

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY) CASE No.
KENTUCKY, INC. TO AMEND ITS DEMAND SIDE) 2022-00251
MANAGEMENT PROGRAMS)

ATTORNEY GENERAL’S INITIAL DATA REQUESTS

The intervenor, the Attorney General of the Commonwealth of Kentucky, through his Office of Rate Intervention [“OAG”], hereby submits the following Initial Data Requests to Duke Energy Kentucky, Inc. [“DEK” or “the Company”] to be answered by the date specified in the Commission’s Orders of Procedure, and in accord with the following:

- (1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate request item will be deemed a satisfactory response.
- (2) Identify the witness who will be prepared to answer questions concerning each request.
- (3) Repeat the question to which each response is intended to refer. The OAG can provide counsel for DEK with an electronic version of these questions in native format, upon request.
- (4) These requests shall be deemed continuing so as to require further and supplemental responses if the Companies receive or generate additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.
- (5) Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association, be accompanied by a signed certification of the preparer or 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.

(6) If you believe any request appears confusing, request clarification directly from Counsel for OAG.

(7) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.

(8) To the extent that any request may be answered by way of a computer printout, identify each variable contained in the printout which would not be self-evident to a person not familiar with the printout.

(9) If the Companies have objections to any request on the grounds that the requested information is proprietary in nature, or for any other reason, notify OAG as soon as possible.

(10) As used herein, the words "document" or "documents" are to be construed broadly and shall mean the original of the same (and all non-identical copies or drafts thereof) and if the original is not available, the best copy available. These terms shall include all information recorded in any written, graphic or other tangible form and shall include, without limiting the generality of the foregoing, all reports; memoranda; books or notebooks; written or recorded statements, interviews, affidavits and depositions; all letters or correspondence; telegrams, cables and telex messages; contracts, leases, insurance policies or other agreements; warnings and caution/hazard notices or labels; mechanical and electronic recordings and all information so stored, or transcripts of such recordings; calendars, appointment books, schedules, agendas and diary entries; notes or memoranda of conversations (telephonic or otherwise), meetings or conferences; legal pleadings and transcripts of legal proceedings;

maps, models, charts, diagrams, graphs and other demonstrative materials; financial statements, annual reports, balance sheets and other accounting records; quotations or offers; bulletins, newsletters, pamphlets, brochures and all other similar publications; summaries or compilations of data; deeds, titles, or other instruments of ownership; blueprints and specifications; manuals, guidelines, regulations, procedures, policies and instructional materials of any type; photographs or pictures, film, microfilm and microfiche; videotapes; articles; announcements and notices of any type; surveys, studies, evaluations, tests and all research and development (R&D) materials; newspaper clippings and press releases; time cards, employee schedules or rosters, and other payroll records; cancelled checks, invoices, bills and receipts; and writings of any kind and all other tangible things upon which any handwriting, typing, printing, drawings, representations, graphic matter, magnetic or electrical impulses, or other forms of communication are recorded or produced, including audio and video recordings, computer stored information (whether or not in printout form), computer-readable media or other electronically maintained or transmitted information regardless of the media or format in which they are stored, and all other rough drafts, revised drafts (including all handwritten notes or other marks on the same) and copies of documents as hereinbefore defined by whatever means made.

(11) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

(12) In the event any document called for has been destroyed or transferred beyond the control of the Companies, state: the identity of the person by whom it was destroyed or transferred, and the person authorizing the destruction or transfer; the time, place, and

method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

(13) Provide written responses, together with any and all exhibits pertaining thereto, in one or more bound electronic volumes, separately indexed and tabbed by each response, in compliance with Kentucky Public Service Commission Regulations and Orders.

(14) “And” and “or” should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.

(15) “Each” and “any” should be considered to be both singular and plural, unless specifically stated otherwise.

Respectfully submitted,

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Certificate of Service

Pursuant to the Commission's Orders in Case No. 2020-00085, and in accord with all other applicable law, Counsel certifies that an electronic copy of the forgoing was served and filed by e-mail to the parties of record.

This 9th day of September, 2022



Assistant Attorney General

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1. Refer to Appendix E, Table 2-2. This Table provides customer counts by segment for the Summer 2021 season.
 - a. Provide a version of this Table for the Winter 2021 season, including both participant counts and percentages.
 - b. Provide the counts and percentages of: i) Residential Single-Family customers with electric heat; and ii) Residential Multi-Family customers with electric heat the Company believes exist in its overall residential electric customer population.
 - c. Provide the counts and percentages of: i) Residential Single-Family customers; and ii) Residential Multi-Family customers the Company believes exist in its overall residential electric customer population.

2. Refer to Appendix E, Table 3-2. This Table provides average hourly load impact by event day for the Summer 2021 study period. Please provide a version of Table 3-2 for:
 - a. Winter 2021 events; and
 - b. Summer 2020 events.

3. Refer to Appendix E, Tables 3-1, 3-2, 3-3, 3-4, and the two tables provided in response to OAG-DR-1-2 above. These six Tables provide the average hourly load reductions, either per customer or per event day, for the Summer 2021, Winter 2021, and Summer 2020 seasons.
 - a. Please provide versions of these six tables in the same formats with average hourly energy (kWh) impacts.
 - b. Please also provide a version of Table 1-2, which also provides average hourly load impacts, for average hourly energy impact by season.

4. Refer to Appendix E, Tables 3-1, 3-2, 3-3, 3-4, and the two tables provide in response to OAG-DR-1-2 above. These six Tables provide the average hourly load reductions, either per customer or per event day, for the Summer 2021, Winter 2021, and Summer 2020 events. Please provide versions of these six tables stratified by: i) customers notified via text message; and ii) customers not notified via text message. Include the results of any statistical analyses (such as tests of statistical significance) recommended by the Company's consultant for such stratification.

5. Refer to Appendix E and Section 4.4, beginning on page 68, which describes the baseline development process.
 - a. Please provide the count of customers for which "event-like days" were available for calculating baselines for: i) the Summer 2021 season; ii) the Winter 2021 season; and iii) the Summer 2020 season.

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- b. Of the count of customers provided in response to subpart (a) above, please provide the average number of “event-like days” used to create baselines for: i) the Summer 2021 season; ii) the Winter 2021 season; and iii) the Summer 2020 season.
 - c. Refer to the Company’s response to subpart (a) above. Of the count of customers for which no event-like days were available, provide the count of customers which were deemed “not weather sensitive.”
 - d. Provide the baseline usage values for each program participant (with no personally-identifiable information revealed) for: i) the Summer 2021 season; ii) the Winter 2021 season; and iii) the Summer 2020 season.
6. Refer to Appendix E, Section 4.4, and Step 3 on page 69, which describes the baseline development process for customers for which no “event-like days” were available, but that were deemed “weather sensitive.”
 - a. Discuss any consideration the Company gave to using this process to establish baselines for all PTR pilot participants. If the Company considered using this approach to establish baselines for all customers, please explain why the Company rejected it. If the Company did not consider using this approach to establish baselines for all customers, please explain why it did not.
 - b. Using the approach to establishing baselines described in Step 3, please provide the resulting baseline usage values for each program participant (with no identities revealed) for: i) the Summer 2021 season; ii) the Winter 2021 season; and iii) the Summer 2020 season.
 - c. Refer to Appendix E, Tables 3-1, 3-2, 3-3, 3-4, and the two tables provided in response to OAG-DR-1-2 above. These six Tables provide the average hourly load reductions, either per customer or per event day, for the Summer 2021, Winter 2021, and Summer 2020 seasons. Please provide a version of these tables which recalculates load impacts using the baseline usage values provided in response to subpart (b) above.
7. Refer to Appendix E, and the count of all customers participating in the PTR Pilot. Provide the average per customer energy used by the group of participating customers in:
 - a. 2020
 - b. 2021
8. Refer to the Company’s response to OAG-DR-1-7 above. Provide the average cost of energy per kWh, including both energy included in base rates and any fuel adjustment clauses, for energy consumed by residential customers in:
 - a. 2020
 - b. 2021

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9. Refer to every event day called in the Summer 2021, Winter 2021, and Summer 2020 study periods.
 - a. Identify the PJM LMP Hubs that serve the DEK service area.
 - b. For each event day called in the study periods, for each PJM LMP Hub identified in response to subpart (a) above, provide the day-ahead energy prices by hour issued by PJM for the event day.
 - c. For each event day called in the study periods, for each PJM LMP Hub identified in response to subpart (a) above, provide the actual spot energy prices by hour recorded by PJM for the event day.
 - d. For each PJM LMP Hub identified in response to subpart (a) above, provide the capacity clearing price per MW-year for 2020, 2021, and 2022.
 - e. For each PJM LMP Hub identified in response to subpart (a) above, provide the capacity clearing prices per MW-year for as many years into the future as PJM has announced to date, starting with the capacity clearing price per MW-year for 2023.
10. Refer to the Company's PTR Pilot program generally. Please describe in detail:
 - a. How DEK calculates its minimum capacity requirements, and how PJM's Peak Shaving Adjustment option can be used to reduce minimum capacity requirements.
 - b. How DEK secures capacity for its minimum requirements in the PJM capacity market.
 - c. How DEK energy costs are determined and translated into rates per kWh charged to customers.
 - d. How DEK participates in PJM's day-ahead energy market.
 - e. How DEK participates in PJM's spot energy markets.
 - f. How DEK shares any profits from PJM day-ahead energy and spot energy market participation with DEK customers.
11. Refer to Appendix E, page 67, which states "Duke Energy offers text message alerts but required pilot customers to setup this preference separately after the enrollment process."
 - a. Please explain why Duke Energy chose not to include a text registration option during the enrollment process.
 - b. Provide the count and percentage of PTR pilot participants who successfully registered a telephone number for event notifications in separate actions after the enrollment process.
 - c. For the PTR pilot participants identified in subpart (b) above, provide the average time elapsed (in months) between a participating customer's enrollment and successful registration of a telephone number for event notification.

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12. Refer to Appendix E, page 12, which states “The Summer 2021 season saw many more events than the Summer 2020 event season, which had only two events.” Also refer to page 3, which indicates the pilot was designed for eight Summer events, two winter events, and two flexible events. Given the pilot design, please explain why:
 - a. Only two events were called in the Summer 2020 season;
 - b. Only two events were called in the Winter 2020 season;
 - c. Sixteen events were called in the Summer 2021 season.
13. Refer to the Company’s response to data request 12 above. Explain the impact of a very small number of events on the Consultant’s statistical analyses, addressing such concepts as statistical significance and confidence intervals.
14. Refer to page 10, which states “Duke Energy Started recruitment in late July 2020.” The OAG assumes the late start (the PSC approved the Pilot on April 27, 2020) was the result of the challenges associated with planning, preparing, and distributing a participation offer with such little time remaining before the 2020 Summer season. Given that the Settlement Agreement which prescribes the PTR Pilot was approved by the Commission in PSC Case No. 2016-00152 in May of 2017, explain why Duke Energy was not more prepared to begin recruiting efforts promptly upon Commission approval of the PTR Pilot on April 27, 2020.
15. Refer to Appendix E, page 33, which states “The first two PTR pilot events in August 2020 produced load impacts 2.7 times higher than that of the subsequent summer. However, it is expected the impacts from the 2021 summer are more representative of typical load impacts.” Please provide support for the statement: “However, it is expected that the impacts from the 2021 summer are more representative of typical load impacts.”
16. Refer to Appendix E and the Marketing Survey described beginning on page 36. Please provide copies of the participant and non-participant survey instruments.
17. Refer to Appendix E and the PTR Pilot program generally.
 - a. Provide all recruiting materials and/or e-mails sent to potential participants.
 - b. Provide all “energy savings tip” materials and/or e-mails (or texts) sent to PTR pilot participants once enrolled.
 - c. For each item provided in response to subpart (b) above, provide the date distributed.
18. Refer to Appendix F, page 3, which describes the results of the Company’s supplemental evaluation of PTR pilot results comparing the results of participants with and without WIFI-enabled Thermostats. Please provide:
 - a. The count of customers with WIFI-enabled Thermostats who enrolled in text-messaged event notifications.

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- b. The count of customers without WIFI-enabled Thermostats who enrolled in text-messaged event notifications.
19. Refer to Appendix F, page 7, which states “Given the Commission’s guidance in past proceedings related to programs with low cost-effectiveness scores, the Company proposes to terminate the original group pilot.” Other than “Commission guidance in past proceedings,” please:
 - a. Describe any benefits associated with the termination of the original group pilot;
 - b. Provide any additional justification for terminating the original group pilot the Company may have.
20. Refer to Appendix E, page 78, which cites Decision 13-07-003 issued by the California Public Utilities Commission (CPUC) on July 11, 2013. This Decision refers to, and is based upon, a Staff report dated May 1, 2013, which appears in turn to be based on representations by Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E) and/or their demand response program evaluators in CPUC proceedings A.12-12-016 and A.12-12-017. The OAG is unable to locate the Staff report dated May 1, 2013, nor any of the materials likely available from SCE or SDG&E which likely formed the basis of the claims made in the Staff report, on the CPUC, SCE, or SDG&E websites.
 - a. Please provide the Staff report dated May 1, 2013 cited in CPUC Decision 13-07-003.
 - b. Please provide any SCE and SDG&E demand response program evaluation reports or other materials on which the Staff report dated May 1, 2013 relied.
21. Refer to Appendix F, Page 7, which indicates that the Company calculated a TRC Score of 0.20 for the PTR Pilot, and that the Company projects a TRC Score of 0.32 for a forward-looking PTR program. Please provide all worksheets, calculations, assumptions, estimates, PTR evaluator report data employed (as included in Appendix E), and any other materials required to support the Company's calculation of both of these TRC Scores. Please provide this response in MS Excel spreadsheet format with no pasted values, no hidden or protected cells, and all formulae working and available for the OAG’s review.
22. Refer to the Company’s DSM plan generally. Please provide the following assumptions employed in total resource cost test calculations, by year into the future, for:
 - a. Value of capacity (in \$) per MW (Generation, Transmission, and Distribution)
 - b. Value of energy (in \$) per MWh