COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC FILING OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. AND ITS MEMBER)	
DISTRIBUTION COOPERATIVES FOR APPROVAL)	CASE NO. 2021-00198
OF PROPOSED CHANGES TO THEIR QUALIFIED)	
COGENERATION AND SMALL POWER)	
PRODUCTION FACILITIES TARIFFS)	

POST-FORMAL CONFERENCE BRIEF OF EAST KENTUCKY POWER COOPERATIVE, INC.

Pursuant to the Commission's September 15, 2021 Order in the above-captioned proceeding, East Kentucky Power Cooperative, Inc. ("EKPC"), by counsel, hereby provides its response to the Commission's question regarding the use of a capacity market clearing price as the rate for use in a five-year fixed contract for the purchase of capacity from a qualifying facility ("QF") under the Public Utility Regulatory Policies Act of 1978, as amended ("PURPA"). Specifically, the Commission requested that EKPC address:

whether using the clearing price of a recent incremental capacity market auction as the capacity payment in the stated rate on EKPC's tariff for use in a five-year fixed contract for a qualifying facility is acceptable and consistent with FERC's PURPA regulations and other applicable federal and state law.

I. Background

In general, every electric utility is required to purchase electric energy and/or capacity made available by QFs.¹ In accordance with Section 210(m) of PURPA, adopted by the Energy

¹ See Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978, Order No. 69, FERC Stats. & Regs. ¶ 30,128, at 30,864, 30,870, order on

Policy Act of 2005 and implemented by the Federal Energy Regulatory Commission ("FERC") in 18 C.F.R. §§ 292.309 & 292.310 (2020), electric utilities are not required to purchase from QFs that FERC finds have access to wholesale competitive markets meeting the criteria adopted by FERC. FERC has terminated EKPC's obligation to enter into new contracts or legally enforceable obligations with QFs with a net generating capacity over 20 MW.²

PURPA also establishes the framework for the rates for the electric energy and/or capacity that electric utilities must purchase. The basic rule is that the rate for purchases of electric energy and/or capacity from QFs must be "just and reasonable to the electric consumer of the electric utility and in the public interest" and must "[n]ot discriminate against [QFs]." Additionally, an electric utility may not be required to "pay more than the avoided costs for purchases" from QFs. FERC has determined that "a rate for purchases satisfies [these] requirements . . . if the rate equals the avoided costs determined after consideration of the factors set forth" in FERC's regulations (discussed below).

"Avoided costs" are defined as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the [QF], such utility would generate itself *or purchase from another source*." Thus, FERC's implementation regulations "provide that electric

reh'g, Order No. 69-A, FERC Stats. & Regs. ¶ 30,160 (1980), aff'd in part & vacated in part sub nom. Am. Elec. Power Serv. Corp. v. FERC, 675 F.2d 1226 (D.C. Cir. 1982), rev'd in part sub nom. Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp., 461 U.S. 402 (1983); 18 C.F.R. § 292.303(a) (2020).

² See East Kentucky Power Cooperative, Inc., 160 FERC ¶ 61,053 (2017), order denying clarification and reh'g, 162 FERC ¶ 61,267 (2018). EKPC intends to file with FERC in the near future an application to terminate its obligation to purchase electric energy and capacity from small power production QFs with a net generating capacity greater than 5 MW.

³ 18 C.F.R. § 292.304(a)(1) (2020).

⁴ 18 C.F.R. § 292.304(a)(2) (2020).

⁵ 18 C.F.R. § 292.304(b)(2) (2020).

⁶ 18 C.F.R. § 292.101(b)(6) (2020) (emphasis added).

utilities must purchase electric energy and capacity made available by [QFs] at a rate reflecting the cost that the purchasing utility can avoid as a result of obtaining energy and capacity from these sources, rather than generating an equivalent amount of energy itself *or purchasing the energy or capacity from other suppliers*."⁷

FERC has clarified that, in purchasing electric energy and capacity from QFs, the electric utility and its ratepayers should be financially indifferent with respect to its purchases from QF. Thus, "the purchasing utility must be in the same financial position it would have been had it not purchased the qualifying facility's output." In that regard, an electric utility with excess capacity would have an avoided capacity cost of zero dollars for the purchase of any capacity from a QF. As stated by FERC, "avoided cost rates need not include the cost for capacity in the event that the utility's demand (or need) for capacity is zero. That is, when the demand for capacity is zero, the cost for capacity may also be zero." 10

⁷ Order No. 69 at 30,864 (emphasis added).

⁸ Order No. 69 at 30,871.

⁹ See, e.g., Qualifying Facility Rates and Requirements Implementation Issues Under the Public Utility Regulatory Policies Act of 1978, Order No. 872, 172 FERC ¶ 61,041, at P 171 & n.266 ("if a purchasing electric utility has no need for additional capacity (and thus the purchasing utility's avoided cost for capacity would be zero)"), order on reh'g and clarification, Order No. 872-A, 173 FERC ¶ 61,158 (2020). See also Order No. 69 at 30,870 ("A qualifying facility may seek to have a utility purchase more energy or capacity than the utility requires to meet its total system load. In such a case, while the utility is legally obligated to purchase any energy or capacity provided by a qualifying facility, the purchase rate should only include payment for energy or capacity which the utility can use to meet its total system load."), 30,885 ("If an electric utility has sufficient capacity to meet its demand, and is not planning to add any new capacity to its system, then the availability of capacity from qualifying facilities will not immediately enable the utility to avoid any capacity costs.").

¹⁰ City of Ketchikan, Alaska, 94 FERC ¶ 61,293, at 62,061 (slip op. at 10) (2001).

II. Use of Market Clearing Price to Set Capacity Rate

A. General Principles

As noted above, FERC's PURPA implementation regulations set forth factors that should be considered in establishing rates for an electric utility's purchase of capacity from QFs. These factors include the electric utility's estimated avoided costs on the utility's system; the utility's plan for the addition and retirement of capacity; the estimated capacity costs of planned capacity additions; the availability of capacity from a QF during system peak periods, including the dispatchability and reliability of the QF, the terms of any contract with the QF, the coordination of scheduled outages, the usefulness of capacity supplied by the QF during system emergencies, the "individual and aggregate value" of energy from QFs on the utility's system, and the smaller capacity increments and shorter lead times available with the addition of capacity from QFs; the "relationship of the availability" of the QF capacity to "the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use"; and the costs or savings resulting from "variations in line losses." Importantly, the factors themselves do not establish the rate; rather, the data "are to be used as a starting point for the calculation of an appropriate rate for purchases equal to the utility's avoided cost." States are given flexibility to implement the rates for the PURPA purchase obligation:

Accordingly, [FERC] supports the recommendation made in the Staff Discussion Paper that it should leave to the States and nonregulated utilities "flexibility for experimentation and accommodation of special circumstances" with regard to implementation of rates for purchases. Therefore, to the extent that a method of calculating the value of capacity from qualifying facilities reasonably accounts for the utility's avoided costs, and does not fail to provide the required encouragement

¹¹ 18 C.F.R. § 292.304(e)(2) (2020).

¹² Order No. 69 at 30,883.

of cogeneration and small power production, it will be considered as satisfactorily implementing [FERC's] rules.¹³

FERC has recognized that use of a market price to set the capacity rate would be acceptable. For example, FERC has observed that it "share[s] the concern [of the Public Utility Commission of Texas ("PUCT")] that the mandatory QF purchase obligation under PURPA in conjunction with administratively avoided cost rates may be inconsistent with the operation of an effective competitive market" and that the PUCT "has sufficient flexibility to adopt *a more market-oriented method of determining avoided costs* which would be both consistent with PURPA and its retail competition program." FERC also has invalidated a state commission's process for determining avoided capacity costs because the process "excluded potential sources of capacity from which the utilities could purchase." FERC stated that it would be "inconsistent with our obligation under PURPA to ensure just and reasonable rates, and our goals to encourage development of competitive bulk power markets, to permit the use of PURPA to create new contracts that do not reflect market conditions for new bulk power supplies." 16

More recently, FERC has specifically approved the use of wholesale market prices (i.e., locational marginal price ("LMP")) as "a measure of as-available energy avoided costs for electric utilities located in [regional transmission organization ("RTO") or independent system operator ("ISO")] markets."¹⁷ Thus, FERC adopted a rebuttable presumption that LMP is an appropriate

¹³ Order No. 69 at 30,883.

¹⁴ Cogen Lyondell, Inc., 95 FERC ¶ 61,243, at 61,838 (2001) (citing Southern California Edison Co., 70 FERC ¶ 61,215, order on reconsideration, 71 FERC ¶ 61,269 (1995)) (emphasis added).

¹⁵ Southern California Edison Co., 70 FERC \P 61,215, slip op. at 26, order on reconsideration, 71 FERC \P 61,269 (1995).

¹⁶ Southern California Edison Co., 70 FERC ¶ 61,215, slip op. at 23.

¹⁷ Order No. 872 at P 151. FERC also noted that states previously (before Order No. 872) could conclude that LMP was an "appropriate measure of the avoided cost for energy." *Id.* at P 175.

means to determine avoided cost for as-available energy.¹⁸ For electric utilities not located within an RTO or ISO, FERC determined that a state could set the as-available energy rate paid to a QF at energy rates established at liquid market hubs¹⁹ or at combined cycle prices (defined as a formula rate established by the state using published natural gas price indices and a proxy heat rate for an efficient natural gas combined-cycle generating facility).²⁰

FERC did not extend its determinations in Order No. 872 to allow the use of LMP or other competitive prices (i.e., energy prices determined at liquid market hubs or combined cycle prices) as the measure of avoided capacity cost. ²¹ FERC concluded that such competitive energy prices reflect the short-run marginal cost of energy to utilities, but, in contrast, the price of capacity purchased from a QF reflects the electric utility's long-run avoided cost; therefore, it would be inappropriate to use *energy* market prices to establish *capacity* rates. ²² However, FERC determined that it would allow prices established in competitive solicitations (such as requests for proposals, or RFPs) to be used for capacity and energy rates (so long as they meet the criteria outlined in Order No. 872, such as transparency and independent administration). ²³ Finally, FERC noted that Order No. 872 "does not alter a purchasing utility's existing obligation to pay QFs for

¹⁸ Order No. 872 at P 152. FERC found that "(1) LMPs reflect the true marginal cost of production of energy, taking into account all physical system constraints; (2) these prices would fully compensate all resources for their variable cost of providing service; (3) LMP prices are designed to reflect the least-cost of meeting an incremental megawatt-hour of demand at each location on the grid, and thus prices vary based on location and time; and (4) unlike average system-wide cost measures of the avoided energy cost used by many states, LMP should provide a more accurate measure of the varying actual avoided energy costs, hour by hour, for each receipt point on an electric utility's system where the utility receives power from QFs." *Id.* at P 153 (citing *Qualifying Facility Rates and Requirements Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, Notice of Proposed Rulemaking, 168 FERC ¶ 61,184 at PP 44-45 (2019)).

¹⁹ Order No. 872 at P 189.

²⁰ Order No. 872 at P 211.

²¹ Order No. 872 at P 120.

²² Order No. 872 at P 119.

²³ Order No. 872 at PP 411-14.

any avoided capacity benefit that allows the utility to avoid acquiring capacity,"²⁴ but did not address its prior statements and orders on the use of a market mechanism to establish the capacity rate.²⁵

B. PJM Market Clearing Price as Avoided Capacity Cost

Consistent with the foregoing principles, EKPC appropriately sets the rate for capacity that it must purchase from QFs at the PJM capacity market clearing price. PJM's capacity market (the Reliability Pricing Model, or "RPM") is the means by which PJM ensures that sufficient power supply resources are available to be called upon to meet energy demand in the future and thereby maintain long-term grid reliability. Load-serving entities ("LSEs") like EKPC must participate in the RPM for their load obligations. EKPC hedges its "Locational Reliability Charge" in the RPM by self-scheduling its resources to cover its obligation in the base residual auction, and offering and clearing its resources in the base residual and incremental auctions. The RPM incremental capacity auctions in particular allow LSEs to secure additional resources to meet their load-serving obligations as those obligations change over time. These auctions are intended to provide an efficient market mechanism for LSEs like EKPC to hedge their capacity payment obligations in PJM.²⁶

²⁴ Order No. 872 at P 119 (citing Order No. 69, FERC Stats. & Regs. ¶ 30,128 at 30,881-86).

²⁵ See, e.g., 220 CMR 8.02, 8.05 (Massachusetts Dept. of Public Utilities rule requiring purchase of QF capacity at "monthly market clearing price for capacity, as determined by the ISO and its successors") (available at <a href="https://casetext.com/regulation/code-of-massachusetts-regulations/department-220-cmr-department-of-public-utilities/title-220-cmr-800-sales-of-electricity-by-qualifying-facilities-and-on-site-generating-facilities-and-on-site-generating-facilities).

²⁶ For a description of PJM's capacity market, see PJM Manual 18: PJM Capacity Market, Revision 50, at 15-20 (effective Sept. 1, 2021) (available at https://www.pjm.com/~/media/documents/manuals/m18.ashx).

As shown in EKPC's submissions to the Commission, the PJM incremental capacity auctions are an integral part of EKPC's resource plans. As part of its tariff filing in this proceeding, EKPC provided a copy of PJM's 2021/2022 RPM Third Incremental Auction Results and detailed calculations concerning its inputs and methodology for arriving at a capacity value for dispatchable generation from a PURPA small power production (SPP) resource. By combining EKPC generator specific information and the most recent capacity market auction results from PJM, EKPC has a high degree of confidence that its calculations reflect the most accurate and timely measure of avoided cost as required in 807 KAR 5:054. As a result, they are fully consistent with PURPA's requirements.²⁷ Payment of any amount over those values would violate PURPA and require the consumers served by EKPC's distribution cooperative member-owners to pay excessive costs.²⁸

Over the next five years, which is the standard contract term for an EKPC power purchase agreement with a PURPA generator, EKPC does not have any significant projected capacity acquisitions or constructions projects in its forecast.²⁹ Any capacity additions over that timeframe would likely be related to customer-specific sustainability goals and not tied to a need to replace existing generation assets. Accordingly, these purchases – if they were to occur – would be minimal, incremental capacity additions whose value is best reflected in the incremental auctions that PJM conducts. (Indeed, as instructed by FERC, the avoided cost payment by EKPC for any

²⁷ See 18 C.F.R. § 292.304(b)(2) (2020) (payment of avoided cost after consideration of factors complies with PURPA purchase obligation).

²⁸ See 18 C.F.R. § 292.304(a)(2) (2020) (an electric utility may not be required to "pay more than the avoided costs for purchases" from QFs).

²⁹ EKPC is still in the process of developing its 2022 Integrated Resource Plan, where its future capacity needs will be spelled out in greater detail.

such purchases should be zero dollars since no capacity construction or purchase would be avoided by EKPC.³⁰)

In contrast to the competitive market price for capacity established in the RPM incremental capacity auctions (which reflects the actual purchase price to EKPC of capacity that it needs to acquire on a short-term basis), the use of Net CONE is not an appropriate methodology for establishing avoided capacity costs. "Net CONE" is the administratively-determined net cost of new entry for a generation resource in PJM (gross cost less estimated net energy and ancillary service revenues). It is used to set the offer floor for certain resources under PJM's Minimum Offer Price Rule ("MOPR"). But Net CONE does not itself set the market clearing price (though presumably it could). Net CONE therefore does not necessarily reflect prices that would result from the operation of competitive market conditions. Nor does it reflect the cost to EKPC of acquiring capacity in the PJM market (i.e., the incremental auction clearing prices), and accordingly would not be EKPC's avoided capacity cost (the cost of purchasing the capacity from other suppliers). As shown in EKPC's recent response to the Commission's Staff's data requests, the applicable Net CONE price was *more than ten times* the auction clearing price in PJM's Third

³⁰ See, e.g., Order No. 872 at P 171 & n.266; Order No. 69 at 30,870, 30,885; City of Ketchikan, Alaska, 94 FERC at 62,061 (slip op. at 10).

³¹ In its recent order addressing Kentucky Power's QF tariff, the Commission required the use of a zonal Net CONE for establishing Kentucky Power's avoided capacity cost. The Commission found that "the avoided capacity rate should be the zonal net CONE for the delivery years that have an established CONE at the time of the contract and the last known net CONE for the remainder of the term. This will balance the interests of Kentucky Power and the QF by enabling QFs to estimate the avoided capacity rates from publically available documents and providing a market based capacity value specific to Kentucky Power's location." *In the Matter of Electronic Application of Kentucky Power*, Case No. 2020-00174, Order, at 100 (Jan. 13, 2021). But CONE is not a market-based value; rather, it is administratively determined. For a summary describing how CONE is an administratively determined (i.e., not market-based) value, see, for example, "Default MOPR Floor Offer Prices for New Generation Capacity Resources," PJM Market Implementation Committee (March 11, 2020) (available at https://www.pjm.com/-/media/committees-groups/committees/mic/2020/20200311/20200311-item-06c-default-mopr-cone.ashx).

Incremental Auction for 2021/2022.³² Stated differently, EKPC – and its Members and the consumers that they serve – would not be financially indifferent if they had to pay for QF capacity at the Net CONE price if the PJM capacity market clearing price were lower.

IV. Conclusion

Wherefore, East Kentucky Power Cooperative, Inc. respectfully requests that the Commission permit EKPC to continue to use the clearing prices established in the PJM incremental capacity market auctions as the capacity payment in the stated rate in EKPC's Cogen Tariff for use in five-year fixed contracts for the purchase of capacity from qualifying facilities.

Tendered this 1st day of October 2021.

Respectfully submitted,

David S. Samford

L. Allyson Honaker

GOSS SAMFORD, PLLC

2365 Harrodsburg Road, Suite B-325

Lexington, Kentucky 40504

(859) 368-7740

david@gosssam fordlaw.com

ally son@gosssam ford law.com

Counsel for East Kentucky Power Cooperative, Inc.

³² See EKPC Response to Staff-DR3-01, Attachment (available at https://psc.ky.gov/pscecf/2021-00198/gwyn.willoughby%40ekpc.coop/09232021063540/NET_CONE_EXAMPLE - 21SEP21 - 01-TARIFF_UPDATE - SPP-Cogen_Update_2021 - 15MAR21.xlsx) (see tab "Seasons-Hours").

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, this is to certify that the electronically filed documents are true and accurate copies of the same documents being filed in paper medium; that the electronic filing has been transmitted to the Commission on October 1, 2021; and that there are currently no parties in this proceeding that the Commission has excused from participation by electronic means.

Counsel for East Kentucky Power Cooperative, Inc.