capital expense related to this environmental compliance project, as proposed is discussed or included. If not included in that case, explain why this project was not included in that plan.



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DATED NOV 08 2024

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