

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:)
)
ELECTRONIC APPLICATION OF)
DUKE ENERGY KENTUCKY, INC. FOR)
(1) AN ADJUSTMENT OF ELECTRIC)
RATES; (2) APPROVAL OF NEW)
TARIFFS; (3) APPROVAL OF)
ACCOUNTING PRACTICES TO)
ESTABLISH REGULATORY ASSETS)
AND LIABILITIES; AND (4) ALL)
OTHER REQUIRED APPROVALS AND)
RELIEF)

CASE NO. 2022-00372

SIERRA CLUB’S SECOND SET OF REQUESTS FOR INFORMATION
TO DUKE ENERGY KENTUCKY, INC.

Sierra Club submits this Second Set of Requests for Information (“RFI”) to Duke Energy Kentucky, Inc. (“Duke”). Sierra Club requests that Duke provide the following information and answer the following questions under oath. Please answer the questions and sub-questions in the order in which they are listed and in sufficient detail to provide a complete and accurate answer to the question. These question(s) are continuing in nature, and if there is a relevant change in circumstances, submit an amended answer, under oath, as a supplement to your original answer. Please state the name of the witness in this proceeding who will sponsor the answer to the question.

Pursuant to the Commission’s December 19, 2022 Order, please provide responses to the following RFIs to the following individuals no later than March 2, 2023:

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DEFINITIONS

Unless otherwise specified in each individual interrogatory or request, “you,” “your,” the “Company,” or “Duke,” refers to Duke Energy Kentucky, Inc., and its affiliates, directors, officers, employees, consultants, attorneys, and authorized agents.

“And” and “or” shall be construed either conjunctively or disjunctively as required by the context to bring within the scope of these interrogatories and requests for production of documents any information which might be deemed outside their scope by another construction.

“Any” means all, each and every example of the requested information.

“Communication” means any transmission or exchange of information between two or more persons, whether orally or in writing, and includes, without limitation, any conversation or discussion by means of letter, telephone, note, memorandum, telegraph, telex, telecopy, cable, email, or any other electronic or other medium.

“Control” means, without limitation, that a document is deemed to be in your control if you have the right to secure the document or a copy thereof from another person or public or private entity having actual possession thereof. If a document is responsive to a request, but is not in your possession or custody, identify the person with possession or custody. If any document was in your possession or subject to your control, and is no longer, state what disposition was made of it, by whom, the date on which such disposition was made, and why such disposition was made.

“Document” refers to written matter of any kind, regardless of its form, and to information recorded on any storage medium, whether in electrical, optical or electromagnetic form, and capable of reduction to writing by the use of computer hardware and software, and includes all copies, drafts, proofs, both originals and copies either (1) in the possession, custody or control of the Company regardless of where located, or (2) produced or generated by, known to or seen by the Company, but now in their possession, custody or control, regardless of where located whether or still in existence. Such “documents” shall include, but are not limited to, applications, permits, monitoring reports, computer printouts, contracts, leases, agreements, papers, photographs, tape recordings, transcripts, letters or other forms of correspondence, folders or similar containers, programs, telex, TWX and other teletype communications,

memoranda, reports, studies, summaries, minutes, minute books, circulars, notes (whether typewritten, handwritten or otherwise), agenda, bulletins, notices, announcements, instructions, charts, tables, manuals, brochures, magazines, pamphlets, lists, logs, telegrams, drawings, sketches, plans, specifications, diagrams, drafts, books and records, formal records, notebooks, diaries, registers, analyses, projections, email correspondence or communications and other data compilations from which information can be obtained (including matter used in data processing) or translated, and any other printed, written, recorded, stenographic, computer-generated, computer-stored, or electronically stored matter, however and by whomever produced, prepared, reproduced, disseminated or made. For purposes of the production of “documents,” the term shall include copies of all documents being produced, to the extent the copies are not identical to the original, thus requiring the production of copies that contain any markings, additions or deletions that make them different in any way from the original.

“Identify” means:

- a. With respect to a person, to state the person’s name, address and business relationship (e.g., “employee”) vis-à-vis the Company;
- b. With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

“Person” means, without limitation, every natural person, corporate entity, partnership, association (formal or otherwise), joint venture, unit operation, cooperative, municipality, commission, governmental body or agency.

“Relating to” or “concerning” means and includes pertaining to, referring to, or having as a subject matter, directly or indirectly, expressly or implied, the subject matter of the specific request.

“Workpapers” are defined as original, electronic, machine-readable, unlocked, unlocked, in native format, and with formulae and links intact.

INSTRUCTIONS

1. The Definitions, Instructions, and Claim of Privilege set out in this Request for Information apply to these questions.
2. In answering these questions, furnish all information that is available to you, including information in the possession of your agents, employees, and representatives, all others from whom you may freely obtain it, and your attorneys and their investigators.
3. Please answer each question based upon your knowledge, information, or belief, and any answer that is based upon information or belief should state that it is given on that basis.
4. If you have possession, custody, or control of the originals of these documents requested, please produce the originals or a complete copy of the originals and all copies that are different in any way from the original, whether by interlineation, receipt stamp, or notation.
5. If you do not have possession, custody, or control of the originals of the documents requested, please produce copies of the documents, however made, in your possession, custody, or control. If any document requested is not in your possession or subject to your control, please explain why not, and give the present location and custodian of any copy or summary of the document.
6. If any question appears confusing, please request clarification from the undersigned counsel.
7. In providing your responses, please start each response on a separate page and type, at the top of the page, the question that is being answered.
8. As part of the response to each question, please state, at the bottom of the answer, the name and job position of each person who participated in any way, other than providing clerical assistance, in the preparing of the answer. If the question has sub-parts, please identify the person or persons by sub-part. Please also state the name of the witness in this docket who will sponsor the answer to the question and who can vouch for the truth of the answer. If the question has sub-parts, please identify the witness or witnesses by sub-part.
9. Rather than waiting to provide all of the responses at the same time, please provide individual responses as each becomes available.

10. Wherever the response to a request for information consists of a statement that the requested information is already available to Sierra Club, please provide a detailed citation to the document that contains the information. The citation shall include the title of the document, relevant page number(s), and to the extent possible paragraph number(s) and/or chart(s)/table(s)/figure number(s).

11. 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.

12. These questions are continuing in nature. If there is a change in circumstances or facts or if you receive or generate additional information that changes your answer between the time of your original response and the time of the hearings, then you should submit, under oath, a supplemental response to your earlier answer.

13. If you consider any question to be unduly burdensome, or if the response would require the production of a voluminous amount of material, please call the undersigned counsel as soon as possible in order to discuss the situation and to try to resolve the problem. Likewise, if you object to any of the questions on the grounds that the question seeks confidential information, or on any other grounds, please call the undersigned counsel as soon as possible.

14. If the response to any question is voluminous, please provide separately an index to the materials contained in the response.

15. If the information requested is included in previously furnished exhibits, workpapers, or responses to other discovery inquiries or otherwise, in hard copy or electronic format, please furnish specific references thereto, including Bates Stamp page citations and detailed cross-references.

16. Data should be provided in native electronic format including active EXCEL workbooks and all linked workbooks, with all formulas, cell references, links, etc., intact, functioning, and complete for all tables, figures, and attachments in the testimony.

17. To the extent that a question asks for the production of copyrighted material, it is sufficient to provide a listing of such material, indicating the title, publisher, author, edition, and page references relied on or otherwise relevant to the question.

18. Sierra Club reserves the right to serve supplemental, revised, or additional discovery requests as permitted in this proceeding.

PRIVILEGE

If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any request for information or request for production, describe the basis for your claim of privilege in sufficient detail so as to permit meaningful evaluation of the validity of the claim. With respect to documents for which a privilege is claimed, produce a “privilege log” that identifies the author, recipient, date and subject matter of the documents or interrogatory answers for which you are asserting a claim of privilege and any other information pertinent to the claim that would likewise enable evaluation of the validity of such claims.

REQUESTS FOR INFORMATION

- 1.1 Please refer to CONFIDENTIAL SIERRA-DR-01-015 regarding forecasted energy revenues for East Bend.
 - a. Please confirm that these values apply to the base gas price scenario. If not, please state which gas price scenario they correspond to.
 - b. Please provide the energy revenue forecast for the missing two scenarios (high gas price, low gas prices, or base gas prices) that was not included in the SIERRA-DR-01-015.
 - c. Please provide the energy revenue forecast for CO₂ Regulation scenario (high gas price, low gas prices, and base gas prices).

- 1.2 Please refer to SIERRA-DR-01-008 CONF Attachment and to Table H.2 in SIERRA-DR-01-003 CONF Attachment, regarding East Bend forecasted capacity factors, variable O&M, fixed O&M and maintenance capital.
 - a. Please confirm that these values apply to the base gas price scenario. If not, please state which gas price scenario they correspond to.
 - b. Please explain why annual values in Table H.2 differ from the annual values contained in SIERRA-DR-01-008 CONF Attachment, specifically capacity factors, variable O&M, fixed O&M and maintenance capital.
 - c. Please provide all values for East Bend in Table H.2 for the No Carbon Regulation scenario (high gas price, low gas price, and base gas price).

- 1.3 Please refer to Table H.2 in SIERRA-DR-01-003 CONF Attachment regarding East Bend's projected cost and operating information from 2021-2035.
 - a. Clarify what is included in the line item "Fixed O&M + Maintenance Capital". Confirm that it includes both Fixed O&M that is included in rates, and sustaining capital costs that are included in rate base.
 - b. Please explain how sustaining capital costs are incorporated into resource planning modeling.
 - c. If sustaining capital expenditures are not included in Table H.2, please provide a forecast of sustaining capital expenditures for all available years.

- 1.4 Please refer to Kroger 1-2(a) regarding East Bend 5 Years Historical Maintenance Expenses.
 - a. State whether maintenance expenses include variable and fixed operating expenses.
 - b. If variable and fixed operating expenses are not included, please provide each for the last five years. Separate variable and fixed operating expenses into two line items, if possible.

- 1.5 Please refer to Mr. McClay's direct testimony regarding Duke Energy's participation in the wholesale capacity markets.
 - a. State whether Duke has performed any analysis over the past 5 years on the costs and benefits of remaining an FRR entity.
 - b. State whether Duke Energy anticipates East Bend will participate in the BRA in the future.
 - i. If yes, provide the year when participation would begin;
 - ii. If yes, state whether Duke Energy expects East Bend to clear the market each year;
 - iii. And if yes, provide a forecast of PJM BRA clearing prices for the DEOK zone and for the years that East Bend would participate.
 - c. Provide all bilateral firm capacity contracts that Duke Kentucky has with other parties.

- 1.6 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the creation of a separate demand charge for distribution demand costs for Rate DT.
 - a. Please identify the costs that the Company proposes to recover through the additional distribution demand charge by name and FERC account.
 - b. Please explain how the costs identified in (a) are currently recovered through Rate DT.
 - c. If the costs identified in (a) are currently recovered through time-varying energy charges, please explain how the costs are allocated to each period (on-peak vs. off-peak). In particular, please explain whether the costs are weighted more towards one period versus the other.
 - d. Please provide the workpapers in native format showing the derivation of the proposed distribution demand charge of \$6.23/kW and the corresponding reduction in other rate components.

- 1.7 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the off-peak structure of Rate DT and the potential for customers to adopt electric vehicle off peak charging behavior.
- a. Please explain whether “off peak” as used by Witness Sailors refers to (i) usage outside of system coincident peak hours, (ii) usage outside of local distribution peak hours, or (iii) something else.
 - b. Does the Company anticipate that future electric vehicle off-peak charging behavior of customers on Rate DT may impact the need for distribution system upgrades? If yes, please explain in detail how.
 - c. Does the Company anticipate that future electric vehicle on-peak charging behavior of customers on Rate DT may impact the need for distribution system upgrades? If yes, please explain in detail how.
- 1.8 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the off-peak structure of Rate DT and the potential for customers to adopt electric vehicle off peak charging behavior.
- a. How many electric vehicle customers currently take service on Rate DT?
 - b. How many customers have approached the Company regarding potentially electrifying their fleets, and who would potentially take service on Rate DT?
 - c. Has the Company had any discussions with its customers or electric vehicle industry members regarding challenges to fleet electrification? If yes, please explain what challenges have been identified.
 - d. Has the Company had any discussions with its customers or electric vehicle industry members regarding challenges to public charging station deployment? If yes, please explain what challenges have been identified.
 - e. Does the Company expect that its proposed additional demand charge for Rate DT would improve the economics of fleet electrification for customers or hinder it? Please explain and provide all analysis the Company has performed regarding this topic.
 - f. Does the Company expect that its proposed additional demand charge for Rate DT would improve the economics of public charging stations or hinder it? Please explain and provide all analysis the Company has performed regarding this topic.
- 1.9 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the creation of a separate demand charge for distribution demand costs for rate DT. For each category of costs proposed to be recovered through the distribution demand charge, please provide the allocator(s) used in the cost of service study and a description of how the allocator(s) is computed. For example, if the allocator is “K206 – Distribution Line – Secondary”, please explain whether this is measured based on the average of the DT class’s monthly peak demands, or whether it is measured based on the maximum of the sum of the individual customers’ maximum non-coincident demands.
- 1.10 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the creation of a separate demand charge for distribution demand costs for rate DT. For each category of costs proposed to be recovered through the distribution demand charge, please identify

the major cost drivers for that cost category. For example, if an included cost category is distribution substations, please indicate whether the cost is primarily driven by the maximum aggregate summer demand of customers served by that substation, or whether the cost is primarily driven by something else (such as an individual customer's non-coincident demand).

- 1.11 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the creation of a separate demand charge for distribution demand costs for rate DT.
 - a. For each category of costs proposed to be recovered through the distribution demand charge, to the extent known, please identify when demand on each type of equipment tends to reach its maximum (e.g., during summer afternoons, during winter mornings, etc.).
 - b. For each category of costs proposed to be recovered through the distribution demand charge, has the Company conducted any analysis of how the peak demand on the equipment may shift in the future due to electric vehicle adoption? If yes, please provide all such data and analysis in native format.

- 1.12 Refer to the direct testimony of Bruce Sailors, page 10, lines 14-20 regarding the creation of a separate demand charge for distribution demand costs for rate DT.
 - a. Does the Company maintain records of when (date and time) each substation reaches its maximum demand? If yes, for each of the last three years, please provide the following data in a working Excel file. If the data requested are not available, please provide data that most closely matches that requested.
 - i. The substation identifier (number or name),
 - ii. The date and time of each substation peak,
 - iii. The maximum demand in kVA,
 - iv. The seasonal ratings for the substation,
 - v. The number of customers served by that substation.
 - b. Does the Company maintain records of when (date and time) each feeder reaches its maximum demand? If yes, for each of the last three years, please provide the following data in a working Excel file. If the data requested are not available, please provide data that most closely matches that requested.
 - i. The feeder identifier (number or name),
 - ii. The date and time of each feeder peak,
 - iii. The maximum demand in kVA,
 - iv. The seasonal ratings for the feeder,
 - v. The number of customers served by that feeder.

- 1.13 Regarding the current Rate DT (Electric Tariff Sheet No. 41) as shown on Page 3 of 34 attached to the direct testimony of Bruce Seilers.
 - a. Please identify the costs that the Company currently recovers through the existing Summer on-peak demand charge by name and FERC account, and the allocator used for these costs.
 - b. Please identify the costs that the Company currently recovers through the existing Winter on-peak demand charge by name and FERC account, and the allocator used for these costs.

- c. Please identify the costs that the Company currently recovers through the existing off-peak demand charge by name and FERC account, and the allocator used for these costs.
- 1.14 Refer to the direct testimony of Bruce Sailors, page 25, lines 20-21 regarding the proposed change of the determination of billing demand to include the higher of the on-peak period demand or 50 percent of the off-peak period demand.
- a. Please identify the costs that the Company currently recovers through the Rider LM on-peak demand charge by name and FERC account.
 - b. Please explain whether “on peak” as used by Witness Sailors refers to (i) usage during system coincident peak hours, (ii) usage during local distribution peak hours, or (iii) something else.
 - c. Does the Company anticipate that future electric vehicle off-peak charging behavior of customers on Rider LM may impact the need for distribution system upgrades? If yes, please explain in detail how.
 - d. Does the Company anticipate that future electric vehicle on-peak charging behavior of customers on Rider LM may impact the need for distribution system upgrades? If yes, please explain in detail how.
- 1.15 Refer to the direct testimony of Bruce Sailors, page 25, lines 16-21 regarding the potential of customers on Rates DS and DP to adopt electric vehicle off-peak charging behavior.
- a. How many electric vehicle customers currently take service on Rate DS and Rate DP?
 - b. How many customers have approached the Company regarding potentially electrifying their fleets, and who would potentially take service on Rate DS and Rate DP?
 - c. Does the Company expect that its proposed off-peak demand charge for Rider LM for customers on Rate DS and Rate DP would improve the economics of fleet electrification for customers or hinder it? Please explain and provide all analysis the Company has performed regarding this topic.
 - d. Does the Company expect that its proposed additional demand charge for Rider LM for customers on Rate DS and Rate DP would improve the economics of public charging stations or hinder it? Please explain and provide all analysis the Company has performed regarding this topic.
- 1.16 Refer to the direct testimony of Bruce Sailors, page 25, lines 20-21 regarding the proposed change of the determination of billing demand to include the higher of the on-peak period demand or 50 percent of the off-peak period demand for Rider LM.
- a. For each category of costs proposed to be recovered through the Rider LM demand charge, please provide the allocator(s) used in the cost of service study and a description of how the allocator(s) is computed. For example, if the allocator is “K206 – Distribution Line – Secondary”, please explain whether this is measured based on the average of the DT class’s monthly peak demands, or whether it is measured based on the maximum of the sum of the individual customers’ maximum non-coincident demands.

- b. For each category of costs proposed to be recovered through the Rider LM demand charge, please identify the major cost drivers for that cost category. For example, if an included cost category is distribution substations, please indicate whether the cost is primarily driven by the maximum aggregate summer demand of customers served by that substation, or whether the cost is primarily driven by something else (such as an individual customer's non-coincident demand).
- c. For each category of costs proposed to be recovered through the Rider LM demand charge, to the extent known, please identify when demand on each type of equipment tends to reach its maximum (e.g., during summer afternoons, during winter mornings, etc.).
- d. For each category of costs proposed to be recovered through the Rider LM demand charge, has the Company conducted any analysis of how the peak demand on the equipment may shift in the future due to electric vehicle adoption? If yes, please provide all such data and analysis in native format.

Dated: February 17, 2023

Of counsel

(not licensed in Kentucky)

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Respectfully submitted,



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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Second Request for Information in this action is being electronically transmitted to the Commission on February 17, 2023; and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.



JOE F. CHILDERS