

Kentucky Resources Council

Post Office Box 1070 Frankfort, Kentucky 40602 502-875-2428 hello@kyrc.org www.kyrc.org

Ashley Wilmes Executive Director

Board of Directors Tim Heine Chair

> Jeanne Marie Hibberd Vice-Chair

Abigail Fletcher Secretary

Betsy Rudd Bennett

Briana Bluford

Alison Brotzge-Elder

Joe Childers

Roy Crawford

Sarah Lynn Cunningham

Arnita Gadson

Jim Hays

Prasanthi Persad

Hannah Weinstein

Board Emeritus Roger Shott

Of Counsel Tom FitzGerald January 21, 2025

Via email to psc.comment@ky.gov

Ms. Linda Bridwell, Executive Director Kentucky Public Service Commission 211 Sower Boulevard, Post Office Box 615 Frankfort, Kentucky 40601

Case No. 2024-00305, In the Matter of: ELECTRONIC TARIFF FILING OF KENTUCKY POWER COMPANY TO REVISE ITS INDUSTRIAL GENERAL SERVICE TARIFF

Dear Ms. Bridwell:

Please find for electronic filing in the above-captioned matter *Comments of Appalachian Citizens' Law Center, Kentucky Conservation Committee, and Kentucky Resources Council on Kentucky Power Company Application for Approval for Revisions to Its Industrial General Service Tariff.*

These comments are being filed via email to psc.comment@ky.gov.

Regards,

Byron Garv

Program Attorney

On Behalf of Appalachian Citizens Law Center, Kentucky Conservation Committee, and Kentucky Resources Council

RECEIVED

JAN 21 2025

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC TARIFF FILING OF KENTUCKY POWER COMPANY TO REVISE ITS INDUSTRIAL GENERAL SERVICE TARIFF

CASE NO. 2024-00305

COMMENTS OF APPALACHIAN CITIZENS' LAW CENTER, KENTUCKY CONSERVATION COMMITTEE, AND KENTUCKY RESOURCES COUNCIL ON KENTUCKY POWER COMPANY APPLICATION FOR APPROVAL FOR REVISIONS TO ITS INDUSTRIAL GENERAL SERVICE TARIFF

Dated: January 21, 2025

Byron L. Gary Program Attorney Kentucky Resources Council P.O.Box 1070 Frankfort, Kentucky 40602 (502) 875-2428 byron@kyrc.org

On Behalf of Appalachian Citizens Law Center, Kentucky Conservation Committee, and Kentucky Resources Council

Table of Contents

I. The Proposed Changes Are Consistent with the Commission's Authority	2
II. Public Interest Commenters Support the Proposed Tariff Revisions but Recommend That the Commission Strengthen Them in Several Ways	5
a. Public Interest Commenters agree that the tariff terms should mandate an initial contract period of 20 years	5
b. Public Interest Commenters support the proposed terms related to notice for discontinuing service or reducing contract capacity, along with the proposed discontinuance fee of a five-year minimum billing charge	3
i. The Company should assess whether a notice requirement and discontinuance fee of greater than five years would better serve the tariff goals	
ii. The Company should specify that notice of intent to discontinue service cannot be given during the first five years of the initial contract term	
iii. The Company should include additional terms to further limit the impact of large load customers reducing contract capacity	
c. Public Interest Commenters support the proposed tariffs' heightened requirements for minimum monthly billing demand10)
d. Public Interest Commenters support the proposed tariffs' collateral requirement. 1	1
e. The Company should be required to justify any downward divergence from the tariff requirements12	2
III. Public Interest Commenters Recommend Provisions Pertaining to Cost	
Allocation, Demand Response, Emergency Response, and Information Transparency	z
a. The tariff should include a cost allocation term to ensure that other ratepayers are not subsidizing the costs of adding large load customers	
 b. The Company should commit to concrete steps to assess potential demand response programs for prospective large load customers	3
c. The Company should commit to assessing procedures for emergency load shedding events	7
d. The Company should establish a quarterly reporting requirement regarding large load customer load growth and related investments, to ensure transparency	
IV. Conclusion 20)

COMMENTS OF APPALACHIAN CITIZENS' LAW CENTER, KENTUCKY CONSERVATION COMMITTEE, AND KENTUCKY RESOURCES COUNCIL ON KENTUCKY POWER COMPANY APPLICATION FOR APPROVAL FOR REVISIONS TO ITS INDUSTRIAL GENERAL SERVICE TARIFF

Appalachian Citizens' Law Center, Kentucky Conservation Committee, and Kentucky Resources Council (collectively, "Public Interest Commenters") hereby comment on the proposed revisions to the Industrial General Service Tariff submitted by Kentucky Power Company ("the Company") on August 30, 2024 (hereinafter, the "proposed tariff").

Public Interest Commenters strongly support the creation of tariff terms to protect Kentucky ratepayers from the substantial risks associated with the possible addition of new large load customers. Without such terms, the Company and its existing customers might have to foot the bill for large load related capacity and infrastructure investments that existing customers do not benefit from, especially if the projected demand from large load customers fails to fully materialize.¹ The proposed tariff terms pertaining to contract length, discontinuing service, reducing contract capacity, monthly billing demand, and collateral each help to ameliorate some of that risk. As a result, Public Interest Commenters support the adoption of the proposed tariff, but recommend that it be strengthened in certain key ways. Specifically, in addition to at a minimum the adoption of the proposed tariff terms, Public Interest Commenters recommend that:

1. The tariff includes a pricing adjustment mechanism to ensure that large load customers pay just and reasonable rates throughout the entire contract term;

¹ Company's Resp. to AG Request No. 1-10; *see also* Isabelle Riu et al., Energy + Environmental Economics, *Load Growth Is Here to Stay, but Are Data Centers?*, at 22 (July 2024) ("E3 Load Growth Report"), https://www.ethree.com/wp-content/uploads/2024/07/E3-White-Paper-2024-Load-Growth-Is-Here-to-Stay-but-Are-Data-Centers.pdf ("these operating challenges and large required investments pose major customer affordability, safety, and reliability concerns.").

- The Company assesses whether a notice requirement and discontinuance fee of greater than five years would better serve tariff goals;
- 3. The tariff specifies that notice of intent to discontinue service cannot be given during the first five years of the initial contract term;
- 4. The tariff includes a term capping individual customer yearly contract capacity reductions to 100 MW—or a comparable amount—in any given year;
- 5. The tariff includes a term capping overall yearly contract capacity reductions across large load customers to 5% of the prior year's peak load or a comparable amount;
- 6. The Company assesses whether a minimum monthly billing demand of greater than 90% would better serve tariff goals;
- 7. To the extent that contracts with potential large load customers have less stringent terms than those contained in the proposed tariffs, the Company be required to explain why divergence from the tariff terms is appropriate and provide calculations showing the difference in charges to the customer under the negotiated contract provisions compared to the anticipated charges under the tariff provisions;
- 8. The tariff includes a cost allocation term to ensure that other ratepayers are not subsidizing the costs associated with the addition of large load customers;
- The Company commits to concrete steps to assess the need and potential for demand response programs for prospective large load customers;
- 10. The Company commits to assessing system reliability impacts and emergency procedures related to large load customers; and
- 11. The Company establishes a quarterly reporting requirement regarding large load customer load growth and related investments.

I. The Proposed Changes Are Consistent with the Commission's Authority.

Tariff provisions like the ones contained in the proposed tariffs are necessary to

fulfill the Commission's regulatory duties. The Commission is tasked with ensuring that

the rates utilities charge customers are "fair, just and reasonable."² Without tariff

protections for the Company's existing customers, rates for those customers could

increase substantially if a large load customer unexpectedly leaves the Company's

² KRS 278.030(1); Kentucky Pub. Serv. Comm'n v. Com. ex rel. Conway, 324 S.W.3d 373, 377 (Ky. 2010).

service territory or overestimates projected energy use.³ Such increased rates would not be fair, just, or reasonable.

Across the country, energy demands are projected to increase as a result of the growth in large loads like data centers. In just the past two years, five-year forecasts of electricity growth have increased from 2.8% to 15.8%, driven largely by artificial intelligence data centers, semiconductor chip manufacturing, and battery manufacturing.⁴ PJM in particular has "observed unprecedented data center load growth," which has the potential to utilize "all remnant capacity on the transmission system."⁵ In Kentucky, the Company appears to anticipate the potential addition of "new customers with load requirements that would be significantly larger than [its] current largest customer."⁶ While the Company has not filed information pertaining to the industry or industries of the potential new large load customers, AEP affiliates proposing large load tariffs in other states have made clear that potential new large load additions are primarily from the data center and advanced manufacturing industries.⁷

There remains a high degree of uncertainty as to the scale and impact of this projected load growth, and there is a risk that some of the forecasted energy demand

³ Company's Resp. to AG Request No. 1-10; John D. Wilson, Zach Zimmerman, & Rob Gramlich, *Strategic Industries Surging: Driving US Power Demand*, Grid Strategies, at 21 (Dec. 2024) ("Surging Demand Report"), https://gridstrategiesllc.com/wp-content/uploads/National-Load-Growth-Report-2024.pdf.

⁴ Surging Demand Report at 6.

⁵ *Id.* at 26 (quoting Stan Sliwa et al., *PJM Planning Load Data Needs*, PJM, at 5 (June 26, 2023), https://www.pim.com/-/media/DotCom/committees-groups/subcommittees/las/2023/20230626/20230626-item-04---impact-of-forecasted-large-load-adjustments-in-rtep.pdf).

⁶ Company's Resp. to AG Request No. 1-1.

⁷ See Companies' Resp. to WVEUG Request No. 2-3(c), In the Matter of Appalachian Power Company and Wheeling Power Company's Application for Approval for Revisions to Schedules LCP And IP, Case No. 24-0611-E-T-PW (W. Virginia Public Service Comm'n Nov. 27, 2024),

https://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=632626&NotType=WebDock et; Rebuttal Testimony of Andrew J. Williamson at 19:4-10, *In the Matter of the Verified Petition of Indiana Michigan Power Company for Approval of Modifications to its Industrial Power Tariff*, Cause No. 46097 (Ind. Utility Reg. Comm'n Nov. 4, 2024),

https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/33c410e7-e09a-ef11-8a6a-001dd80bd98a/bb9c6bba-fd 52-45ad-8e64-a444aef13c39?file=46097_IndMich_Submission%20of%20Rebuttal%20Testimony%20of%20Andre w%20J.%20Williamson_110424.pdf.

may not materialize.⁸ For example, tech industry estimates for future data center demand currently range from 10 gigawatts ("GW") to 65 GW, whereas utilities forecast at least 90 GW of additional data center load.⁹ As Grid Strategies LLC recently noted, "business revenues to cover the costs of the artificial intelligence investments have not yet been proven," and the "combination of exuberance and uncertainty raises the question of whether these projects could fail to sustain anticipated power demand."¹⁰ It is also possible that some large load customers may shop the same demand around to different utilities, leading to faulty load growth projections and potential overbuilding.¹¹

Because of this uncertainty, it is crucial that investments to support projected load growth be accompanied by terms to ensure that large load customers are the ones paying for such investments. Large load tariffs have emerged as a key mechanism for reducing revenue risks and improving load growth forecasts from data centers and other large load customers.¹² For example, a large load tariff proceeding in Indiana Michigan

https://www.sierraclub.org/sites/default/files/2024-09/demandingbetterwebsept2024.pdf; E3 Load Growth Report at 27 ("There is still much uncertainty at the macro and micro level regarding the scope and scale of data center growth. However, the key question should not be 'How much will load grow?', but instead 'Where and what kind of load growth can be accommodated in different jurisdictions?'''); *see also* John Engel, *Utility Consumer Advocates Slam PJM's 'Inconsistent' Data Center Load Forecasts*, Power Grid International (July 19, 2024), https://www.power-grid.com/td/transmission/utility-consumer-advocates-slam-pims-inconsistent-data-center-load-fo recasts/.

https://www.woodmac.com/horizons/gridlock-demand-dilemma-facing-us-power-industry/.

⁸ See Jeremy Fisher et al., *Demanding Better: How Growing Demand for Electricity Can Drive a Cleaner Grid*, Sierra Club, at 7 (Sept. 2024) ("Demanding Better"),

⁹ Surging Demand Report at 10, 21; see also Chris Seiple, Gridlock: the Demand Dilemma Facing the US Power Industry, at 3, 6 (Oct. 2024),

¹⁰ Surging Demand Report at 21; *see also* Allison Nathan, Jenny Grimberg & Ashley Rhodes, *Gen AI: Too Much Spend, Too Little Benefit*?, Goldman Sachs Global MacroResearch, Issue 129 (June 25, 2024), <u>https://www.goldmansachs.com/images/migrated/insights/pages/gs-research/gen-ai--too-much-spend%2C-too-little-benefit-/TOM_AI%202.0_ForRedaction.pdf</u>.

¹¹ Demanding Better at 7 ("Some observers have hypothesized that large load customers may be shopping the same demand to multiple utilities, looking for the fastest interconnection process at the lowest cost, a practice which puts utilities at risk of overbuilding for loads that may not materialize."); *see also* Federal Energy Regulatory Commission, *Transcript: Technical Conference Regarding Large Loads Co-Located at Generating Facilities*, at 30:24-25 (Dec. 3, 2024),

https://www.ferc.gov/media/transcript-technical-conference-regarding-large-loads-co-located-generating-facilities ("five utilities tell PJM we have a data center, and in reality we have one, not five").

¹² Surging Demand Report at 17.

Power Company's ("Indiana Michigan" or "I&M") service territory recently resulted in a settlement for a tariff with provisions pertaining to initial contract length, contract termination, contract reduction, minimum monthly charges, and collateral requirements.¹³ The proposed tariff for large load customers in this proceeding would help protect the public by ensuring just, fair, and reasonable rates for all customers.

II. Public Interest Commenters Support the Proposed Tariff Revisions but Recommend That the Commission Strengthen Them in Several Ways.

Public Interest Commenters support the proposed tariff revisions, each of which is a step in the right direction in protecting Kentucky ratepayers from risks associated with the projected increase in large load customers. The proposed tariff terms would help ensure that large load customers are paying for the demand that they are projecting, and that other ratepayers are not stuck with excessive bills if the demand does not materialize or is discontinued or significantly reduced during a contract period. Although Public Interest Commenters support the proposed tariff revisions, they also encourage the adoption of strengthened tariff terms to further protect the Company and ratepayers.

a. Public Interest Commenters agree that the tariff terms should mandate an initial contract period of 20 years.

Public Interest Commenters support the proposed tariff term of a 20-year initial contract length. Substantial investments in the capacity and transmission system will be

¹³ Submission of Unopposed Settlement Agreement at 1-5, *In the Matter of the Verified Petition of Indiana Michigan Power Company for Approval of Modifications to its Industrial Power Tariff*, Cause No. 46097 (Ind. Utility Reg. Comm'n Nov. 22, 2024) ("I&M Unopposed Settlement"),

 $[\]label{eq:https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/4aae5d78-18a9-ef11-8a6a-001dd80bd98a/bb9c6bba-fd 52-45ad-8e64-a444aef13c39?file=46097_IndMich_Submission%20of%20Unopposed%20Settlement%20Agreement%20and%20Unopposed%20Motion%20for%20Acceptance%20of%20Out%20of%20Time%20Filing_112224.pdf.$

necessary to support loads over 150 MW.¹⁴ These investments carry significant risks, particularly given the likelihood that the increased loads will not be distributed across various customer classes but instead be limited to data centers and advanced manufacturing sectors. A 20-year contract allows cost recovery on such investments to be distributed over an appropriate contract term, helping to ensure that large load customers adequately pay for necessary utility investments.¹⁵

Although Public Interest Commenters strongly encourage the adoption of a contract length requirement of 20 years or more, Public Interest Commenters also recommend including a pricing adjustment mechanism to ensure that large load customers pay just and reasonable rates throughout the entire contract term. For instance, the Company could include a tariff term stipulating that the monthly rates in the proposed tariffs could be reopened if the actual cost to serve large load customers increases such that the rates are no longer just and reasonable. This would ensure that other customers would not have to pay increased rates if the actual cost to serve large load customers load customers becomes greater than currently anticipated. Such a term would help protect against long-term uncertainty regarding the costs associated with serving large load customers.

b. Public Interest Commenters support the proposed terms related to notice for discontinuing service or reducing contract capacity, along with the proposed discontinuance fee of a five-year minimum billing charge.

The Company must ensure that large load customers pay for a fair share of the costs associated with their interconnection, such as any necessary transmission

¹⁴ Kentucky Power Tariff Filing, at PDF p. 1 (Aug. 30, 2024) ("Company's Initial Filing"); Company's Resp. to Commission Staff Request No. 1-3(a).

¹⁵ Company's Resp. to Commission Staff Request No. 1-3(b).

upgrades. If large load customers were to request a certain level of service, only to reduce demand or discontinue service soon after, the Company and their other customers could be left to pay for those costs,¹⁶ leading to increased, unjust, and unreasonable rates for those customers.¹⁷ As a result, the proposed tariffs should include terms to limit the risk of large load customers reducing demand or discontinuing service prior to paying for a large percentage of the costs associated with initial system upgrades.

At a minimum, Public Interest Commenters encourage the adoption of the

proposed terms related to notice for discontinuing service or reducing contract capacity;

the proposed discontinuance fee of a five-year minimum billing charge; and the

proposed contract capacity reduction limit of 20%. However, these terms can be

strengthened in several important ways.

https://www.utilitydive.com/news/regulators-protect-small-customers-rising-transmission-costs-data-centers/735155 / ("Data center customers, however, can evaporate as quickly as they've appeared. If the anticipated data center load does not materialize, or if they close shop prematurely, the transmission expansion costs can be stranded. Instead of payments from the data center going to pay off the transmission investment and funding a portion of the costs of running the grid, remaining customers would be left paying for a more expensive grid without offsetting revenues."). ¹⁷ See Nora Wang Esram & Neal Elliott, *Turning Data Centers into Grid and Regional Assets: Considerations and Recommendations for the Federal Government, State Policymakers, and Utility Regulators*, ACEEE, at 4 (Oct. 2024).

¹⁶ Company's Resp. to AG Request No. 1-10; *see also* Abraham Silverman, Suzanne Glatz, & Mahala Lahvis, *Can regulators protect small customers from rising transmission costs for big data centers?*, Utility Dive (Dec. 11, 2024),

https://www.aceee.org/sites/default/files/pdfs/Turning%20Data%20Centers%20into%20Grid%20And%20Regional% 20Assets%20-%20Considerations%20and%20Recommendations%20for%20the%20Federal%20Government,%20St ate%20Policymakers,%20and%20Utility%20Regulators.pdf ("The data centers . . . can increase energy bills for nearby households. In Santa Clara, the heart of Silicon Valley, rising electric rates are driven by the municipal utility's significant spending on transmission lines and other infrastructure to meet the enormous power demand of over 50 data centers."); Evan Halper & Caroline O'Donovan, *As data centers for AI strain the power grid, bills rise for everyday customers*, Wash. Post (Nov. 1, 2024),

https://www.washingtonpost.com/business/2024/11/01/ai-data-centers-electricity-bills-google-amazon/ ("Some regulators are concerned that the tech companies aren't paying their fair share, while leaving customers from homeowners to small businesses on the hook. In Oregon, electric utilities are warning regulators that consumers need protections from rising rates caused by data centers. . . . In the Mid-Atlantic, the regional power grid's energy costs shot up dramatically, and data centers are cited as among the root causes of rate increases of up to 20 percent expected in 2025.").

i. The Company should assess whether a notice requirement and discontinuance fee of greater than five years would better serve the tariff goals.

A notice requirement of at least five years for discontinuing service or reducing contract capacity will help protect against costs being unjustly shifted to other ratepayers, while also giving the Company time to plan for the reduced system demand. The five-year minimum billing fee for discontinuing service would complement the notice requirement by ensuring a degree of cost recovery if a large load customer discontinues service. However, the Company has not provided evidence showing that five years in particular is the ideal length of time for the notice requirement or the cost recovery fee. It could be the case that a longer period of time—such as eight years—would better protect the Company and their customers without being unreasonably burdensome on large load customers. Furthermore, the Company's own analysis shows that the five-year termination fee becomes more sensitive to both market value and asset cost fluctuation for periods over ten years.¹⁸ Public Interest Commenters therefore encourage the Company to assess whether a longer notice requirement and stronger fee for discontinuing service may better achieve the regulatory goals of the proposed tariffs.

ii. The Company should specify that notice of intent to discontinue service cannot be given during the first five years of the initial contract term.

The proposed tariff specifies that the five-years notice of intent to reduce contract capacity shall not be given during the first five years of the initial contract term. However, no equivalent protection is in place regarding notices of intent to *discontinue service*. The Company has not explained why this protection does not apply when a

¹⁸ Company's Resp. to Commission Staff Request No. 1-3(c).

customer is discontinuing service. Public Interest Commenters therefore recommend that the final tariff specifies that notice of intent to discontinue service shall not be given during the first five years of the initial contract term.

iii. The Company should include additional terms to further limit the impact of large load customers reducing contract capacity.

Although a reduction limit of 20% is a significant first step in reducing the risk associated with reductions in contract capacity for large loads, such a limit would still assign significant risk to the Company and ratepayers. Two additional terms could help further mitigate the risk associated with significant reductions in contract capacity. First, Public Interest Commenters recommend a term capping individual customer reductions to 100 MW—or a comparable amount—in any given year. Second, Public Interest Commenters recommend a term capping overall reductions across large load customers to 5% of the prior year's peak load or a comparable amount. These terms were considered in I&M's large load tariff proceeding,¹⁹ and they would further insulate the Company and its customers from the risk associated with demand reductions from large load customers.

The first of these recommended terms is necessary to protect ratepayers from increased costs associated with large demand reductions from individual large load customers. For instance, under the current proposed tariffs, if a 1,000 MW customer reduced contract capacity by 20% in a single year, the Company would have to manage a 200 MW reduction in demand within a single year. A 100 MW cap on individual

¹⁹ Rebuttal Testimony of Andrew J. Williamson at 26:7-20, *In the Matter of the Verified Petition of Indiana Michigan Power Company for Approval of Modifications to its Industrial Power Tariff*, Cause No. 46097 (Ind. Utility Reg. Comm'n Nov. 4, 2024), <u>https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/33c410e7-e09a-ef11-8a6a-001dd80bd98a/bb9c6bba-fd</u> <u>52-45ad-8e64-a444aef13c39?file=46097 IndMich Submission%20of%20Rebuttal%20Testimony%20of%20Andre</u>

w%20J.%20Williamson 110424.pdf.

customer yearly reductions in contract capacity would allow the Company to spread the reduction across two years rather than just one.

The second term is necessary to protect ratepayers from the potential costs associated with numerous large load customers reducing demand at the same time. This is a real possibility if new large load customers are limited to one or two sectors. If those sectors experience economic downturns, numerous large load customers may seek to reduce contract capacity at the same time. The Company can protect against this risk by capping overall yearly reductions across large load customers to 5% of the prior year's peak load. The Company could grant reduction requests on a first-come, first-served basis, so that the Company only grants reduction requests until the cumulative reduction across large load customers equals 5% of the prior year's peak load.

c. Public Interest Commenters support the proposed tariffs' heightened requirements for minimum monthly billing demand.

Public Interest Commenters strongly recommend the adoption of a monthly billing demand of at least 90% of (a) the customer's on-peak contract capacity or (b) the customer's highest previously established monthly billing demand during the past 11 months or (c) the customer's maximum demand created during the billing month. As described above, there is still significant uncertainty as to how the increased demand associated with large load customers will materialize. One or more large load customers reducing billing demand to 60%—the current minimum billing demand—could lead to drastically increased costs for the Company and its other customers.²⁰ The Company's KPCO_R_KPSC_1_4_Attachment 1 shows that the potential difference between a

²⁰ Company's Resp. to Commission Staff Request No. 1-4(b).

1,000 MW customer's yearly billing demand at 60% versus 90% minimum billing demand is \$72.7 million.²¹ At the current 60% minimum billing demand, other customers would be left to make up that lost revenue, in addition to covering the costs associated with any stranded infrastructure investments and contractual commitments for energy and capacity that would no longer be needed.²² As a result, the heightened minimum billing demand requirement in the proposed tariffs is necessary to ensure just and reasonable rates for customers.

Even a 90% billing demand, however, would still assign the Company and its existing customers significant risk, and it could be the case that a minimum billing demand of greater than 90%—such as 95%—would better protect the Company and its customers while still allowing large load customers sufficient flexibility. For example, KPCO_R_KPSC_1_4_Attachment 1 shows a \$343.4 million gap between the expected total bill for a 1,000 MW customer and the expected 90% minimum billing demand recovery.²³ As a result, while Public Interest Commenters strongly support the adoption of a monthly billing demand of at least 90%, they also recommend that the Company evaluate whether a higher minimum billing demand could better protect the Company and its customers from costs associated with large load customers' demand uncertainty.

d. Public Interest Commenters support the proposed tariffs' collateral requirement.

Public Interest Commenters also support the proposed collateral requirements, which would help to mitigate the risk associated with large load customers for the Company and its other customers. As the Company has stated, "[s]hould a customer of

²¹ KPCO_R_KPSC_1_4_Attachment 1 (Graph).

²² Company's Resp. to Commission Staff Request No. 1-4(b); Company's Resp. to AG Request No. 1-10.

²³ KPCO_R_KPSC_1_4_Attachment 1.

this magnitude unexpectedly exit the Company's service territory, there is potential for significant financial harm to the Company and its other customers," and the proposed collateral requirement "was established to protect existing customers from the size risk of these large loads."²⁴ At the same time, the requirement would impose a minimal burden on large load customers, because the Company and the large load customer would have flexibility to agree upon an acceptable form of collateral based on the creditworthiness of the customer.²⁵ In particular, the Company has stated that it "would accept letter of credit, cash, and, depending on public debt rating and liquidity, a parent guarantee."²⁶ The specific numerical requirement—24 times maximum expected monthly non-fuel bill—also aligns with the collateral requirement contained in the recent settlement agreement for I&M's tariff for large load customers.²⁷ Public Interest Commenters believe that this collateral requirement should be adopted in the final revised tariffs to ensure fair and reasonable rates to the Company's customers.

e. The Company should be required to justify any downward divergence from the tariff requirements.

Several of the proposed tariff terms contain flexibility mechanisms that could weaken the tariff protections. Specifically, the proposed tariffs specify that "contract capacity changes may be implemented with less than five (5) years' notice with mutual agreement," and that "[s]uch notice shall not reduce the maximum contract capacity established during the term of the contract by more than 20%, except by mutual agreement."²⁸ The Company has stated that it "will consider seriously any such request and any unique circumstances thereof," and that it may agree to reduce these

²⁴ Company's Resp. to Commission Staff Request No. 1-3(d).

²⁵ Company's Initial Filing at PDF p. 11.

²⁶ Company's Resp. to AG Request No. 1-5.

²⁷ I&M Unopposed Settlement at Attachment A, Sheet No. 21.7.

²⁸ Company's Initial Filing at PDF p. 11.

requirements "if the Company has other customers that are new or expanding their load profile that would counteract the loss of capacity from a customer under these terms."²⁹ It is also unclear whether certain large load customers could sign special contracts with the Company with less stringent terms than those in the proposed tariffs.

Public Interest Commenters recommend that the Company be required to justify any such downward divergence or weakening of tariff requirements, as well as provide calculations showing the difference in charges to the customer under the negotiated contract provisions compared to the anticipated charges under the tariff provisions. This will improve transparency and help ensure that the Company is not arbitrarily weakening tariff terms through contracts with individual large load customers.

III. Public Interest Commenters Recommend Provisions Pertaining to Cost Allocation, Demand Response, Emergency Response, and Information Transparency.

In addition to strengthening the proposed tariff terms, Public Interest Commenters recommend that the Commission and parties utilize this proceeding to adopt provisions pertaining to cost allocation, demand response, emergency response, and information transparency. Like the proposed tariff terms, these additional provisions would help protect ratepayers from potential risks associated with load growth.

a. The tariff should include a cost allocation term to ensure that other ratepayers are not subsidizing the costs of adding large load customers.

First, Public Interest Commenters recommend the inclusion of a term directly assigning certain costs associated with providing electric service to large loads to the large load customers. This would complement the currently proposed tariff terms by

²⁹ Company's Resp. to Commission Staff Request No. 1-2(a), (b).

directly eliminating the risk of large load customers not paying for transmission investments and other expenses needed to provide service to those customers.

As evidenced in the Company's response to the Attorney General, the Company currently expects the addition of large load customers to require significant infrastructure investments: "The Company would be required to add or expand transmission facilities and secure additional generation resources to serve those customers."³⁰ While the Company anticipates that the proposed tariff revisions will "substantially reduce[]" "the impacts of the large-load customer closing its operations or reducing its capacity requirement,"³¹ the Company can further mitigate any impact to cost of service for other customers by requiring large load customers to pay for the incremental costs associated with serving them.

Direct assignment of certain costs to large load customers has become more common in tariffs and rates for large load customers. For example, I&M's recent large load tariff settlement assigns to each large load customer the cost of any "Full Planning Studies, including steady-state and dynamic studies, required because of the potential addition of a Large Load Customer."³² Even with this provision, the settlement specifies that it does not limit the ability of the settling parties or Indiana Utility Regulatory Commission to address cost allocation in a subsequent proceeding.³³

New York Municipal Power Agency's rider for rates and charges for high density load service includes an even stronger cost allocation provision. The rider mandates that, "[u]pon payment of security acceptable to the Utility, the Utility shall conduct, or

³⁰ Company's Resp. to AG Request No. 1-10.

 $^{^{31}}$ *Id*.

³² I&M Unopposed Settlement at 6.

³³ *Id*. at 9.

cause to be conducted a feasibility study to evaluate whether the requested load can be safely served by the Utility."³⁴ The rider specifies that the customer is responsible for the reasonable costs of conducting this feasibility study.³⁵

Under the New York rider, the customer is also initially responsible for the entire cost of any new facilities necessary to supply the requested service, and the customer is required to pay the costs of any new facilities in cash before those facilities will be constructed.³⁶ However, at the end of each of the first ten years of service, the customer receives a "refund equal to the lesser of the annual non-supply related revenues from the customer, or one-tenth of the cost contribution paid by the customer."³⁷

Evergy Missouri Metro's Special High-Load Factor Market Rate takes a different approach to cost allocation. The utility is required to track all costs to serve a customer and verify that the revenue collected from the customer is higher than the costs, in order to ensure that other customers are not being held liable for any revenue deficiencies or stranded investments and costs.³⁸ If the customer's rate revenues fail to exceed the cost to serve the customer, the utility is required to make an additional revenue adjustment to cover the shortfall while ensuring that non-Special High Load Factor Market Rate customers are held harmless from any such deficiency.³⁹

³⁴ New York Municipal Power Agency, Generic Tariff Rider A (Rates and Charges for Customers Requesting High Density Load ("HDL") Service), Leaf 95-96 (Mar. 23, 2018),

https://ets.dps.ny.gov/ets_web/search/showPDF.cfm?%3B%3AIS%20%3B%2A%29LOUNWD%5CJ%5E8%2B%2 2%2B5%2F0MD%2F0%28%231F%26S%5C%3FV%0A.

 $[\]overline{^{35}}$ *Id*. at Leaf 96.

³⁶ Id.

 $^{^{37}}$ *Id*.

³⁸ Evergy Metro, Inc. d/b/a Evergy Missouri Metro, Special High-Load Factor Market Rate, Schedule MKT, Sheet 58C (July 13, 2023),

https://www.evergy.com/-/media/documents/billing/missouri/detailed_tariffs_mo/special-high-load-factor-market-rat e.pdf.

³⁹ Id.

Public Interest Commenters recommend that the proposed tariff include a term directly assigning to large load customers certain costs associated with delivering service to those customers. At a minimum, this term should encompass any costs from conducting studies related to the potential addition of a large load customer. Like the New York rider, this term could also initially assign the cost of any new facilities needed to serve a customer to that customer, with a mechanism to refund a portion of that over a reasonable period of time that sufficiently protects against stranded cost risks.

b. The Company should commit to concrete steps to assess potential demand response programs for prospective large load customers.

Although data centers have traditionally had energy needs that made it difficult to participate in demand response programs and reduce energy usage during system peak hours, recent advances have made participation in such programs more practical.⁴⁰ Google, for example, has recently piloted a demand response program that centers on shifting non-urgent computing tasks to other times and locations during periods of high stress on a local power grid.⁴¹

While this proceeding may not be the appropriate forum for a specific demand response mandate, Public Interest Commenters recommend that the Commission and parties use this proceeding to commit to concrete steps to assessing the need and potential for demand response programs for prospective large load customers. This is the approach adopted in the recent I&M large load tariff settlement, in which I&M committed to convening one or more meetings of settling parties to discuss existing and

⁴⁰ T. Bruce Tsuchida et al., *Brattle, Electricity Demand Growth and Forecasting in a Time of Change*, Brattle, at 8-9 (May 2024).

⁴¹ *Id.*; Varun Mehra & Raiden Hasegawa, *Supporting power grids with demand response at Google data centers*, Google Cloud (Oct. 3, 2023),

https://cloud.google.com/blog/products/infrastructure/using-demand-response-to-reduce-data-center-power-consump tion.

potential demand response opportunities for large load customers by a date certain.⁴² Public Interest Commenters recommend that such an approach be taken here.

c. The Company should commit to assessing procedures for emergency load shedding events.

In addition to assessing the need and potential for demand response programs for large load customers, the Company should commit to assessing system reliability risks and emergency response procedures pertaining to large load customers. Large data centers have the potential for large, rapid changes in load, which, without proper planning, could result in severe reliability problems as aggregate demand from data centers increases.⁴³ State public utility regulators need to plan emergency operation protocols, identify which infrastructure can be curtailed to avoid blackouts, and create programs to require load shedding during emergencies. An assessment of the reliability risks could help the Company and the Commission protect the public and craft appropriate emergency response measures before new large loads additions need to be served.

An assessment of the reliability risks would be in line with recent precedent. For

example, the recent I&M large load tariff settlement included a provision requiring:

I&M [to] convene a meeting, and more if needed of the Settling Parties to discuss . . . the Company's emergency response procedures, including required system actions that would be necessary to respond to an emergency load shedding event required by PJM that is caused by deficiencies in either transmission and/or generation capacity and consider the potential need to modify such procedures due to the Large Load customers.⁴⁴

⁴² I&M Unopposed Settlement at 6.

⁴³ Surging Demand Report at 18.

⁴⁴ I&M Unopposed Settlement at 6.

I&M is required to convene the meeting(s) within ninety days of a final commission order approving the settlement and is also required to file a report upon conclusion of the discussion.⁴⁵ Other entities also have active task forces to better understand the reliability impacts of emerging large loads such as artificial intelligence data centers. For instance, the North American Electric Reliability Corporation launched a Large Loads Task Force ("LLTF") in 2024. The LLTF will first "focus on identifying the unique characteristics and risks associated with emerging large loads, and then validate and prioritize these risks."⁴⁶ The LLTF will then "identify gaps and mitigation of potential risks to support BPS [bulk power system] reliability including enhancements to existing planning and operations processes to help transmission planners and operators mitigate these risks."⁴⁷

Public Interest Commenters recommend that the Commission and the Company use this proceeding to kick off an assessment of the reliability risks unique to the Company's Kentucky service territory. Following such an assessment, appropriate procedures for mitigating reliability risks could be incorporated in future tariff changes.

d. The Company should establish a quarterly reporting requirement regarding large load customer load growth and related investments, to ensure transparency.

Finally, Public Interest Commenters recommend that the Commission and Company use this proceeding to increase transparency related to large load customer load growth, related investments, and cost allocation pertaining to large load customers.

⁴⁵ Id.

⁴⁶ North American Electric Reliability Corporation, Large Loads Task Force (LLTF) Scope Document, at 1 (August 2024), <u>https://www.nerc.com/comm/RSTC/LLTF/LLTF%20Scope.pdf</u>.

⁴⁷ Id.

While some degree of confidentiality may be necessary to protect business interests,

greater specificity than currently exists is needed for effective regulatory oversight.⁴⁸

Public Interest Commenters recommend that the Company be ordered to file a

quarterly report in this docket with information pertaining to projected load growth from

large load customers and associated investments. At a minimum, this report should

include information pertaining to:

- 1. The number of current and prospective large load customers and the total load associated with those customers;
- 2. Load details for prospective large load customers, including estimated peak demand, energy requirements, load factor, date of inquiry, location, and industry and timing of load addition associated with each potential customer;
- 3. All investments made by the Company to serve large load customers, including generation, transmission, and distribution system investments;
- 4. A description of all new resources procured for large load customers;
- 5. All revenues collected by a large load customer and a comparison of those revenues to the costs of serving that customer;
- 6. Executed electric service agreements and transmission Letters of Agreement related to large load customers;
- 7. Proof that the large load customer has purchased or leased the land where it is requesting service;
- 8. Any notices of reduction to contract capacity or notices of intent to discontinue service from large load customers; and
- 9. Any contract termination fees assessed to large load customers.

^{(&}quot;If we don't get the right load information, then we're going to be wrong \ldots Bad data means bad predictions. We need to be working to find out what's the real load \ldots and what efficiencies can we count on from the data centers and other large users.").

Additionally, to the extent that such information is currently protected by Non-Disclosure Agreements ("NDAs") executed between the Company and a prospective customer, the Commission should caution the Company that an inability to provide information necessary for effective regulatory oversight may result in the Commission being unable to make findings in the Company's favor, and direct the Company to not enter into any new or modified NDAs that would prevent the Company from disclosing the above information.

IV. Conclusion

Public Interest Commenters support the adoption of the proposed tariffs terms, which are necessary to protect the Company and its existing customers from the risks associated with the possible addition of new large load customers, but recommend that the proposed tariffs be strengthened in certain key ways. Public Interest Commenters appreciate the opportunity to share the above comments in this proceeding.

Dated: January 21, 2025

Mary Cromer Deputy Director Appalachian Citizens' Law Center 317 Main Street Whitesburg, KY 41858

Lane Boldman Executive Director Kentucky Conservation Committee 316 Wapping Street Frankfort, KY 40601 Respectfully submitted,

Byron L. Gary Program Attorney Kentucky Resources Council P.O.Box 1070 Frankfort, Kentucky 40602 (502) 875-2428 byron@kyrc.org