COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	:	
	:	
ELECTRONIC APPLICATION OF KENTUCKY UTILITIES	:	
COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC	:	
RATES, A CERTIFICATE OF PUBLIC CONVENIENCE	:	CASE NO. 2020-00349
AND NECESSITY TO DEPLOY ADVANCED METERING	:	
INFRASTRUCTURE, APPROVAL OF CERTAIN	:	
REGULATORY AND ACCOUNTING TREATMENTS, AND	:	
ESTABLISHMENT OF A ONE-YEAR SURCREDIT	:	
	:	
IN THE MATTER OF:	:	
	:	
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	:	CASE NO. 2020-00350
ADVANCED METERING INFRASTRUCTURE,	:	
APPROVAL OF CERTAIN REGULATORY AND	:	
ACCOUNTING TREATMENTS, AND ESTABLISHMENT	:	
OF A ONE-YEAR SURCREDIT	:	

JOINT POST-HEARING BRIEF OF THE KENTUCKY ATTORNEY GENERAL AND THE KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

September 7, 2021

TABLE OF CONTENTS

LEGA	BACKGROUND	2
I.	The Origin of PURPA & FERC's Implementation of the PURPA Rules	2
II.	Kentucky's PURPA Rules	3
III.	FERC Modernizes PURPA	4
IV.	Federal Law Requires Kentucky To Implement The New PURPA Rules	7
ARGU	1ENT	7
SQF	LQF RATES	7
I.	For Purposes Of Determining The Avoided Capacity Costs Of A Qualifying Facility, The Commission Should Adopt The Competitive Solicitation Pricing Approach Now Available To States Pursuant To FERC Order 872, Which Is Most Consistent With The Objectives Of PURPA	7
	A. The Competitive Solicitation Pricing Approach Is Nondiscriminatory To QFs	7
	3. The Competitive Solicitation Pricing Approach Produces Just And Reasonable Rates For Retail Electric Customers	8
	C. The Competitive Solicitation Pricing Approach Is A Viable Option For KU/LG&E.	9
II.	f The Commission Chooses To Undertake The Traditional Multi-Factor Pricing Approach To Establish Avoided Capacity Costs For Qualifying Facilities, Then It Should Adopt KU/LG&E's Proposal.	10
	A. Under Both Federal And State Regulations, The Multi-Factor Pricing Approach Requires A Fact-Specific Inquiry Examining The Particular Operating Characteristics Of A Given QF.	10
	3. KU/LG&E's Avoided Capacity Pricing Proposal Is The Only Proposal Consistent With The Requirements Of The Multi-Factor Pricing Approach	12
	C. KU/LG&E's Proposal Recognizes The Importance Of Negotiation And Commission Hearings When Determining QF Contract Purchase Rates	13
III.	The Commission Should Not Adopt The Kentucky Power QF Capacity Pricing Methodology For KU/LG&E	14
IV.	The Commission Should Reject KYSEIA's SGQ/LQF Avoided Cost Pricing Approach, Which Is Unreasonable And Violates PURPA Regulations	15

NE'	T METERING RATES	17
I.	KU/LG&E's Net Metering Compensation Approach Appropriately Considers The Impacts Of Net Metering On All Utility Customers	18
II.	KU/LG&E's Net Metering Compensation Approach Results In Fair, Just, and Reasonable Rates for All Customers.	19
CON	CLUSION	21

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	:	
	:	
ELECTRONIC APPLICATION OF KENTUCKY UTILITIES	:	
COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC	:	
RATES, A CERTIFICATE OF PUBLIC CONVENIENCE	:	CASE NO. 2020-00349
AND NECESSITY TO DEPLOY ADVANCED METERING	:	
INFRASTRUCTURE, APPROVAL OF CERTAIN	:	
REGULATORY AND ACCOUNTING TREATMENTS, AND	:	
ESTABLISHMENT OF A ONE-YEAR SURCREDIT	:	
	:	
IN THE MATTER OF:	:	
	:	
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	:	CASE NO. 2020-00350
ADVANCED METERING INFRASTRUCTURE,	:	
APPROVAL OF CERTAIN REGULATORY AND	:	
ACCOUNTING TREATMENTS, AND ESTABLISHMENT	:	
OF A ONE-YEAR SURCREDIT	:	

JOINT POST-HEARING BRIEF OF THE KENTUCKY ATTORNEY GENERAL AND THE KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

The Attorney General of the Commonwealth of Kentucky, through his Office of Rate Intervention ("Attorney General") and Kentucky Industrial Utility Customers, Inc. ("KIUC") hereinafter referred to jointly as "AG/KIUC," submit this Post-Hearing Brief to the Kentucky Public Service Commission ("Commission").

LEGAL BACKGROUND

I. The Origin of PURPA & FERC's Implementation of the PURPA Rules

Passed in response to the oil and natural gas crises of the 1970s, the Public Utility Regulatory Policies Act of 1978 ("PURPA") is aimed at encouraging the conservation of electric energy while also maintaining equitable retail rates for electric consumers.¹ In furtherance of these objectives, PURPA requires electric utilities (which in the 1970s, had a monopoly over transmission access and near total control of electric wholesale markets)² to purchase power from certain "Qualifying Facilities" ("QFs"), including wind, solar, biomass, waste (among other things, coal refuse), geothermal, and cogeneration facilities (both topping cycle and bottoming cycle) up to 80 MW in size.³ However, in order to protect consumers, the rates for those purchases are required to be "just and reasonable to electric customers of the electric utility and the public interest" and to be capped at "the incremental cost to the electric utility of alternative electric energy. "4 PURPA defines "incremental cost of alternative electric energy" as "the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source." 5

PURPA also requires the Federal Energy Regulatory Commission ("FERC") to promulgate rules effectuating the statutory requirements, which it first did in 1980.⁶ FERC's rules similarly require that rates for purchases from QFs shall be "just and reasonable to the electric consumer of the electric utility and in the public interest." Additionally, the rules specifically equate "incremental costs" as set forth in the PURPA statute to a utility's "avoided costs," guarding

¹ PURPA, Pub. L. 95-617.

² Order 872, 173 FERC P 61,158 (July 16, 2020) at 36.

³ 16 U.S.C. 824a-3(a).

^{4 16} U.S.C. 824a-3(b).

^{5 16} U.S.C. 824a-3(d).

⁶ See 18 C.F.R. 292.101 et seq.

^{7 18} C.F.R. 292.304(a)(1).

against excessive QF costs being passed to retail customers. ⁸ In accordance with the initial FERC rules, a purchase rate for QF power satisfies PURPA requirements if the rate equals avoided cost "determined after consideration of" multiple factors set forth under 18 C.F.R 292.304(e), including, but not limited to, the QF's availability during system peaks, its dispatchability, and its reliability. ⁹ However, "avoided cost" merely sets the cap on QF purchase rates. A purchase rate may be set less than avoided cost if a state regulatory authority determines that a lower rate is consistent with 18 CFR 292.304(a) and is "sufficient to encourage cogeneration and small power production." ¹⁰

II. Kentucky's PURPA Rules

Section 210(f) of PURPA requires state regulatory authorities with jurisdiction over electric utilities to implement the FERC rules.¹¹ Kentucky did so in 1982.¹² In 807 KAR 5:054, Section 7, Kentucky echoes the FERC requirement that purchase rates "shall be just and reasonable to the electric customer of the utility, in the public interest..." and that rates "shall be based on avoided costs after consideration of" multiple factors set forth under 807 KAR 5:054, Section 7(5).¹³ Kentucky defines "avoided costs" as "incremental costs to an electric utility of electric energy or capacity or both which, if not for the purchase from the qualifying facility, the utility would generate itself or purchase from another source."¹⁴ Expanding upon the limitations on the utility purchase obligation, 807 KAR 5:054, Section 6(2) provides that "[t]he qualifying facility's right to sell power to the utility shall be curtailed in periods when

-

⁸ 18 C.F.R. 292.304(a)(2) ("Nothing in this subpart requires any electric utility to pay more than the avoided costs for purchases").

^{9 18} C.F.R. 292.304(b)(2).

^{10 18} C.F.R. 292.304(b)(3).

^{11 16} U.S.C. 824a-3(f).

^{12 807} KAR 5:054.

¹³ 807 KAR 5:054 (Section 7(2), (4) and (5)).

¹⁴ 807 KAR 5:054, Section 1.

purchases from qualifying facilities will result in costs greater than those which the utility would incur if it generated an equivalent amount of energy instead of purchasing that energy."

While Kentucky requires standard rates for all QFs, the state regulations emphasize that the standard rates for QFs above 100 kilowatts "shall be used only as the basis for negotiating a final purchase rate with qualifying facilities after proper consideration has been given to factors affecting purchase rates listed in subsection (5)(a) of this section....If the electric utility and qualifying facility cannot agree on the purchase rate, then the commission shall determine the rate after a hearing." The regulations add that "[a]ll contracts between qualifying facilities and electric utilities shall be provided to the commission for its review." 16

III. FERC Modernizes PURPA

For decades, the PURPA rules remained largely the same, outside of some changes to the FERC rules necessitated by the Energy Policy Act of 2005,¹⁷ which among other things, amended PURPA by establishing a rebuttable presumption that QFs below 20 MW located in competitive wholesale markets (e.g. RTOs) already have nondiscriminatory access to the market.¹⁸ This amendment eliminated the utility purchase requirement associated with many QFs greater than 20 MW.

However, on July 16, 2020 in Order 872, the FERC materially changed its PURPA rules in an effort to align those rules with the realities of the current electric market.¹⁹ Explaining its rationale, FERC cited three major shifts in the electric market that have occurred since PURPA was enacted in 1978. First, FERC cited "an unprecedented change in the dynamics of the

^{15 807} KAR 5:054, Section 7(4).

^{16 807} KAR 5:054, Section 9.

¹⁷ Pub. L. 109-58, 119 Stat. 594.

¹⁸ 18 C.F.R. 292.309(d)(1).

¹⁹ Order 872, 173 FERC ₱ 61,158 (July 16, 2020).

natural gas market and relevant supply and demand."²⁰ Second, FERC notes that "[t]he oncenascent renewables industry has grown and matured over the past 40 years and has only accelerated subsequent to the Energy Policy Act of 2005's amendment of PURPA..."²¹ Third, FERC notes that "the introduction of QFs as competing sources of electricity to the incumbent electric utilities has led to the development of significant non-QF independent power production. In addition, RTOs and ISOs have developed competitive wholesale electric markets that serve roughly two-thirds of electricity consumers in the United States."²²

In light of these changes, FERC created new paths for electric utilities to meet their QF purchase obligations. One such path is the introduction of a new avoided capacity pricing methodology – the Competitive Solicitation Pricing approach.²³ Under this methodology, "a state regulatory authority or nonregulated electric utility may use a price determined pursuant to a competitive solicitation process to establish qualifying facility energy and/or capacity rates for sales to electric utilities, provided that such competitive solicitation process is conducted pursuant to procedures ensuring the solicitation is conducted in a transparent and non-discriminatory manner" consistent with FERC's Allegheny standard.²⁴ Additionally, "[t]o the extent that the electric utility procures all of its capacity, including capacity resources constructed or otherwise acquired by the electric utility, through a competitive solicitation process conducted pursuant to paragraph (b)(8)(i) of this section, the electric utility shall be presumed to have no avoided capacity costs unless and until it determines to acquire capacity outside of such competitive solicitation process. However, the electric utility shall nevertheless

⁻

²⁰ Order 872 at 37-38.

²¹ Order 872 at 38-39.

²² Order 872 at 39-40.

²³ Order 872 at 24.

²⁴ 18 C.F.R. 292.304(b)(8)(i); *Allegheny Energy Supply Co., LLC*, 108 FERC ¶ 61,082, at P18 (2004).

be required to purchase energy from qualifying small power producers and qualifying cogeneration facilities."25

This new Competitive Solicitation Pricing methodology serves as an alternative to the traditional Multi-Factor approach to avoided cost capacity pricing, which remains available to the states. In establishing this new methodology, FERC notes that "competitive solicitations can provide a fair and transparent method for QFs to establish full avoided cost rates." FERC adds that "[c]ompetitive solicitations may be an especially appropriate tool in those regions outside of Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) where there are no organized competitive markets where QFs can make sales." 27

Order 872 made several other significant changes to the 1980 FERC rules, including allowing variable QF energy rates to guard against overpayment, establishing a rebuttal presumption that Locational Marginal Price ("LMP") represents the as-available avoided energy cost for electric utilities located in RTOs, permitting states to set as-available energy avoided cost rates at competitive prices from liquid market hubs or calculated from a formula based on natural gas price indices and specified heat rates, modifying the traditional "one mile" rule, changing the fee requirements for self-certification or self-recertification, updating the rebuttable presumption threshold of nondiscriminatory market access for small power production facilities from 20 MW to 5 MW, and requiring QFs to demonstrate commercial viability and a financial commitment to construct its facility pursuant to objective and reasonable state-determined criteria before a QF is entitled to a contract or Legally Enforceable Obligation.²⁸

-

²⁵ 18 C.F.R. 292.304(b)(8)(ii).

²⁶ Order 872 at 24.

²⁷ Order 872 at 24.

²⁸ Order 872 at 10-15.

IV. Federal Law Requires Kentucky To Implement The New PURPA Rules

Kentucky has yet to implement these significant changes to the FERC rules through its own state-level rulemaking, but it is required to do so by December 31, 2021. 16 U.S.C. 824a-3(f)(1) provides that "beginning on or before the date one year after any rule is prescribed by the Commission under subsection (a) or revised under such subsection, each State regulatory authority shall, after notice and opportunity for public hearing, implement such rule (or revised rule) for each electric utility for which it has ratemaking authority." The new FERC regulations became effective December 31, 2020. Consequently, Kentucky must begin implementing those rules by the end of this year.

ARGUMENT

SQF/LQF RATES

I. For Purposes Of Determining The Avoided Capacity Costs Of A Qualifying Facility, The Commission Should Adopt The Competitive Solicitation Pricing Approach Now Available To States Pursuant To FERC Order 872, Which Is Most Consistent With The Objectives Of PURPA.

The Commission should adopt the new Competitive Solicitation Pricing approach for purposes of KU/LG&E's QF avoided capacity cost pricing. This approach is nondiscriminatory to QFs while also producing rates that are just and reasonable for retail electric customers, consistent with the objectives of PURPA.

A. The Competitive Solicitation Pricing Approach Is Nondiscriminatory To QFs.

As Order 872 explains, "the primary feature of a transparent and non-discriminatory competitive solicitation is that a utility's capacity needs are open for bidding to all capacity providers, including QF and non-QF resources, on a level playing field. This level playing field ensures that any QF's capacity rates that result from the competitive solicitation are just and

reasonable and non-discriminatory avoided cost rates."²⁹ Hence, under this approach, QFs can participate in competitive bidding just like any other potential capacity resource, consistent with the PURPA objective of preventing discrimination against QFs.³⁰ As KU/LG&E witness Sinclair explained, "[t]he purpose of PURPA's QF provisions as implemented in Kentucky is to allow non-utility renewable generation and co-generation to compete in the same terms as other utility resources while protecting customers (who ultimately have to pay the bill) from paying more than they otherwise would for power generation."³¹

B. The Competitive Solicitation Pricing Approach Produces Just And Reasonable Rates For Retail Electric Customers.

The Competitive Solicitation Pricing methodology is also the option that best effectuates PURPA's requirement to produce just and reasonable rates for retail customers. FERC notes in Order 872 that the "upper limit on QF rates established in section 210(b), equal to a purchasing utility's incremental costs, commonly called 'avoided costs,'…ensures that the purchasing utility cannot be required to pay more for power purchased from a QF than it would otherwise pay to generate the power itself or to purchase power from a third party."³² The Competitive Solicitation Pricing approach provides a fair and transparent method of determining what the utility would pay to generate power itself or to purchase power from a third party.

Moreover, the Competitive Solicitation Pricing option prevents customers from paying excessive costs to QFs in years when there is no capacity need and therefore no avoided capacity cost for the utility. 18 CFR 292.304(b)(8)(ii) provides that a utility that procures all of its capacity through an eligible competitive solicitation process "shall be presumed to have no avoided capacity costs unless and until it determines to acquire capacity outside of such

²⁹ Order 872 at 121.

³⁰ Hearing Tr. (Aug. 18, 2021) at 9:46:23.

³¹ Sinclair Supplemental Direct Testimony (July 13, 2021) at 3:14-17.

³² Order 872 at 13.

competitive solicitation process." Thus, in years where the utility does not need to solicit capacity, customers do not pay for excess capacity. So, for example, under a 20-year QF contract, there would be no capacity payment until capacity is projected to be needed. Just as this Commission would not purposely allow a utility to build excess capacity, no utility should be required to purposely buy excess capacity from a QF. As FERC explains, "[s]o long as a QF's rate is set at the purchasing utility's full avoided cost, the QF's rate should be the same as the rate the purchasing utility otherwise would be paying or the cost it would be incurring, and such a rate would not be discriminatory."33

C. The Competitive Solicitation Pricing Approach Is A Viable Option For KU/LG&E.

The new FERC rules require that in order to use the new Competitive Solicitation Pricing approach, an electric utility must procure all of its capacity through a competitive solicitation process consistent with the Competitive Solicitation methodology.³⁴ KU/LG&E meet this requirement, as Companies witness Sinclair confirmed at the hearing:

Q: Is it the Companies' practice to go through competitive solicitations for new generation?

A: Yes, I've been involved personally in every single major resource we've done since at least the Trimble County 2 project, and every single one of them, we go to the market to identify market opportunities. Because again, to demonstrate to this Commission that we are looking at the least cost resource, there has to be options... we always go the marketplace as part of the process.³⁵

We would expect the Competitive Solicitation Pricing approach to work like this: Based on its traditional system planning methodology, KU/LG&E would determine when, how much, and what type of new generating capacity will be needed to meet projected native load on a least-cost basis. Once that determination is made, then a competitive solicitation or RFP would be

34 18 C.F.R. 292.304(b)(8)(ii).

³³ Order 872 at 55.

³⁵ Hearing Tr. (Aug. 17) at 2:35:45.

held where all potential suppliers, including the utility as well as QFs, would compete on a level playing field to provide consumers with the lowest and best price. This entire process would be reviewed by the Commission in a certificate proceeding under KRS 278.020.

Accordingly, the Competitive Solicitation Pricing approach is the best way to effectuate PURPA's objectives and the Commission should adopt it for KU/LG&E. The Commission should likewise begin a rulemaking in order to reflect this new methodology in Kentucky's PURPA regulations.

II. If The Commission Chooses To Undertake The Traditional Multi-Factor Pricing Approach To Establish Avoided Capacity Costs For Qualifying Facilities, Then It Should Adopt KU/LG&E's Proposal.

18 C.F.R. 292.304(e)(1) provides that "a state regulatory authority or nonregulated electric utility may establish rates for purchases of energy and/or capacity from a qualifying facility based on a Competitive Solicitation Price. To the extent that capacity rates are not set pursuant to this section, capacity rates shall be set pursuant to subsection (2)." Subsection (2) of 18 C.F.R. 292.304(e) outlines the traditional Multi-Factor Pricing approach found in both the 1980 FERC regulations and 807 KAR 5:054. Accordingly, if the Commission chooses not to adopt the Competitive Solicitation Pricing approach to QF capacity purchase rates, then it must adhere to the requirements of the Multi-Factor Pricing approach.

A. Under Both Federal And State Regulations, The Multi-Factor Pricing Approach Requires A Fact-Specific Inquiry Examining The Particular Operating Characteristics Of A Given QF.

As the chart below reflects, both the federal and Kentucky regulations are highly similar with respect to which factors must be considered when establishing a purchase rate for QF capacity. As can be seen from the chart, this inquiry is detailed and fact-intensive.

Avoided Cost Multi-Factor Inquiry - FERC vs. KPSC Rules				
Factor	In FERC Rule? (18 CFR 292.304(e)(2))	Equivalent in KPSC Rules? (807 KAR 5:054, Section 7(5)) or Section 5		
Availability of capacity or energy from a qualifying facility during the system daily and seasonal peak	Yes	Yes		
Ability of electric utility to dispatch the qualifying facility	Yes	Yes		
The expected or demonstrated reliability of the qualifying facility	Yes	Yes		
The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance	Yes	Yes		
The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the electric utility's facilities;	Yes	Yes		
The usefulness of energy and capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation	Yes	Yes		
The individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system	Yes	Yes		
The smaller capacity increments and the shorter lead times available with additions of capacity from qualifying facilities	Yes	Yes		
The relationship of the availability of energy or capacity from the qualifying facility to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use	Yes	Yes		
The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity	Yes	Yes		
The data provided pursuant to 18 CFR 292.303(b), (c), or (d), including State review of any such data;	Yes	Yes		

B. KU/LG&E's Avoided Capacity Pricing Proposal Is The Only Proposal Consistent With The Requirements Of The Multi-Factor Pricing Approach.

Of the avoided capacity cost pricing options proposed by parties to this case, KU/LG&E's option is only option that aligns with the FERC and state PURPA regulations surrounding the Multi-Factor Pricing approach. 18 CFR 292.304(e) provides that the factors listed above "shall, to the extent practicable, be taken into account in determining rates for purchases from a qualifying facility..."³⁶ KU/LG&E's approach follows this directive.³⁷ Under the Companies' proposal, avoided capacity costs are resource-specific, calculated by using either a Market Price index or the levelized cost of a CT, whichever is lower, as the starting point for contract negotiations.³⁸ The Companies' approach therefore grapples with the required factors (availability at system peaks, dispatchability, reliability, etc.), enabling KU/LG&E to craft a tailor-made avoided cost rate for each QF contract taking into account the unique operating characteristics of the QF. This is important because the operating characteristics of a solar QF located in Eastern Kentucky may differ widely from the operating characteristics of a solar QF located in Western Kentucky, and even more so with a wind, biomass, waste coal, topping-cycle or bottoming-cycle cogeneration QF. One size does not fit all.

The Companies' approach also establishes just and reasonable rates for retail customers by finding "the lowest cost method for each generation technology." Moreover, that approach recognizes that in years when the Companies do not require capacity resources, they do not have avoided capacity costs. As witness Sinclair explains "[t]he system only needs a certain quantity of resources to be reliable, so customers should not pay for more resources than are necessary. The Commission's OF regulation requires OF energy and capacity rates to be based

³⁶ Emphasis added.

³⁷ Hearing Tr. (Aug. 18, 2021) at 9:59:28.

³⁸ Sinclair Supplemental Direct Testimony (July 13, 2021) at 11:1-7; Ex. DSS-2.

³⁹ Sinclair Supplemental Direct Testimony (July 13, 2021) at 10:12-13.

⁴⁰ Hearing Tr. (Aug. 17) at 7:33:27.

on avoided costs, i.e. customers should only pay for what is being avoided. Because it is unlikely that the Commission would allow the Companies to collect costs of intentionally overbuilding generation, I am assuming the Commission would not want to set QF rates that would result in intentionally over-contracting for generation or paying for capacity that was not needed or that would cause significant integration costs for customers."⁴¹ Consistent with this view, the Companies propose to levelize long-term QF contract pricing to reflect the lack of avoided costs in years where KU/LG&E has no capacity need.⁴²

C. KU/LG&E's Proposal Recognizes The Importance Of Negotiation And Commission Hearings When Determining QF Contract Purchase Rates.

As mentioned above, the purchase rates listed by witness Sinclair would merely form a starting point for negotiations with a given QF. Such negotiations, as well as Commission hearings on each negotiated QF contract, are required for QFs larger than 100 kilowatts under 807 KAR 5:054, Sections 7(4) and 9.

Long-term QF contracts can result in retail customers paying hundreds of millions of dollars over decades.⁴³ The substantial costs at issue with respect to the QF purchase mandate help elucidate why federal and state regulations require utilities and Commissions to engage in detailed fact-intensive inquiries in order to craft a just and reasonable purchase rate that recognizes the unique operating characteristics of a given QF. Further, unlike Kentucky's net metering rules, there is no statutory cap on the amount of QFs from which KU/LG&E must purchase power. As witness Seeyle testified, the lack of such a cap is a "big concern" and creates a greater financial risk for retail customers than net metering.⁴⁴ Given this significant risk to customers, and in accordance with Kentucky law, not only should all purchase rates for contracts

⁴¹ Sinclair Supplemental Direct Testimony (July 13, 2021) at 14-15.

⁴² Hearing Tr. (Aug. 17) at 10:01:13.

⁴³ Hearing Tr. (Aug. 18) at 18:34:50.

⁴⁴ Hearing Tr. (Aug. 17) at 10:07:06.

with QFs above 100 kilowatts be subject to negotiation, all contracts between KU/LG&E and QFs must be provided to the commission for its review and approval in an on-the-record hearing with full due process safeguards.⁴⁵ Whether a utility builds its own power plant or buys the output from a QF power plant, the impact on consumers is the same and the ratepayer protections provided by this Commission should be the same.

III. The Commission Should Not Adopt The Kentucky Power QF Capacity Pricing Methodology For KU/LG&E.

In its January 13, 2021 Order in Kentucky Power Company's most recent rate case, Case No. 2020-00174, the Commission established a uniform net CONE tariff rate for all utility QF purchases, while still allowing utilities and QFs to have agreements different than the tariff subject to Commission approval.⁴⁶ The Commission should not adopt the same approach for KU/LG&E.

As discussed above, federal and state regulations require the Commission to either adopt the Competitive Solicitation Pricing approach or the Multi-Factor Pricing approach. A uniform rate for all QFs above 100 kW regardless of their operating characteristics is not consistent with either required approach. Such pricing would not reflect the results that would be produced under the Competitive Solicitation Pricing approach. And as the factors outlined in the federal and state regulations reflect, QF pricing under the Multi-Factor Pricing approach must be resource-specific and requires a fact-based examination of actual avoided costs associated with a given QF contract.

Adopting the correct approach to QF pricing matters even more in KU/LG&E's service territory since the Companies are not members of an RTO and therefore, are required to purchase power from all QFs up to 80 MW. In contrast, Kentucky Power (a PJM member) is

_

^{45 807} KAR 5:054, Section 9.

⁴⁶ Order, Case No. 2020-00174 (January 13, 2021) at 100.

only required to purchase from cogeneration facilities up to 20 MW and small power production facilities up to 5 MW, unless those facilities can prove discrimination in their access to the competitive market. Thus, the potential cost exposure for Kentucky Power's retail customers is far less than for KU/LG&E's customers.

IV. The Commission Should Reject KYSEIA's SGQ/LQF Avoided Cost Pricing Approach, Which Is Unreasonable And Violates PURPA Regulations.

The avoided capacity pricing approach proposed by KYSEIA witness Barnes in this case is flawed on multiple levels and should be rejected. Under that proposal, all QFs would be paid a uniform avoided cost capacity rate based upon their generation production during 791 on-peak hours (Monday through Friday 11:00 am to 8:00 pm) in the summer (June through September), adjusted for avoided transmission demand losses. Alternatively, witness Barnes recommends that if the Commission chooses market-based pricing, then it should use the LevelTen index pricing in the two most recent quarters as the all-in rate without a separate capacity rate calculation.⁴⁷

As discussed above, adopting a uniform capacity pricing rate for all QF facilities regardless of their unique operating characteristics is not consistent with federal and state PURPA requirements, which require either a competitive solicitation or a tailor-made pricing approach. The capacity value of solar differs by location, and is fundamentally different than the capacity value of wind, biomass, waste coal generation, cogeneration at a paper plant, cogeneration at a refinery, etc. Moreover, KYSEIA's approach discriminates against non-solar QF facilities, in violation of 16 U.S.C 824a-3(b)(2). The approach restricts the hours that count for purposes of determining avoided capacity costs to only summer peaks, when solar resource output will be maximized, ignoring the fact that KU is a winter peaking system and that both

⁴⁷ Supplemental Rebuttal Testimony of Justin R. Barnes (August 5, 2021) at 18 and 23.

systems combined have high winter peaks.⁴⁸ Consequently, QFs that contribute to meeting the Companies' winter peaks (which solar resources cannot) would not receive any capacity payments for those contributions.⁴⁹ It is not surprising that the solar industry proposes a biased payment methodology that only focuses on generation production during the hours of greatest sunshine. This approach is both discriminatory and unlawful, failing to recognize the value of QFs in meeting system peaks throughout the entire year rather than in only the summer peak hours.⁵⁰

KYSEIA's proposal also incorporates an unreasonable 1.4% risk-free discount rate in its avoided capacity cost pricing. The discount rate is the rate at which QF developers effectively borrow money from customers. Any customer that has a credit card balance, a student loan, a mortgage, or other debt obligation has a much higher cost of money than the federal government's 1.4% risk free borrowing cost. Witness Seelye testified that in his lengthy experience, he has never seen such a risk-free discount rate in resource planning proceedings.⁵¹ The correct discount rate, which is industry standard in these types of proceedings, is the Companies' weighted average cost of capital.⁵² KYSEIA's proposed discount rate thus only exacerbates the unjust and unreasonable costs that would be passed to retail customers under its proposal.

⁴⁸ Hearing Tr. (Aug. 18, 2021) at 9:52:22.

⁴⁹ Hearing Tr. (Aug. 18, 2021) at 18:30:05 and 9:51:19; See also Hearing Tr. (Aug. 17) at 7:39:15.

⁵⁰ Hearing Tr. (Aug. 18, 2021) at 18:33:50.

⁵¹ Hearing Tr. (Aug. 18, 2021) at 10:03:24.

⁵² Hearing Tr. (Aug. 18, 2021) at 10:02:22.

NET METERING RATES

Net metering, in the simplest terms, is the compensation paid to customers who generate power through their rooftop solar array in excess of their needs, which is then dispatched back to the grid and the utility. Other customers on the grid then use that power, with a portion being lost to inefficiency of the line.

Historically, compensation to customers who sold excess electricity back to the utility was at a rate equal to the price per kilowatt-hour that the utility charged residential customers for that electricity. Due to the expense of installation, few sought to install rooftop solar and the rate impacts of that pricing methodology to other retail customers were minor. Therefore, little attention was paid to this segment of the market. However, with time and advancements in the solar industry, the price of solar panels fell, and residential solar installations surged. Utilities were forced to confront the reality that compensating customers for their excess generation at the traditional one-to-one kilowatt-hour energy credit was a losing proposition because that method overcompensated net metering customers and required the utilities to pass excessive costs on to their non-net metering customers.

Now, while some interest groups still push for continuing to compensate rooftop solar generators at a historic one-to-one kWh rate, it has become clear that such a methodology unfairly transfers excessive generation costs to the utilities' non-net metering customers. Over forty states, including Kentucky, have enacted rules to address developing net metering issues.⁵³ Kentucky's net metering law, which was updated in 2019 with the enactment of Senate Bill 100, grandfathers existing customers for 25 years, allowing them to continue to receive the net metering compensation they were receiving as of December 31, 2019. It also allows utilities to amend net metering tariffs prospectively, starting January 1, 2020. Finally, the law caps the

⁵³ Kentucky's net metering statues can be found in KRS 278.465 through KRS 278.467.

amount of generation a utility is required to purchase from net metering customers. When cumulative net metering systems reach 1% of a utilities' single hour peak load in a calendar year, a utility is no longer required to offer the program.

Through this proceeding, in compliance with Senate Bill 100, KU/LG&E propose to close their existing net metering service tariff to new customers and create a new tariff consistent with the statutory changes. KU/LG&E's proposed approach is the fairest and most equitable way to calculate net metering costs and should be adopted.

I. KU/LG&E's Net Metering Compensation Approach Appropriately Considers The Impacts Of Net Metering On All Utility Customers.

When considering the net metering compensation issue, the Commission should take a holistic perspective since the compensation afforded to net metering customers for excess energy impacts every other KU/LG&E retail customer. While customers electing to install rooftop solar should have the option to do so, that choice should not lead to unfair, unjust, and unreasonable rates for other retail customers in violation of the Commission's statutory mandate.

If a retail customer chooses to install rooftop solar on their home, they immediately receive the benefit of lower electricity bills regardless of whether they are paid for any excess energy they generate. And when the sun does not shine, their electricity consumption is not interrupted, as they continue to receive electricity from the electric utility. Further, many net metering customers view their choice as having a positive impact on the environment. These reasons alone should suffice to justify the installation of solar panels for those who choose to do so.

However, as the solar industry has grown, the question of whether rooftop solar customers are receiving excessive benefits for the power they generate at the expense of other customers is becoming increasingly important. Even in places such as California, a leading state

in solar adoption and generation, the issue of fairness between retail customers who participate in net metering and those who do not is gaining increased attention. Just this year, Assemblywoman Lorena Gonzalez, a Democrat from San Diego and Chair of the Assembly's Appropriations Committee, introduced Assembly Bill 1139,54 a bill that sought to slash payments for excess generation from new rooftop solar and other net-metered projects. Assemblywoman Gonzalez, the author of the bill, said that the current system is not fair, explaining "[i]n San Diego, a non-rooftop solar customer pays \$230 a year to subsidize those of us who have rooftop solar...We want people to have rooftop solar, but it can't be on the on the backs of people who can't have solar."55 The Bill, which advanced out of committee and failed on the floor of the Assembly, garnered many reactions including one in a blog posted by Severin Borenstein, a professor at the University of California-Berkeley Hass School of Business who said "California's distributed solar policy hurts the poor. It's really that simple."56 Accordingly, given these valid concerns about unfair subsidies flowing from low-income customers to a utility's wealthier customers, it is critical that the Commission carefully scrutinize the impact of proposed net metering compensation methodologies on other retail customers.

II. KU/LG&E's Net Metering Compensation Approach Results In Fair, Just, and Reasonable Rates for All Customers.

In order to achieve fair, just, and reasonable rates for all customers, it stands to reason that excess rooftop solar generation should only be purchased at the lowest reasonable price. In

⁵⁴ California Legislative Information AB-1139 Net energy metering (2021-2022) accessible at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1139

⁵⁵ 10 News San Diego (May 26, 2021), https://www.10news.com/news/local-news/ab-1139-controversial-bill-could-change-solar-industry-in-california

⁵⁶ Borenstein, Severin. "Rooftop Solar Inequity" Energy Institute Blog, UC Berkeley, June 1, 2021, https://energyathaas.wordpress.com/2021/06/01/rooftop-solar-inequity/; In his blog Professor Borenstein states "It has been well documented-and surprises no one-that households with solar are disproportionately wealthy (as well as disproportionately white) (citation omitted). So, when a customer installs solar, their share of the fixed cost are shifted to other ratepayers who are poorer on average. Net Energy Metering hurts the poor. It's that simple."

all other instances, Kentucky utilities are required to pursue least cost resources.⁵⁷ Moreover, requiring a utility to pay more than is required for power is not only wasteful and duplicative on its face,⁵⁸ but clearly runs afoul of the Commonwealth's least-cost regulatory mandate.

AG/KIUC urge the PSC to set a rate that is fair and just for all customers. Compensating net metering customers at market prices for excess energy, as KU/LG&E proposes, produces the lowest reasonable cost for that power. That approach also avoids the type of rate subsidies and cost-shifting the Commission recently admonished in a solar contract case.⁵⁹

The Commission recently decided to implement an eight-part test to determine avoided costs associated with net metering in the Kentucky Power case. While the parties in this case generally agree with the test they disagree with the application of those factors. The Commission heard from many witnesses who offered varying opinions dissecting engineering indices and cost calculations. There is however, a straightforward approach that complies with the Commission's charge to set fair, just and reasonable rates. The Commission should move towards a market price application. The simple, equitable, and obvious answer is that the fair price to pay for any excess energy generated is the market price.

-

 $^{^{57}}$ See, e.g., 807 KAR 5:058 \S 8.

⁵⁸ See KRS 278.020(1); In Re: Electronic Application Of Louisville Gas And Electric Company And Kentucky Utilities Company For Approval Of A Solar Power Contract And Two Renewable Power Agreements To Satisfy Customer Requests For A Renewable Energy Source Under Green Tariff Option #3, Case No. 2020-00016, Order (March 2, 2020).

⁵⁹ Electronic Application of Louisville and Electric Company and Kentucky Utilities for Approval of a Solar Power Contract and Two Renewable Power Agreements to Satisfy Customer Requests for a Renewable Energy Source Under Green Tariff Option #3. Case No. 2020-00016. This Commission ruled that the companies could not shift the cost to ratepayers who were not a part of the renewable power agreement and that the tariffs should ensure that participants do not shift costs to nonparticipants. Order May 8, 2020 at pp 21 & 23.

⁶⁰ Electronic Application Of Kentucky Power Company For (1) A General Adjustment Of Its Rates For Electric Service; (2) Approval Of Tariffs And Riders; (3) Approval Of Accounting Practices To Establish Regulatory Assets And Liabilities; (4) Approval Of A Certificate Of Public Convenience And Necessity; And (5) All Other Required Approvals And Relief. Case No. 2020-00174.

CONCLUSION

WHEREFORE, the Commission should adopt AG/KIUC's recommendations in this proceeding.

Respectfully submitted,

DANIEL CAMERON ATTORNEY GENERAL

/s/ J. Michael West

Lawrence W. Cook, Esq. J. Michael West, Esq. John G. Horne II, Esq.

ASSISTANT ATTORNEYS GENERAL 1024 CAPITAL CENTER DR., STE. 200 FRANKFORT, KY 40601 (502) 696-5453 FAX: (502) 564-2698 Larry.Cook@ky.gov Michael.West@ky.gov Angela.Goad@ky.gov John.Horne@ky.gov

-and-

/s/ Michael L. Kurtz

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
Jody Kyler Cohn, Esq.
BOEHM, KURTZ & LOWRY
36 EAST SEVENTH STREET
SUITE 1510 CINCINNATI, OH 45202
(513) 421-2255
FAX: (513) 421-2764
mkurtz@BKLlawfirm.com
kboehm@BKLlawfirm.com
jkylercohn@BKLlawfirm.com