

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

**ELECTRONIC 2024 INTEGRATED RESOURCE
PLAN OF DUKE ENERGY KENTUCKY, INC**) **Case No. 2024-00197**

**SIERRA CLUB’S SECOND SET OF DATA REQUESTS FOR
DUKE ENERGY KENTUCKY, INC.**

Sierra Club hereby submits this Second Set of Data Requests to Duke Energy Kentucky, Inc. (“Duke” or the “Company”). Please provide responses to these data requests below to the undersigned counsel.

GENERAL INSTRUCTIONS

- 1) **Definitions:** For the purposes of these data requests, the following definitions shall apply:
 - a) The term “Duke” means and includes Duke Energy Kentucky, Inc, its parent company or companies (e.g., Duke Energy Corp.), and any and all affiliates and/or subsidiaries, successors, predecessors, agents, consultants, and witnesses in this proceeding, and any and all of their affiliates, subsidiaries, or predecessors.
 - b) The term “Company” means and includes Duke Energy Kentucky, Inc., its parent company or companies (e.g., Duke Energy Corp.) and any and all affiliates and/or subsidiaries, successors, predecessors, agents, consultants, and witnesses in this proceeding, and any and all of their affiliates, subsidiaries, or predecessors.
 - c) “Document” means all written, recorded or graphic matters, however produced or reproduced, pertaining in any manner to the subject of this proceeding, whether or not now in existence, without limiting the generality of the foregoing, all originals, copies and drafts of all writings, correspondence, telegrams, notes or sound recordings of any type of personal or telephone communication, or of

meetings or conferences, minutes of directors or committee meetings, memoranda, inter-office communications, studies, analyses, reports, results of investigations, reviews, contracts, agreements, working papers, statistical records, ledgers, books of account, vouchers, bank checks, x-ray prints, photographs, films, videotapes, invoices, receipts, computer printouts or other products of computers, computer files, stenographer's notebooks, desk calendars, appointment books, diaries, or other papers or objects similar to any of the foregoing, however denominated. If a document has been prepared in several copies, or additional copies have been made, and the copies are not identical (or which, by reasons of subsequent modification of a copy by the addition of notations, or other modifications, are no longer identical) each non-identical copy is a separate "document."

- d) "And" or "or" shall be construed conjunctively or disjunctively as necessary to make the requests inclusive rather than exclusive.
- e) The term "you" and "your" refer to "Duke."
- f) The term "person" means any natural person, corporation, corporate division, partnership, limited liability company, other unincorporated association, trust, government agency, or entity.
- g) The term "regarding" means consisting of, containing, mentioning, suggesting, reflecting, concerning, regarding, summarizing, analyzing, discussing, involving, dealing with, emanating from, directed at, pertaining to in any way, or in any way logically or factually connected or associated with the matter discussed.
- h) The singular as used herein shall include the plural and the masculine gender shall include the feminine and the neuter.
- i) "Identify" or "identifying" or "identification" when used in reference to a person that is a natural person means to state: the full name of the person and any names under which he conducts business; the current employer of the person, the person's job title and classification, the present or last known work address of the person; and, the present or last known telephone number of the person.
- j) "Identify" or "identifying" or "identification" when used in reference to a person other than a natural person means to state: the full name of the person and any names under which it conducts business; the present or last known address of the person; and, the present or last known telephone number of the person.
- k) "Identify" or "identifying" or "identification" when used in reference to a document means to provide with respect to each document requested to be identified by these discovery requests a description of the document that is sufficient for purposes of a request to produce or a subpoena duces tecum, including the following:
 - (a) the type of document (e.g., letter, memorandum, etc.);

- (b) the date of the document;
 - (c) the title or label of the document;
 - (d) the Bates stamp number or other identifier used to number the document for use in litigation;
 - (e) the identity of the originator;
 - (f) the identity of each person to whom it was sent;
 - (g) the identity of each person to whom a copy or copies were sent;
 - (h) a summary of the contents of the document;
 - (i) the name and last known address of each person who presently has possession, custody or control of the document; and,
 - (j) if any such document was, but is no longer, in your possession, custody or control or is no longer in existence, state whether it: (1) is missing or lost; (2) has been destroyed; or (3) has been transferred voluntarily or involuntarily, and if so, state the circumstances surrounding the authorization for each such disposition and the date of such disposition.
- l) “Identify” or “identifying” or “identification” when used in reference to communications means to state the date of the communication, whether the communication was written or oral, the identity of all parties and witnesses to the communication, the substance of what was said and/or transpired and, if written, identify the document(s) containing or referring to the communication.
 - m) “Current” when used in reference to time means in the present time of this data request.
 - n) “Customer” means a person who buys retail electricity on a regular and ongoing basis.
 - o) “Workpapers” are defined as original, electronic, machine-readable, unlocked, Excel format (where possible) with formulas in-tact.

OTHER INSTRUCTIONS

- a) Responses are to be provided in electronic format (e.g., text documents should be in the original word processor file format or PDF, data files should be in Excel).
- b) If you contend that any response to any data request may be withheld under the attorney-client privilege, the attorney work product doctrine or any other privilege or basis, please state the following with respect to each such response in order to

explain the basis for the claim of privilege and to permit adjudication of the propriety of that claim:

- 1) The privilege asserted and its basis;
 - 2) The nature of the information withheld; and,
 - 3) The subject matter of the document, except to the extent that you claim it is privileged.
- c) For any document or set of documents Duke objects to providing to Sierra Club on the grounds it is burdensome or voluminous, please identify the specific document (see instruction (k) above).
- d) These data requests are to be answered with reference to all information in your possession, custody or control or reasonably available to you. These data requests are intended to include requests for information, which is physically within your possession, custody or control as well as in the possession, custody or control of your agents, attorneys, or other third parties from which such documents may be obtained.
- e) If any data request cannot be responded to or answered in full, answer to the extent possible and specify the reasons for your inability to answer fully.
- f) These data requests are continuing in nature and require supplemental responses should information unknown to you at the time you serve your responses to these data requests subsequently become known.
- g) For each response, identify all persons (see instruction (j)) that were involved in the preparation of the answers to the interrogatories below and/or are responsible for compiling and providing the information contained in each answer.
- h) Identify which witness(es) at the hearing is competent to adopt and/or discuss the response.
- i) Please produce the requested documents in electronic format to the following individuals:

Kristin Henry
kristin.henry@sierraclub.org

Joaquin Garcia
joaquin.garcia@sierraclub.org

Nathaniel Shoaff
nathaniel.shoaff@sierraclub.org

- j) Wherever the response to an interrogatory or request consists of a statement that the requested information is already available to the Sierra Club, provide a

detailed citation to the document that contains the information. This citation shall include the title of the document, relevant page number(s), and to the extent possible paragraph number(s) and/or chart/table/figure number(s).

- k) In the event that any document referred to in response to any request for information has been destroyed, specify the date and the manner of such destruction, the reason for such destruction, the person authorizing the destruction and the custodian of the document at the time of its destruction.
- l) Sierra Club reserves the right to serve supplemental, revised, or additional discovery requests as permitted in this proceeding.

DATA REQUESTS

- 2-1. Refer to Company response SIERRA-DR-01-005_Attachment. Please provide the supporting calculations for the PVRR values shown including, but not limited to, post-processing of model outputs or other cost analyses done outside of the model.
- 2-2. Refer to Company response SIERRA-DR-01-009 Attachments 1 through 20.
 - a. Please explain what is included under “fixed cost (\$000)” for East Bend in the Encompass “Resource Annual” report, for each scenario modeled.
 - b. Please provide a breakdown of the fixed costs at East Bend that are included in the model, including calculations that support the values reported in Resource Annual.
 - c. Are there other fixed costs at East Bend that are included in the PVRR but are estimated outside of the model?
 - i. If so, please provide such costs and describe what is included.
 - ii. If not, please explain why not.
- 2-3. Refer to Company response to SIERRA-DR-01-011 Attachment.
 - a. Please provide the data that was used to develop new resource costs.
 - b. Please provided analyses done by or for the Company to develop its final new resource cost inputs used in Encompass.
 - c. If any RFP bid responses were used in developing these costs, please provide such bids and the associated RFP.
- 2-4. Refer to Company response STAFF-DR-01-022.
 - a. Please provide the capital, fixed O&M, and variable O&M costs assumed for co-firing East Bend, including supporting analyses and documentation for these costs.
 - b. Please provide the changes in the operating characteristics of East Bend that would result from these pathways, including supporting analyses and documentation for these changes.

- c. Please provide the capital, fixed O&M, and variable O&M costs assumed for converting East Bend, including supporting analyses and documentation for these costs.
 - d. Please provide the changes in the operating characteristics of East Bend that would result from these pathways, including supporting analyses and documentation for these changes.
- 2-5. Refer to Company response STAFF-DR-01-023.
- a. Please provide the inputs and outputs for modeling of compliance pathways not included in portfolio results shown in the IRP, such as coal CCS.
 - b. Please provide pre- and post-processing files used to develop or analyze these pathways.
 - c. Please provide the capital, fixed O&M, and variable O&M costs assumed for these pathways.
 - d. Please provide any other changes in the operating characteristics of East Bend that would result from these pathways.
- 2-6. Refer to Docket Number 2024-00152, application for a CPCN for converting the wet FGD from a quicklime to a limestone system.
- a. Please provide the capital, fixed O&M, and variable O&M costs associated with this retrofit.
 - b. Were any of the costs in response to (a) included in the IRP modeling?
 - i. If so, please explain where these costs were included, including what inputs were changed and in what scenarios they were changed.
 - ii. If not, please explain why not.
 - c. Please provide the annual costs of quicklime at East Bend assumed in the CPCN modeling.
 - d. Were any of the costs in response to (c) included in the IRP modeling?
 - i. If so, please explain where these costs were included, including what inputs were changed and in what scenarios they were changed.
 - ii. If not, please explain why not.
 - e. Please provide the annual costs of limestone (post conversion) at East Bend assumed in the CPCN modeling.
 - f. Were any of the costs in response to (e) included in the IRP modeling?
 - i. If so, please explain where these costs were included, including what inputs were changed and in what scenarios they were changed.
 - ii. If not, please explain why not.
 - g. Please provide any analyses the Company conducted on the impacts of dispatch costs from converting the FGD.
 - h. Please provide any analyses the Company conducted to estimate the costs and/or benefits of converting the FGD.
 - i. Please provide any other analyses that the Company conducted to evaluate the decision to convert to limestone.

Dated: September 25, 2024

Respectfully submitted,

/s/ Joe F. Childers

Joe F. Childers, Esq.

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Of counsel

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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Second Set of Data Requests is being electronically transmitted to the Commission on September 25, 2024, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

/s/ Bethany Baxter

BETHANY BAXTER