**VERIFICATION**

**STATE OF OHIO** )
) **SS:**
**COUNTY OF HAMILTON** )

The undersigned, Bruce Sailers, Director Jurisdictional Rate Administration, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Bruce L. Sailers
Bruce Sailers Affiant

Subscribed and sworn to before me by Bruce Sailers on this 1st day of March, 2023.

Emilie Sunderman
NOTARY PUBLIC

My Commission Expires: July 8, 2027

NOTARY PUBLIC STATE OF OHIO

EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

## VERIFICATION

**STATE OF INDIANA** )
) **SS:**
**COUNTY OF** )

The undersigned, Cormack C. Gordon, Director Transportation Electrification, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Cormack C. Gordon Affiant

Subscribed and sworn to before me by Cormack C. Gordon on this 23 day of February, 2023.

NOTARY PUBLIC

My Commission Expires: 3/26/27

KARA LYNNE LUKEHART
NOTARY PUBLIC
LINCOLN COUNTY, NC
My Commission Expires 3/26/27

**VERIFICATION**

**STATE OF NORTH CAROLINA** )
) **SS:**
**COUNTY OF MECKLENBURG** )

The undersigned, James McClay, Managing Director Natural Gas Trading, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief

James McClay Affiant

Subscribed and sworn to before me by James McClay on this 21 day of February 2023.

NOTARY PUBLIC

My Commission Expires:

SHAMELL M WILSON
My Comm. Expires
NOTARY PUBLIC
July 06, 2026
MECKLENBURG COUNTY, NC

# VERIFICATION

**STATE OF OHIO** )
) **SS:**
**COUNTY OF HAMILTON** )

The undersigned, James E. Ziolkowski, Director, Rates & Regulatory Planning, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

James E. Ziolkowski Affiant

Subscribed and sworn to before me by James E. Ziolkowski on this 1st day of March, 2023.

NOTARY PUBLIC

My Commission Expires: July 8, 2027

EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

**VERIFICATION**

**STATE OF OHIO** )
)
**COUNTY OF HAMILTON** )

**SS:**

The undersigned, Dominic Melillo, Director Asset Management, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Dominic Melillo Affiant

Subscribed and sworn to before me by Dominic Melillo on this 1st day of March, 2023.

NOTARY PUBLIC

My Commission Expires: July 8, 2027

EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

**VERIFICATION**

**STATE OF INDIANA** )
) **SS:**
**COUNTY OF HENDRICKS** )

The undersigned, William C. Luke, VP Midwest Generation, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

William C. Luke, Affiant

Subscribed and sworn to before me by William C. Luke on this 27th day of February, 2023.

NOTARY PUBLIC

TINA HEMMELGARN
Notary Public, State of Indiana
Hendricks County
Commission Number NP0716939
My Commission Expires
November 12, 2026

My Commission Expires: 11/12/26

**VERIFICATION**

**STATE OF NORTH CAROLINA** )
) **SS:**
**COUNTY OF MECKLENBURG** )

The undersigned, Scott Park, Managing Director IRPl & Analytics, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief

Scott Park Affiant

Subscribed and sworn to before me by Scott Park on this 24th day of February 2023.

TINA HEMMELGARN
Notary Public, State of Indiana
Hendricks County
Commission Number NP0716939
My Commission Expires
November 12, 2026

NOTARY PUBLIC

My Commission Expires: 11/12/26

**VERIFICATION**

**STATE OF INDIANA** )
) **SS:**
**COUNTY OF HENDRICKS** )

The undersigned, William C. Luke, VP Midwest Generation, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

William C. Luke, Affiant

Subscribed and sworn to before me by William C. Luke on this 27th day of February, 2023.

NOTARY PUBLIC

TINA HEMMELGARN
Notary Public, State of Indiana
Hendricks County
Commission Number NP0716939
My Commission Expires
November 12, 2026

My Commission Expires: 11/12/26

# KyPSC Case No. 2022-00372
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**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**PUBLIC SIERRA-DR-02-001**

**REQUEST:**

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).

**RESPONSE:**

**CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)**

a. Confirmed

b. Please see SIERRA-DR-02-001 Confidential Attachment.

c. Please see SIERRA-DR-02-001 Confidential Attachment.

**PERSON RESPONSIBLE:** Scott Park

# CONFIDENTIAL PROPRIETARY TRADE SECRET

# SIERRA-DR-02-001
# CONFIDENTIAL ATTACHMENT

# FILED UNDER SEAL

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**PUBLIC SIERRA-DR-02-002**

**REQUEST:**

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).

**RESPONSE:**

**CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachments only)**

a. Yes, the data in Table H-2 is from the Ref Scenario that includes a CO2 tax and the base gas forecast.

b. The values differ because the SIERRA-DR-01-008 Confidential Attachment was inadvertently incorrect. Please see SIERRA-DR-02-002 Confidential Attachment 1 that includes an updated screen shot of Table H-2 and capacity factors, variable O&M, fixed O&M and maintenance capital for the preferred portfolio in all six

scenarios. See SIERRA-DR-02-002 Confidential Attachments 2 through 7 for the corrected scenarios. Combining the six scenarios in the SIERRA-DR-01-008 Confidential Attachment caused the error. Therefore, Duke Energy Kentucky is providing six separate worksheets for each of the six scenarios.

c. Please see SIERRA-DR-02-002 Confidential Attachment 1.

**PERSON RESPONSIBLE:** Scott Park

# CONFIDENTIAL PROPRIETARY TRADE SECRET

# SIERRA-DR-02-002
# CONFIDENTIAL ATTACHMENTS 1 - 7

# FILED UNDER SEAL

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-003**

**REQUEST:**

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.

**RESPONSE:**

a. Yes, the line item "Fixed O&M + Maintenance Capital" includes Fixed O&M and the sustaining capital costs are included in the IRP modeling. The data included in Table H.2 of the IRP as attached in SIERRA-DR-01-003 Confidential Attachment is forecasted data for 2021 – 2035 for purposes of the IRP. It is not meant to reflect what is in the test period in this proceeding.

b. Assuming that "sustaining capital" is intended to mean the same thing as "maintenance capital", those costs are included in the analysis.

c. Please see response (b)

**PERSON RESPONSIBLE:** Scott Park

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-004**

**REQUEST:**

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.

**RESPONSE:**

a. Maintenance expenses do not include variable and fixed operating expenses.

b. Objection. This request seeks information that is overbroad, irrelevant, and not likely to lead to the discovery of admissible or relevant evidence. Moreover, this request seeks information that does not exist. Without waiving said objection and to the extent discoverable, separation of variable and fixed operating expenses is not available.

**PERSON RESPONSIBLE:** As to objection, Legal
As to response, William C. Luke

**REQUEST:**

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.

**RESPONSE:**

**CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment (c) only)**

a. Duke Energy does periodically perform analysis on the costs and benefits of remaining an FRR entity.

b. Objection. This request is vague and ambiguous as to what is meant by "participate" and thus calls for speculation and guesswork. Without waiving said objection

and to the extent discoverable, East Bend (or Woodsdale) could participate in future PJM BRA auctions if Duke Energy Kentucky had excess generation capacity in a year after fulfilling its FRR capacity obligation.

i. The company has not yet determined whether it will sell any potential excess capacity into the PJM BRA for the 2025/2026 auction to be held in June of 2023.

ii. The unit may or may not clear the auction depending on the clearing price.

iii. Duke Energy Kentucky does not forecast PJM clearing prices.

c. Please see SIERRA-DR-02-005(c) Confidential Attachment.

**PERSON RESPONSIBLE:** As to objection, Legal
As to response, James J. McClay

# CONFIDENTIAL PROPRIETARY TRADE SECRET

# SIERRA-DR-02-005(c)
# CONFIDENTIAL ATTACHMENT

# FILED UNDER SEAL

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-006**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

a. The Rate DT-SEC and Rate DT-PRI distribution demand costs appear on Schedule FR-16(7)(v)-11 DIST Demand in the Company's as-filed Cost of Service Study. This schedule shows the plant and expenses that were functionalized as distribution and classified as demand related. These costs were obtained from the Company's standard

filing schedules, specifically the Schedule B's (plant) and the Schedule C's (expenses). The FERC account numbers appear on the Schedule B's and Schedule C's.

b. The costs identified in (a) are currently recovered through the bundled demand charges and energy charges that recover generation, transmission, and distribution costs.

c. The costs identified in (a) are recovered through the Rate DT summer and winter on-peak and off-peak demand charges and energy charges. Generation and transmission costs are generally allocated to the rate classes based on contribution to the Company's coincident peaks. The peaks occur in most months during the late afternoon or early evening. Distribution costs are generally allocated to the rate classes based on average or non-coincident peak demands that can occur any time of the day. Rate DT was originally established in the 1980s with high on-peak demand charges and low off-peak demand charges. The purpose of the bundled rate design over the years was to encourage customers to move usage from on-peak to off-peak periods to reduce loading on the generation plants despite the potential negative impact on distribution plant cost recovery. This rate design has been carried forward over the years.

d. Please see response to STAFF-DR-01-056, Attachment -SCH-M and N Test Period, the "Proposed Rates" tab.

**PERSON RESPONSIBLE:** James E. Ziolkowski – a. thru c.
Bruce L. Sailers – d.

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-007**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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 Sailers 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.

**RESPONSE:**

a. Company witness Sailers references the "off peak" structure of Rate DT as those hours are defined in Rate DT.

b. The Company has not performed such studies. However, the Company does anticipate increased adoption of electric vehicles over time.

c. The Company has not performed such studies. However, the Company does anticipate increased adoption of electric vehicles over time.

**PERSON RESPONSIBLE:** Bruce L. Sailers

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-008**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

a. The requested information is not available.

b. The Company is aware of one specific customer. However, informally, the Large Account Management team has talked with multiple customers regarding electric vehicles. The exact number is not available.

c. Yes. Generally, industry concerns are that the pace, scale and clustered load effect of electric fleets may create scenarios in which current paradigms for responding to service requests create cost burden and timelines that are not conducive to desired market speed for fleet EV conversion and therefore additional paradigms may need to be explored.

d. Yes. To date, challenges observed in the deployment of public charging stations are primarily in supply chain and lead times for fast charging equipment, utility distribution transformers, distribution panels behind the meter and similar materials. Other challenges can include site host agreements, easements required for utility service, and permitting delays with local authorities having jurisdiction.

e. The individual customer's future potential electric vehicle charging patterns are not known and therefore the Company cannot conclude whether the proposed distribution demand charge will improve, hinder, or be of no significant impact to fleet electrification. However, the Company does believe the proposed distribution demand charge will recover distribution demand related costs more equitably based on a customer's peak monthly use of the distribution system.

f. The individual customer's future potential electric vehicle charging patterns are not known and therefore the Company cannot conclude whether the proposed distribution demand charge will improve, hinder, or be of no significant impact to fleet

electrification. However, the Company does believe the proposed distribution demand charge will recover distribution demand related costs more equitably based on a customer's peak monthly use of the distribution system.

**PERSON RESPONSIBLE:** Bruce L. Sailers – a., b., e., f.
Bruce L. Sailers / Cormack C. Gordon – c., d.

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-009**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

The following table shows descriptions for the plant and O&M allocators for the distribution demand cost items:

| DISTRIBUTION PLANT - PLANT ALLOCTORS | | | | |
|---|---|---|---|---|
| | SUBSTATIONS | K215 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS |
| | POLES, TOWERS & FIXTURES - PRIMARY - DEMAND | K205 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | POLES, TOWERS & FIXTURES - PRIMARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | POLES, TOWERS & FIXTURES - SECONDARY - DEMAND | K206 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | POLES, TOWERS & FIXTURES - SECONDARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | CONDUCTORS - OVERHEAD / PRIMARY - DEMAND | K205 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | CONDUCTORS - OVERHEAD / PRIMARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | CONDUCTORS - OVERHEAD / SECONDARY - DEMAND | K206 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | CONDUCTORS - OVERHEAD / SECONDARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | CONDUCTORS - UNDERGROUND / PRIMARY - DEMAND | K205 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | CONDUCTORS - UNDERGROUND / PRIMARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | CONDUCTORS - UNDERGROUND / SECONDARY - DEMAND | K206 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | CONDUCTORS - UNDERGROUND / SECONDARY - CUSTOMER | K406 | | CUSTOMER COUNTS |
| | TRANSFORMERS DEMAND RELATED | K215 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS |
| | TRANSFORMERS CUSTOMER RELATED | K406 | | CUSTOMER COUNTS |
| | SERVICES | K217 | | WEIGHTED CUSTOMER COUNTS |
| | METERS | K407 | | METER COSTS |
| | STREET LIGHTS | K401 | | DIRECT ASSIGNMENT TO LIGHTING CLASS |
| | ADJUSTMENT | K209 | | GROSS DISTRIBUTION PLANT |
| | CONSTRUCTION NOT CLASSIFIED | K209 | | GROSS DISTRIBUTION PLANT |
| | RWIP | K215 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS |
| | | | | |
| | RATE BASE ADJUSTMENTS | NP29 | | NET PLANT |

| | | | | |
|---|---|---|---|---|
| **DISTRIBUTION O & M** | | | | |
| | SUBSTATIONS | K201 | | 12 MONTH AVERAGE COINCIDENT PEAK |
| | POLES, TOWERS & FIXTURES | PL49 | | WEIGHTED NET DISTRIBUTION PLANT FOR POLES, TOWERS & FIXTURES |
| | OVERHEAD LINES - PRIMARY / DEMAND | K205 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | OVERHEAD LINES - PRIMARY / CUSTOMER | K406 | | CUSTOMER COUNTS |
| | OVERHEAD LINES - SECONDARY / DEMAND | K206 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | OVERHEAD LINES - SECONDARY / CUSTOMER | K406 | | CUSTOMER COUNTS |
| | UNDERGROUND LINES - PRIMARY / DEMAND | K205 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | UNDERGROUND LINES - PRIMARY / CUSTOMER | K406 | | CUSTOMER COUNTS |
| | UNDERGROUND LINES - SECONDARY / DEMAND | K206 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS WITH WEIGHTING |
| | UNDERGROUND LINES - SECONDARY / CUSTOMER | K406 | | CUSTOMER COUNTS |
| | TRANSFORMERS DEMAND RELATED | K203 | | 12 MONTH AVERAGE NCP |
| | TRANSFORMERS CUSTOMER RELATED | K401 | | DIRECT ASSIGNMENT TO LIGHTING CLASS |
| | OTHER MAINTENANCE | K203 | | 12 MONTH AVERAGE NCP |
| | LOAD DISPATCH | K215 | | 12 MONTH AVERAGE CLASS DIVERSIFIED DEMANDS |
| | METERS | K407 | | METER COSTS |
| | STREET LIGHTING AND SIGNAL SYSTEMS | K401 | | DIRECT ASSIGNMENT TO LIGHTING CLASS |
| | OTHER OPERATIONS | K203 | | 12 MONTH AVERAGE NCP |
| | MISCELLANEOUS EXPENSES ADJUSTMENT | K203 | | 12 MONTH AVERAGE NCP |
| | AFFILIATED COMPANY RENTS ADJUSTMENT | D249 | | WEIGHTED NET TOTAL DIST PLANT RATIOS |

**PERSON RESPONSIBLE:** James E. Ziolkowski

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-010**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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).

**RESPONSE:**

Please see the response to SIERRA-DR-02-009. Allocators used in the Cost of Service Study were selected based on the main cost drivers for that category of cost.

**PERSON RESPONSIBLE:** James E. Ziolkowski

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-011**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

a. Please see the response to SIERRA-DR-02-009. Duke Energy Kentucky normally experiences its peak demands during the summer. Therefore, equipment loading (i.e., substations, transformers, etc.) will generally be at the highest levels during summer afternoons. Less commonly, equipment loads can also reach high levels during extremely cold winter periods. Individual pieces of equipment may vary based on the specific customer load characteristics for the customers the equipment serves.

b. No. The company has not conducted analysis on how future electric vehicle adoption impacts the peak demand for each category of equipment.

**PERSON RESPONSIBLE:** Bruce L. Sailers

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**PUBLIC SIERRA-DR-02-012**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

**CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)**

a. No. The data that most closely matches the requested information is provided in SIERRA-DR-02-012 Confidential Attachment.

b. No. The data that most closely matches the requested information is provided in SIERRA-DR-02-012 Confidential Attachment.

**PERSON RESPONSIBLE:** Dominic "Nick" J. Melillo

# CONFIDENTIAL PROPRIETARY TRADE SECRET

# SIERRA-DR-02-012
# CONFIDENTIAL ATTACHMENT

# FILED UNDER SEAL

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-013**

**REQUEST:**

Regarding the current Rate DT (Electric Tariff Sheet No. 41) as shown on Page 3 of 34 attached to the direct testimony of Bruce Sailers.

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.

**RESPONSE:**

Please see the response to SIERRA-DR-02-006.

The Rate DT summer and winter on-peak demand charges and the off-peak demand charges were not designed to recover costs that occur in specific time periods. Rate DT was designed to encourage load switching from on-peak to off-peak periods to reduce on-peak generation loads. The Company has maintained the general design of Rate DT over the past decades.

**PERSON RESPONSIBLE:** James E. Ziolkowski

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-014**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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 Sailers 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.

**RESPONSE:**

a. Rider LM does not recover any specific costs. Rider LM modifies the demand billing determinants that are used calculate bills for participating customers who are served under Rate DS or Rate DP.

b. The term “on peak” refers to the definition of “on peak” that is contained within the Rider LM tariff sheet.

c. Unknown.

d. Unknown.

**PERSON RESPONSIBLE:** Bruce L. Sailers

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-015**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

a. The requested information is not available.

b. Informally, the Large Account Management team has talked with multiple customers regarding electric vehicles. The exact number is not available.

c. Neither. The Company does not propose an off-peak demand charge for Rider LM.

d. The individual charging station's future potential electric vehicle charging patterns are not known and therefore the Company cannot conclude whether the proposed change to the demand billing determinant will improve, hinder, or be of no significant impact to the economics of public charging stations. However, the Company does believe the adjustment to Rider LM's determination of the demand billing determinant will recover demand related costs more equitably based on a customer's peak monthly demand or 50% of their off-peak demand. Finally, the Company would also note that the low load factor provisions in Rates DS and DP, specifically the cap rate provisions, remain in place.

**PERSON RESPONSIBLE:** Bruce L. Sailers

**Duke Energy Kentucky**
**Case No. 2022-00372**
**SIERRA CLUB Second Set Data Requests**
**Date Received: February 17, 2023**

**SIERRA-DR-02-016**

**REQUEST:**

Refer to the direct testimony of Bruce Sailers, 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.

**RESPONSE:**

a. Rider LM does not recover any specific costs. Rider LM modifies the demand billing determinants that are used to calculate bills for participating customers who are served under Rate DS or Rate DP.

b. Please see the response to part (a).

c. Please see the response to part (a).

d. No.

**PERSON RESPONSIBLE:** Bruce L. Sailers