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 30TH day of JANUARY, 2024.

Adele M. Frisch
NOTARY PUBLIC

My Commission Expires: 1/5/2029

VERIFICATION

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

The undersigned, Matt Kalemba, Managing Director IRP and Analytics - Midwest, 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.

Matt Kalemba Affiant

Subscribed and sworn to before me by Matt Kalemba on this 1 day of February 2024.

Sheila Lemoine
Notary Public
Lincoln County
North Carolina
My Commission Expires 7/21/2024

Sheila Lemoine
NOTARY PUBLIC

My Commission Expires: July 21, 2024

VERIFICATION

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

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

Dominic Melillo Affiant

Subscribed and sworn to before me by Dominic Melillo on this 23rd day of January, 2024.

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)
)
COUNTY OF HENDRICKS)

SS:

The undersigned, Timothy J. Hohenstatt, Director Transmission 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.

Timothy J. Hohenstatt, Affiant

Subscribed and sworn to before me by Timothy J. Hohenstatt on this 26TH day of JANUARY 2024.

NOTARY PUBLIC

My Commission Expires: 10/26/29

JOHN W LONGSHORE, JR.
Notary Public - Seal
Marion County - State of Indiana
Commission Number NP0737063
My Commission Expires Oct 26, 2029

KyPSC Case No. 2023-00413
TABLE OF CONTENTS

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-001

REQUEST:

Provide the number of customers who have submitted an application to take service under Rider NM I but whose eligible generating facility has not yet been put into service as of the date of the response to this request.

RESPONSE:

There are 110 customers who have applied for net metering service (i.e., Rider NM I) but are not yet in service as of January 10, 2024.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-002

REQUEST:

Refer to the Direct Testimony of Bruce L. Sailers (Sailers Direct Testimony), page 13, line 4 through page 14, line 10.

a. Explain whether a potential net metering customer must have submitted its application for net metering prior to the effective date of Rider NM II to take service under Rider NM I, or whether their eligible generating facility must be in service prior to the effective date of Rider NM II to take service under Rider NM I.

b. Confirm that, during the 25-year period following the effective date of Rider NM II, a customer with an eligible generating facility served under Rider NM I that has a rated capacity of 10 kW can replace a non-functioning solar panel and increase the system's capacity by up to 10 kW without being removed from Rider NM I. If not confirmed, explain why not.

RESPONSE:

a. A customer's eligible generating facility must be in service prior to the effective date of Rider NM II to take service under Rider NM I.

b. The interconnection study is performed based on the capacity rating of the customer's inverter for the eligible generating facility, and not the capacity of the customer's solar panels. A Rider NM I customer may replace non-functioning solar panels and may also increase the panel capacity consistent

with the capability of the system's inverter as approved in the interconnection study. These actions will not cause the customer to be moved to Rider NM II. However, if the customer increases the capacity of their inverter relative to the approved capacity in the interconnection study, a new net metering/interconnection application and new interconnection study are required, and the customer will be moved to Rider NM II as available.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-003

REQUEST:

Refer Sailers Direct Testimony, page 14, lines 21–22. Explain why Duke Kentucky is proposing to make customers ineligible for Rider NM II if they are taking service under Rider AMO or temporary service.

RESPONSE:

The net metering billing process for Rider NM II uses interval meter data for both consumption from the grid, channel 1, and export to the grid, channel 3, of the Company's standard smart meters. If a customer elects to participate in Rider AMO, there is no interval meter data process available for the customer to participate in Rider NM II.

Temporary service accounts are typically for builders during site construction. Once a permanent account is established with a customer, an application can be submitted for net metering service.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-004

REQUEST:

Refer to Sailers Direct Testimony, page 18, lines 8–9.

a. Explain why a 25-year cost recovery period was utilized. Include in the response how Duke Kentucky estimates the useful life of a CT.

b. Provide the net present value calculation that was used to discount the avoided capacity costs. Include in the response how the net present value calculation was derived.

c. Provide the PJM Effective Load Carrying Contribution (ELCC) sheet used by Duke Kentucky for fixed tilt solar resources.

RESPONSE:

a. The Company has a general understanding that the Commission has directed a long-run review of avoided costs. This long-run review would refer to the life of a rooftop solar facility. For example, on page 41 of the Commission's order in Case No. 2020-349 dated September 24, 2021, the Commission states as a guiding principle, "Conduct forward-looking, long-term, and incremental analysis. A utility makes economic decisions that consider the entire life of a project, and such long-term analysis should also apply to an eligible customer-generator. Given that the typical warranty provided by a solar panel manufacturer is 25 years, this would be an appropriate analysis period for LG&E/KU's net metered customers." The Company uses a 25-year period as a reasonable time frame for the Avoided Cost Excess

Generation Credit (ACEGC) analysis. The 25-year assumption is not the Company's estimated useful life of a CT.

b. The calculation is provided in Confidential Attachment BLS-3 to Mr. Sailers testimony.

c. PJM Effective Load Carrying Contribution (ELCC) values can be found at https://www.pjm.com/planning/resource-adequacy-planning/effective-load-carrying-capability. The values used convert the 2022/23, 2023/24, 2024/25 delivery years, and forward into annual calendar year values. The value used for delivery year 2022/23 is 50%, for 2023/24 is 38%, for 2024/25 is 36%, for 2025/26 is 36%, and for 2026/27 is 18%. The values for 2027 and later are held constant at the 2026 calendar year value. See the reports on the PJM link above.

    i. ELCC Class Ratings for 2023-2024 3IA, 2025-2027 BRA and 2026-2027 BRA.PDF (used for the 2022/2023 Delivery Year value),

    ii. ELCC Class Ratings for 2023-2024 BRA.PDF (used for the 2023/2024 delivery year value),

    iii. ELCC Class Ratings for 2024-2025 BRA.PDF (used for the 2024/2025 delivery year value),

        1. Note that this document was updated with a value of 33% instead of the previous value of 36%. At the time, a value was not readily available for 2025/2026 and 36% was used.

    iv. The estimate used for the 2026/2027 delivery year is sourced from the report found at www.pjm.com/-/media/committees-groups/cifp-

ra/2023/20230727/20230727-item-02a---cifp---pjm-proposal-update---july-27.ashx on page 61 in the summer column.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-005

REQUEST:

Refer to the Direct Testimony of Matthew Kalemba (Kalemba Direct Testimony), pages 4–5, lines 15–8. Explain whether there is a difference between the forecasted Locational Marginal Prices (LMP) energy costs and the real time energy costs. If so, then explain why Duke Kentucky would rather utilize forecasted LMP energy prices rather than real-time LMP energy prices.

RESPONSE:

There is no difference between the forecasted LMPs in this filing and a forecast of real time energy prices. The Encompass model evaluates the forecasted hourly load, the previous hour's generation, and forecasted generation dispatch costs in solving for each hour's LMP which is how PJM determines its hourly RT LMPs.

PERSON RESPONSIBLE: Matthew Kalemba

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

STAFF-DR-01-006

REQUEST:

Refer to the Kalemba Direct Testimony, page 7, lines 5–14.

a. Explain why Duke Kentucky used a natural gas fired CT as the avoided resource. Include in the explanation any work papers or modeling that indicated when or whether Duke Kentucky intends to construct a natural gas fired CT.

b. Explain whether Duke Kentucky's third-party consultants utilized a publicly available source, such as the National Renewable Energy Laboratory (NREL), to calculate the avoided capacity costs for a CT. If not, then explain why not.

RESPONSE:

a. The Peaker Methodology, used by Duke Kentucky in this proceeding, assumes that when a utility's generating system is operating at equilibrium, the installed fixed capacity cost of a CT unit (a "peaker") plus the variable marginal energy cost of running the system will produce a reasonable proxy for the marginal capacity and energy costs that a distributed resource allows the Company to avoid. Under the peaker methodology, even if a utility's next planned unit is not a simple cycle peaker, the peaker methodology still accurately represents a valid estimate of the utility's avoided costs. From an installed cost perspective, a simple cycle peaking unit is typically the least expensive type of traditional resource that the Company can construct to provide capacity for reliability purposes.

b. The third-party consultant does not utilize publicly available data when developing CT costs. The consultant is involved with engineering, procuring, and constructing these technologies and has first-hand knowledge of the costs to construct CTs. The information they provide is often the most up-to-date view of costs available which is not always the case with public sources that can rely on older market data. Additionally, the consultant made regional adjustments so that the costs are aligned to the Midwest rather than a national average cost, which is part of the benefit of using their numbers.

PERSON RESPONSIBLE: Matthew Kalemba

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

PUBLIC STAFF-DR-01-007

REQUEST:

Refer to Attachment BLS-3 CONF, Avoided Capacity tab. [redacted]

[redacted]

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

[redacted] is used for the O&M component. [redacted]

[redacted] is used for the combustion turbine component.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2023-00413
STAFF's First Set Data Requests
Date Received: January 19, 2024

PUBLIC STAFF-DR-01-008

REQUEST:

Refer to Attachment BLS-3 CONF, Avoided T and D tab.

a. [redacted].

b. [redacted] Include any workpapers in unlocked Excel format, if necessary.

c. [redacted] Include any workpapers in unlocked Excel format, if necessary.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

a. [redacted].

b. [redacted].

c. [redacted].

PERSON RESPONSIBLE: Bruce L. Sailers – a.
Nick Melillo – b.
Tim Hohenstatt – c.

PUBLIC STAFF-DR-01-009

REQUEST:

Refer to Attachment BLS-3 CONF, Res Rate Calculation tab.

a. Explain the 5.4 percent in distribution line losses, including any work papers or calculations to support the percentage.

b. Explain the 0.785 percent in transmission line losses, including any work papers or calculations to support the percentage.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

a. Please refer to STAFF-DR-01-009 Confidential Attachment. The 5.4 percent distribution line loss is shown on the [redacted].

b. Please refer to STAFF-DR-01-009 Confidential Attachment. The 0.785 percent transmission line loss is shown on the [redacted].

PERSON RESPONSIBLE: Nick Melillo – a.
Tim Hohenstatt – b.

CONFIDENTIAL PROPRIETARY TRADE SECRET

STAFF-DR-01-009
CONFIDENTIAL ATTACHMENT

FILED UNDER SEAL