

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

In the Matter of:

ELECTRONIC 2021 INTEGRATED)	CASE NO.
RESOURCE PLAN OF DUKE)	2021-00245
ENERGY KENTUCKY, INC.)	

SIERRA CLUB’S SUPPLEMENTAL REQUESTS FOR INFORMATION TO DUKE

Pursuant to the Commission’s September 9, 2021, Order, Sierra Club hereby propounds the following supplemental requests for information to Duke Energy Kentucky, Inc. (“Duke” or “the Company”), in the above-captioned proceeding.

The Company shall answer these data requests in the manner and timeframe set forth in the aforementioned Order, including by no later than December 17, 2021. Please produce the requested documents in electronic format whenever possible, and to the following recipient:

Matthew E. Miller
Sierra Club
2528 California Street
Denver, CO 80205
Email: matthew.miller@sierraclub.org

Wherever the response to an interrogatory or request consists of a statement that the requested information is already available to 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(s)/table(s)/figure number(s).

In the event that any document referred to in response to any request 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.

Sierra Club reserves the right to serve supplemental and/or revised discovery requests as permitted in this proceeding.

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, officers, directors, employees, and 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 or 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 that you have the right to secure a 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. “Documents,” for purposes of the production of the same, 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. 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.

“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.

“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, Excel format (where possible) with formulas intact.

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 interrogatory or request for production, describe the basis for your claim of privilege in sufficient detail so as to permit Sierra Club or the Commission to evaluate 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 enable Sierra Club or the Commission to evaluate the validity of such claims.

TIME

Unless otherwise provided, the applicable time period for each of these requests for information is January 1, 2016, to the present.

REQUESTS FOR INFORMATION

1. Refer to IRP pp. 12-13, 42, 64-65. Please confirm that the “Reference with a Carbon Regulation” scenario is considered by Duke to be the 2021 IRP’s “base case” (p.12).
 - a. If not confirmed, please explain why not, and explain what instead constitutes the IRP’s “base case.”
2. Refer to IRP pp. 12 & 42, and to Duke Response to AG-DR-01-001(j) (“Q: Based on all facts and circumstances known today, and recognizing the rapidly changing regulatory environment, provide the year for East Bend’s retirement which [Duke] believes to be most likely.” “A: At the time of this IRP analysis, the Company believes that the most likely retirement year for East Bend 2 is 2035, as indicated in the preferred portfolio”).
 - a. Please confirm that, where the IRP indicates (at p.42) “With the base gas assumption [and also “optimized with carbon regulation”], the retirement of East Bend 2 is accelerated to 2027 and replaced with gas generation and solar,” that refers to the Reference with a Carbon Regulation scenario and the retirement date favored thereunder.
 - b. Please confirm that the Reference with a Carbon Regulation scenario continues to reflect “those expectations considered [by Duke to be] most likely to unfold over the 15-year planning period with no major disruptions to the business environment.” (p.12)
 - c. Please discuss the reconcilability of Duke’s belief that 2035 is “the most likely” retirement date for East Bend 2 “[b]ased on all facts and circumstances known today” (Response to AG-DR-01-001(j)), on the one hand, with Duke’s belief that the Reference with a Carbon Regulation circumstances are “the most likely to unfold”

and Duke’s judgment that East Bend 2 should be retired under 2027 in that scenario, on the other hand.

3. Refer to IRP pp. 34-35 & Fig. 4.1, and pp. 167-68 & CONFIDENTIAL Table H.2.
 - a. Please identify and provide the technical source or sources (exhaustively) supporting the “typical capacity factor” listed for each supply-side resource listed in Fig. 4.1.
 - b. Please confirm that those capacity factors refer to annual capacity factors (if not confirmed, please explain).
 - c. Please confirm that the base case utilizes those respective capacity factor assumptions/projections for all potential future additions of supply-side capacity resource options (e.g., all gas CCs are assumed to have a 70% capacity factor, all CTs 10%, and so on, per the figure).
 - i. If not confirmed, please identify the respective capacity factors that the base case includes instead for each resource (and if a capacity factor projection varies over the years for a given resource, identify the capacity factor projection for each year); and explain the basis/bases for each choice.
4. Refer to IRP pp. 4-5 and to Duke Energy Corporation’s website, specifically the Climate Change – Environment webpage, <https://www.duke-energy.com/Our-Company/Environment/Global-Climate-Change>, indicating that the Duke family of utilities, across several states, has “set ambitious climate goals for our company, striving toward at least a 50% reduction in CO2 emissions from electricity generation in 2030 on the way to net-zero CO2 by 2050.”¹
 - a. Please identify the reference year for that reduction goal (i.e., 50% compared to what year).
 - b. Please confirm that those emissions reduction goals refer to the goals of Duke Energy Corporation across its subsidiaries, only one utility of which is Duke Energy Kentucky. If not confirmed, please clarify.
 - i. Identify any analogous goal/target/etc. for CO2 emissions reductions that Duke Energy Kentucky in particular may have, specific to its own generation.

¹ See also the following statement on the same webpage: “With this focus and the continued collaboration of regulators, elected officials and stakeholders, we’re confident we can meet our goals and secure a clean energy future for the millions of Americans we are proud to serve.”

- c. Please discuss how Duke Energy Corporation’s fleetwide CO2 emissions reductions goals are taken by Duke Energy Kentucky and factored into its own plans and resource decisions, identifying the steps or ways in which that happens as granularly, specifically, and concretely as possible. Conversely, if Duke Energy Corporation’s fleetwide CO2 emissions reductions goals are not weighed or otherwise taken into account in any tangible, specific ways by Duke Energy Kentucky in the course of its modeling and planning, please so state.
 - d. Please provide an of estimate:
 - i. the emissions reduction (in %), relative to the same year identified in response to (a) above, that would be associated with the IRP’s “propos[al] [of] 16% of renewable resources in 2030.” (p.4)
 - ii. the emissions reduction (in %), relative to the same year identified in response to (a) above, that would be associated with the IRP’s scenario of “35% of generation com[ing] from renewables by 2030.” (p.5)
 - e. Please discuss whether a future of either 16% or 35% of Duke Energy Kentucky’s generation coming from renewable resources in 2030 would be compatible with a 50% reduction in Duke’s emissions by 2030.
5. Please explain whether the 2021 IRP’s load forecasts, and/or other aspects of the IRP’s modeling or analysis, consider and factor in the range of possible futures vis-à-vis electric vehicle (EV) penetration in Duke’s service territory.
- a. If not, please explain that choice not to take EV growth into account.
 - b. If so, please discuss how the IRP does so, and explain why that discussion does not appear explicitly in the IRP (or, if it actually does, identify where).

Dated: November 19, 2021

Respectfully submitted,



Of counsel
(not licensed in Kentucky):

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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of SIERRA CLUB'S SUPPLEMENTAL REQUESTS FOR INFORMATION TO DUKE in this action is being electronically transmitted to the Commission on November 19, 2021; and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.



JOE F. CHILDERS