COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

| ELECTRONIC APPLICATION OF KENTUCKY |) |
|---------------------------------------|-----------------------|
| UTILITIES COMPANY FOR AN ADJUSTMENT |) |
| OF ITS ELECTRIC RATES AND APPROVAL OF |) CASE NO. 2025-00113 |
| CERTAIN REGULATORY AND ACCOUNTING |) |
| TREATMENTS |) |

RESPONSE OF KENTUCKY UTILITIES COMPANY TO

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND MOUNTAIN ASSOCIATION'S THIRD REQUESTS FOR INFORMATION

DATED SEPTEMBER 12, 2025

FILED: SEPTEMBER 23, 2025

| COMMONWEALTH OF KENTUCKY |) |
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| COUNTY OF JEFFERSON | í |

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Senior Director — Business and Economic Development for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

John Bevington

Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22, 2027



| COMMONWEALTH OF KENTUCKY | |
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| COUNTY OF JEFFERSON |) |

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Robert M. Conroy

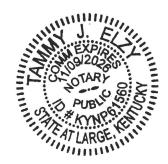
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22 day of 5e ptember 2025.

Notary Public Slay

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026



| COMMONWEALTH OF KENTUCKY | , |
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| COUNTY OF JEFFERSON | , |

The undersigned, **Andrea M. Fackler**, being duly sworn, deposes and says that she is Manager - Revenue Requirement/Cost of Service for LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

Andrea M. Fackler

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Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

mary 22, 2027

| COMMONWEALTH OF KENTUCKY |) |
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| COUNTY OF JEFFERSON |) |

The undersigned, **Michael E. Hornung**, being duly sworn, deposes and says that he is Manager of Pricing/Tariffs for LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Michael E. Hornung

Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22, 2027

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COMMONWEALTH OF KENTUCKY)

COUNTY OF JEFFERSON

The undersigned, **Drew T. McCombs**, being duly sworn, deposes and says that he is Director - Regulatory Accounting for PPL Services Corporation and he provides services to Kentucky Utilities Company and Louisville Gas and Electric Company, that he has personal knowledge of the matters set forth in the responses, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Drew T. McCombs

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of September 2025.

Notary Public Elm

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026

| COMMONWEALTH OF KENTUCKY | , |
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| COUNTY OF JEFFERSON | 1 |

The undersigned, **Elizabeth J. McFarland**, being duly sworn, deposes and says that she is Vice President, Transmission for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

Elizabeth J. McFarland

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of September 2025.

Notary Public

Notary Public ID No. KYNP14646

My Commission Expires:

10-16-2028

| COMMONWEALTH OF KENTUCKY |) |
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| COUNTY OF JEFFERSON |) |

The undersigned, **Shannon L. Montgomery**, being duly sworn, deposes and says she is the Vice President, Customer Services for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

Shannon L. Montgomery

Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22 2027

| COMMONWEALTH OF KENTUCKY |) |
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| COUNTY OF JEFFERSON |) |

The undersigned, **Charles R. Schram**, being duly sworn, deposes and says that he is Vice President –Energy Supply and Analysis for Kentucky Utilities Company and Louisville Gas and Electric Company and is an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Charles R. Schram

Church Rochum

Notary Public ID No. KINP32193

My Commission Expires:

04/25/2029

JENNIFER LYNN VINCENT NOTARY PUBLIC Commonwealth of Kentucky Commission # KYNP32193 My Commission Expires 6/25/2029

| COMMONWEALTH OF KENTUCKY | |
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| COUNTY OF JEFFERSON | |

The undersigned, Peter W. Waldrab, being duly sworn, deposes and says that he is Vice President, Electric Distribution, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Subscribed and sworn to before me, a Notary Public in and before said County

Mary a Whaly
Notary Public ID No. <u>HYNP92214</u>

My Commission Expires:

September 11, 2028

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.1

Responding Witness: Robert M. Conroy / Michael E. Hornung

- Q-3.1. Please refer to Stipulation Testimony Exhibit 1 in Case No. 2025-00045 (July 29, 2025), page 7. Reconcile the Companies' proposed Rate EHLF eligibility thresholds of 100 MVA and 85% load factor with the Stipulation's definition of "Eligible Data Center," which includes facilities with expected or actual peak demand between 50 MVA and 100 MVA and expected or actual monthly load factor of 75% or greater. Please include in the Companies' response its explanation for why Rate EHLF should not apply to all data centers that the Stipulation would deem "Eligible" for purposes of Mill Creek 6 cost recovery.
- A-3.1. No reconciliation is necessary. The Company's proposed Rate EHLF was and is appropriate as filed, including its availability and applicability provisions. The Company has already explained its rationale for the proposed Rate EHLF eligibility thresholds of 100 MVA and 85% load factor in this proceeding, e.g., in the Direct Testimony of Michael E. Hornung.

Note also that the Stipulation to which the request refers states in relevant part:

WHEREAS, it is understood by all Parties hereto that this Stipulation is subject to the approval of the Commission insofar as it constitutes an agreement by the Parties for settlement, and, absent express agreement stated herein, does not represent agreement on any specific claim, methodology, or theory supporting the appropriateness of any proposed or recommended relief, matters, or issues addressed herein; ¹

• • •

8.1. Except as specifically stated otherwise in this Stipulation, entering into this Stipulation shall not be deemed in any respect to constitute an admission by any of the Parties that any computation,

¹ Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates, Case No. 2025-00045, Stipulation Testimony Exh. 1 ("Stipulation") Stipulation at 2 (July 29, 2025).

formula, allegation, assertion or contention made by any other party in this case is true or valid.²

...

8.8. The Stipulation shall in no way be deemed to affect or diminish the jurisdiction of the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.³

...

- 8.11. The Parties agree that, for the purpose of the Stipulation only, the terms are based upon the independent analysis of the Parties to reflect a fair, just, and reasonable resolution of the issues herein and are the product of compromise and negotiation.
- 8.12. The Parties agree that neither the Stipulation nor any of its terms shall be admissible in any court or commission except insofar as such court or commission is addressing litigation arising out of the implementation of the terms herein, the approval of this Stipulation, or a Party's compliance with this Stipulation. This Stipulation shall not have any precedential value in this or any other jurisdiction.⁴

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² *Id.* at 10.

³ *Id*. at 12.

⁴ *Id*.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.2

Responding Witness: John Bevington / Counsel

- Q-3.2. Have the Companies forecasted how many prospective data center customers are 100 MW (and larger), and how many are likely to be 50 MW 99 MW in size? If so, explain the results of that analysis and produce any documentation of the same.
- A-3.2. The Companies object to this request on the grounds that it seeks information that is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving that objection, the Companies have not undertaken such a forecast.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.3

Responding Witness: John Bevington / Counsel

- Q-3.3. Have the Companies reviewed overall national and worldwide projections for data center growth, and compared them against data centers actually being built to determine a ratio of proposed to actual growth? If so, explain the results of that review and produce any documentation of the same. If not, explain why not.
- A-3.3. The Companies object to this request on the grounds that it seeks information that is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving that objection, no.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.4

Responding Witness: John Bevington / Counsel

- Q-3.4. Have the Companies compared data center projections to forecasted chip production capacity to meet data center demands? If chip production capacity is limited, how does that limit potential data center growth?
- A-3.4. The Companies object to this request on the grounds that it seeks information that is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving that objection, no.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.5

Responding Witness: John Bevington / Michael E. Hornung

- Q-3.5. Have the Companies analyzed whether any existing commercial or industrial customers would be eligible for EHLF tariff? If yes, what did the Companies find? If not, why not?
- A-3.5. See the response to Walmart 1-8.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.6

Responding Witness: Michael E. Hornung

- Q-3.6. Did the Companies evaluate including in the EHLF tariff any provisions to encourage load flexibility from EHLF customers? If so, explain why no such terms were included in the tariff. If not, explain why not.
- A-3.6. The definition of "load flexibility" in this context is unclear. If it refers to customers adjusting electricity use based on signals like grid demand or prices, these issues are covered elsewhere in the tariff. For instance, demand response options for EHLF customers will be developed and included within the Company's Demand Side Management programming and tariff.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.7

Responding Witness: Michael E. Hornung / Peter W. Waldrab / Counsel

- Q-3.7. Have the Companies evaluated the potential for using single-point metering for co-location data center facilities rather than metering individual building business tenants? What progress have the Companies made in response to the PSC directive⁵ in developing plans for utilizing and optimizing DERs in sync with in situ DPV and without in situ DPV?
- A-3.7. For information regarding single-point metering for co-location, refer to the response provided to Sierra Club 2-3.

The Companies object to the second part of this request on the grounds that it seeks information that is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving that objection, the Companies state as follows:

The request mischaracterizes the cited paragraph from the Commission's September 24, 2021 orders in the Companies' 2020 base rate cases. The cited paragraph contains no "directive" at all; rather, it merely recounts a directive from a previous order requiring "the parties"—not just the Companies—to file additional evidence in those cases:

Regarding NMS 2, the June 30, 2021 Order directed the parties to file additional evidence for the net metering export compensation rate using the components established in Kentucky Power Company's (Kentucky Power) net metering proceeding, Case No. 2020-00174: avoided energy, ancillary services, generation

⁵ Final Orders, *In the Matters of Electronic Application of Kentucky Utilities Company and Louisville Gas & Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*, Case No. 2020-00349 at 2 (Sept. 24, 2021) and Case No. 2020-00350 Sept. 24, 2021 Final Order at 2: "The Commission also found that additional information regarding advanced distribution management solutions (ADMS) and Distributed Energy Resource Management Systems (DERMS) was necessary because of LG&E/KU's plans to spend significant amounts on ADMS and DERMS to address potential issues with a dynamic distribution system, such as voltage regulation, even though the penetration of such resources on LG&E/KU's system is miniscule and there are other, more affordable alternatives to ADMS and DERMS."

Response to Question No. 3.7 Page 2 of 2 Hornung / Waldrab / Counsel

capacity, transmission capacity, distribution capacity, carbon, and environmental compliance costs, and job benefits as they relate to calculating the NMS 2 export rate. The Commission also found that additional information regarding advanced distribution management solutions (ADMS) and Distributed Energy Resource Management Systems (DERMS) was necessary because of LG&E/KU's plans to spend significant amounts on ADMS and DERMS to address potential issues with a dynamic distribution system, such as voltage regulation, even though the penetration of such resources on LG&E/KU's system is miniscule and there are other, more affordable alternatives to ADMS and DERMS.⁶

Therefore, the purported "directive" cited in the response does not exist.

That aside, refer to Waldrab direct testimony. The Companies are working with industry peer groups including EPRI, EEI, AEIC, SEE, etc., to stay abreast of leading practices regarding DER utilization. The Companies' sister utility, PPL Electric Utilities, is conducting a multi-year DER Management System (DERMS) pilot for a subset of its customers in Pennsylvania. The Companies are monitoring this effort and exploring the merits of such capabilities.

⁶ Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00349, Order at 2 (Ky. PSC Sept. 24, 2021) (internal citation omitted); Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Meter Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00350, Order at 2 (Ky. PSC Sept. 24, 2021) (internal citation omitted).

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.8

Responding Witness: Peter W. Waldrab

- Q-3.8. What analyses have the Companies conducted to determine the potential for DER to be used to optimize existing and future grid resources?
- A-3.8. See the direct testimony of Peter W. Waldrab, Exhibit PWW-3. DERs have the potential to provide a number of grid-related services, including time-shifting peak loads and volt/VAR support, but only if the services are dispatchable. Benefits must be timed with the need to provide, otherwise grid planners and operators must plan for the worst-case scenario. The Companies' sister utility, PPL Electric Utilities, are currently conducting a multi-year DER Management System (DERMS) pilot that the Companies are following closely.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.9

Responding Witness: Shannon L. Montgomery

- Q-3.9. Have the Companies reviewed DR programs in other utility jurisdictions to determine suitability for their jurisdictions? If yes, what did the Companies find? If yes, did the Companies evaluate DR potentials for both winter and summer peaks? If not, why not?
- A-3.9. Yes. The Companies review demand response program offerings at other utilities as part of the normal course of business through engagement with industry research and advisory consultancies, independent research, discussions with peer utilities, and attendance at webinars and conferences.

Past reviews of DR programs at other utilities contributed to the inclusion of three new DR programs in the Companies' current 2024-2030 DSM-EE Program Plan (Peak Time Rebates, Bring Your Own Device, and Optimized EV Charging) which can be used to address summer and winter peaks.

Since the approval of the Companies' 2024-2030 DSM-EE Program Plan, review of DR programs at other utilities contributed to the inclusion of three program enhancements in the Companies' 2024 IRP (Business Demand Response greater than 50 kW and less than 200 kW, BYOD Energy Storage, and BYOD Whole Home Generator). These enhancements are intended to address summer and winter peaks.

The current and planned suite of DR programs allow for all customer segments to participate in a DR program, based on program eligibility, with little to no customer equipment cost to enroll.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.10

Responding Witness: Michael E. Hornung

- Q-3.10. Have the Companies analyzed the financial impacts for DPV owners of using different true-up methods? In particular, have the Companies compared monthly versus instantaneous true-up to determine the difference between methods?
- A-3.10. No. As the Commission has previously stated, KRS 278.465(4) and KRS 278.466(3) require the methodology currently reflected in the Company's Rider NMS-2 tariff provisions. See the response to PSC 4-16 for references and context.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.11

Responding Witness: Charles R. Schram

- Q-3.11. Please elaborate on the Companies' method for calculating the ELCC used for solar generation resources.
 - a. Did the Companies calculate ELCC based on customer load or metered load?
 - b. Did the Companies calculate ELCC based on individual projects or portfolio of projects?
 - c. Does the Commission have guidance on ELCC calculation method? If yes, did the Companies follow that guidance? If not, why not?
- A-3.11. ELCC is not applicable to the Companies' resource planning process because the Companies specify reserve requirements for both the summer and winter on a net capacity basis. Alternatively, MISO and PJM specify capacity needs on an unforced capacity ("UCAP") basis. Because of this difference, the Companies use seasonal "capacity contributions" and not ELCC to account for differences in the way different generation technologies contribute to system reliability. Whereas a seasonal capacity contribution indicates the portion of a resource's seasonal net capacity that contributes to a seasonal net capacity need, PJM, for example, develops ELCC to indicate the portion of a resource's summer net capacity that contributes to a summer UCAP capacity need.

For the Companies, the capacity contribution for a fully dispatchable resource is 100% because the Companies' reserve requirements are specified on a net capacity basis; the use of lower capacity contributions for fully dispatchable resources would cause the Companies to overbuild generation. Seasonal capacity contributions for a battery energy storage system ("BESS") are developed by comparing their impact on LOLE to that of a fully dispatchable SCCT. Capacity contributions for BESS are less than 100% only because of their limited duration, and a BESS's summer and winter capacity contributions are the same because BESS is equally available to serve the Companies' summer and winter peak demands. The methodology the Companies use to develop seasonal capacity contributions for solar is necessarily different because the availability of solar during summer and winter peak demands is very different; solar is typically not

available during the winter peak because the Companies' winter peak typically occurs at night. As a result, the methodology for computing solar capacity contributions is focused on peak hours, and the capacity contribution for solar in the winter is zero. Because solar is typically not available during winter peak hours, the use of a non-zero capacity contribution would shift reliability risk to the peak hours. For this reason and because the Companies' winter reserve requirement is the binding constraint for serving customers reliably, the use of a non-zero winter capacity contribution for solar is not in the best interest of customers.

The Companies explained the method for calculating the *capacity contribution* for solar in the 2024 Integrated Resource Plan ("IRP") as follows:

For solar resources, the Companies calculated winter and summer capacity contributions of 0% and 83.7%, respectively, by evaluating historical solar generation during the Companies' historical peak load hours. The Companies first determined that winter peak loads occur most commonly in hour beginning 7 AM and summer peaks in hours beginning 2 PM or 3 PM, depending on the month. Using these peak load hours, the Companies determined the expected generation during peaks by calculating the median historical solar generation averaged across ten sites in Kentucky for both winter and summer seasons.

- a. The Companies are not calculating ELCC. See the response above.
- b. The Companies are not calculating ELCC. See the response above.
- c. In their September 24, 2021 Order in Case No. 2020-00349 (2020 Rate Case), the Commission stated, "Therefore, the Commission finds that LG&E/KU should implement an ELCC method for valuing resource's capacity contribution." However, while ELCC and the Companies' capacity contributions are both used to account for differences in the way different generation technologies contribute to system reliability, for the reasons listed above, the use of ELCC is not appropriate and not in the best interest of customers.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.12

Responding Witness: Andrea M. Fackler / Elizabeth J. McFarland

- Q-3.12. Please provide transmission rate filings with FERC for the last 5 years along with the associated FERC decisions. Please provide copies of these documents rather than simply refer to the FERC website.
- A-3.12. See attachments being provided in separate files.

Response to Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association's Third Requests for Information Dated September 12, 2025

Case No. 2025-00113

Question No. 3.13

Responding Witness: Drew T. McCombs

- Q-3.13. Please provide the last 5 years of FERC Form 1 filings through 2024. FERC no longer publishes these in a readily readable format and does not include filings older than 2021.
- A-3.13. See attachments being provided in separate files. The attachments provided contain the 2020-2023 KU FERC Form 1 filings. See Tab 41 (807 KAR 5:001 Section 16(7)(k) of the Filing Requirements for the 2024 KU FERC Form 1 filing.