BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Proposed Amendments to CSR 240-20.060, Filing Requirements for Electric Utility Cogeneration	)))	**File No. EX-2020-0006**

MIDWEST COGENERATION ASSOCIATION
PROPOSED AMENDMENTS TO STAFF'S PROPOSED RULES

COMES NOW the Midwest Cogeneration Association ("MCA")[1] and, pursuant to the *Notice of Rulemaking Hearing* issued May 29, 2020, requests that the Public Service Commission ("Commission") make two critical amendments to Staff's proposed draft cogeneration rules.

The Midwest Cogeneration Association ("MCA") strongly believes that Staff's proposed cogeneration rules, as currently written, would fail to fully and effectively implement the goals and requirements of the Public Utility Regulatory Policies Act ("PURPA"), and that MCA's recommended changes submitted herein are necessary to ensure market access for cogeneration facilities in Missouri.

Summary of MCA's Proposed Amendments

Standard offer contracts are designed to encourage the development of energy projects by making long term contracts at fixed rates available to qualified facilities. Under Staff's proposed cogeneration rules, a standard offer contract would only be required to be made available to cogeneration facilities with a design capacity 1,000 kW, leaving out the vast majority of cogeneration projects which would be large enough to export power to the grid. MCA urges that Staff's proposed cogeneration rules be amended to require a standard offer contract:

1) be made available to cogenerations systems with ≤ 20 MW of nameplate generation capacity; and

2) provide a minimum 10-year contract term and up to 20-year contract term for qualifying cogeneration facilities.

Why do standard offer contracts matter for cogeneration projects?

The power purchase agreement ("PPA") is the most critical contract in the effort to secure cogeneration project financing, typically providing the project's owner with stable and sufficient revenue to pay its project debt obligation, covering the project's operating expenses, and providing a reasonable risk-adjusted return to investors. Lenders look to whether there is a guaranteed revenue stream from a creditworthy purchaser that is sufficient to support the

[1] The MCA was incorporated in 1984 to promote a greater public understanding of cogeneration and independent power production. The organization works to improve general business conditions in the cogeneration industry, conducting research, publishing reports and holding various seminars and workshops with the goal of advancing the concept of cogeneration throughout Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

project's economics. The terms of the PPA determine whether equity investors and debt lenders view the project as financeable, and lenders are very concerned with the length of the PPA term. According to the Electricity Consumers Resource Council, "Projects cannot get financed without some degree of long-term PPA pricing certainty. Utilities already receive cost recovery for assets over their lifetimes, often spanning 20 to 40 years. QFs should receive comparable treatment."[2] Term length must put the PURPA Qualifying Facility ("QF") in a position that approximates the position of the utility in resource planning. A standard offer term that is too short prejudices QF projects when competing at avoided cost rates which are based on non-QF projects that are amortized over 20 years or longer.

Proposed Amendment #1: Standard Offer Contracts Should Be Extended to Cogeneration Facilities with ≤20 MW Capacity

PURPA regulations require electric utilities to establish standard rates for purchases from QFs with capacity of 100 kilowatts ("kW") or less, but explicitly give state commissions the authority to develop standard rates for larger projects. 18 C.F.R. §§ 292.304(c)(1), (2). The availability of a standard rate reduces transaction costs for individual projects, avoiding the cost and burden of establishing an individualized avoided cost rate and reducing barriers to entry. Indeed, FERC gave states the discretion to establish standard rates for QFs precisely because standard rates reduce transaction costs and significantly encourage cogeneration and small power production. 45 Fed. Reg. 12214, at 12223.

Negotiation of a contract can be costly, and under the Staff's proposed rule the only resolution for a negotiation that a QF believes to be unfair is an even more time intensive and expensive individual contract review proceeding in front of the Commission. For projects ≤ 20MW, that cost and uncertainty can derail the project altogether. According to Staff's proposed rule, "For qualifying facilities whose systems fall out of the standard contract ranges described in Section (4), if the utility and the customer cannot agree to the terms and conditions of the contract, the [Public Service Commission (PSC)] commission shall establish the terms and conditions upon the request of the utility or the customer." Such delays and uncertainty would be a deal-breaker for most if not all potential cogeneration projects that would otherwise be economic and beneficial for Missouri.

If the "avoided cost" is appropriately set, ratepayers will benefit when the contracting and transaction costs for both the utility and the QF are reduced through the use of a standard offer contract. While a larger cap on the standard offer would be expected to result in more projects by QFs, those more energy efficient and resilient projects would be in the public interest. Further, by definition the cost of those projects would not exceed the utility's "avoided cost".

Why is ≤ 20 MW the right maximum capacity for a standard contract? As an initial matter, 20 MW reflects a traditional demarcation between small and large system sizes in PURPA implementation and interconnection procedures.[3] Also, importantly, on July 16, 2020, the

[2] Electricity Consumers Resource Council, Fact Sheet on PURPA, CHP & U.S. Manufacturers (October 2018), p. 2, available at https://www.eba-net.org/assets/1/6/PURPA_Binder1.pdf

[3] "The Commission noted that, in using 20 MW to separate the presumption that large QFs had nondiscriminatory access and small QFs lacked such access, the Commission had recognized: (1) Order No. 671's exemption for QFs that are 20 MW or smaller from sections 205 and 206 of the FPA; and (2) Order Nos. 2006 and 2006-A's setting 20 MW as the demarcation for different interconnection standards between small and large generators." FERC, Docket Nos. RM19-15-000 and AD16-16-000; Order No. 872, issued July 16, 2020, available at https://www.ferc.gov/sites/default/files/2020-07/07-2020-E-1.pdf at p. 332, citing *see* Order No. 688, 117 FERC ¶

Federal Energy Regulatory Commission (FERC) retained the rebuttable presumption that cogeneration facilities with a net capacity at or below 20 MW do not have nondiscriminatory access to markets to sell their excess power.[4] This latest finding of continuing discriminatory access to markets for cogeneration systems under 20 MW underscores the need for the Commission to adopt policies that support and facilitate the development of these cogeneration projects. FERC explained the particular need for a standard contract for ≤20 MW cogenerators, noting, "… the production and sale of electricity is a byproduct of these thermal processes, and owners of cogeneration facilities might not be as familiar with energy markets and the technical requirements for such sales."[5]

By allowing CHP systems up to 20 MW in size to access standard offer contracts and providing for a minimum contract length of 10 years and up to 20-year contracts for qualifying cogeneration projects, the Commission will make the proposed cogeneration rules far more effective at implementing PURPA and opening market access to cogeneration in Missouri. As stated in MCA's initial comments in this proceeding, Missouri is behind neighboring states in cogeneration deployment.[6] Indeed, in 2016 the U.S. Department of Energy found that Missouri has the technical potential to generate 3,290 MW of electricity via cogeneration at 6,384 sites. But as of 2019, Missouri was generating only 236 MW of power at 19 cogeneration sites. Increasingly states are recognizing that raising the maximum system size for standard offer contracts can help achieve PURPA's goal of increasing markets for cogeneration. For example, the California Public Utilities Commission's recently adopted Standard Offer Contracts program is available to QF's with a capacity of 20 MW or less and provides for terms of up to 12 years with pricing set by reference to Locational Marginal Prices (LMP) in California.[7]

In sum, the Commission should extend standard offer contracts to projects up to 20 MW because it reduces transaction costs for the utility and the cogeneration customer and it is consistent with PURPA's goal of leveling the playing field for customer-owned small cogeneration projects. Adopting this proposed amendment will break-through a long-standing unwarranted barrier to the development of clean, reliable, affordable, and abundant baseload energy in Missouri as intended by Missouri's Comprehensive State Energy Plan.[8]

61,078 at P 76, order on reh'g, Order No. 688-A, 119 FERC ¶ 61,305 at P 97; see also 18 CFR 292.601(c)(1) ("[S]ales of energy or capacity made by qualifying facilities 20 MW or smaller, or made pursuant to a contract executed on or before March 17, 2006 or made pursuant to a state regulatory authority's implementation of section 210 the Public Utility Regulatory Policies Act of 1978, 16 U.S.C. 824a-1, shall be exempt from scrutiny under sections 205 and 206."); Revised Regulations Governing Small Power Production and Cogeneration Facilities, Order No. 671, 114 FERC ¶ 61,102, at P 98, order on reh'g, Order No. 671-A, 115 FERC ¶ 61,225 (2006) (establishing exemption for QFs 20 MW or below from 205 and 206 of FPA); Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, 111 FERC ¶ 61,220, at P 75, order on reh'g, Order No. 2006-A, 113 FERC ¶ 61,195 (2005), order granting clarification, Order No. 2006-B, 116 FERC ¶ 61,046 (2006).

[4] https://www.ferc.gov/sites/default/files/2020-07/07-2020-E-1-PURPA-fact-sheet.pdf

[5] FERC, Docket Nos. RM19-15-000 and AD16-16-000; Order No. 872, issued July 16, 2020, at p. 334

[6] See *Recommendation of the Midwest Cogeneration Association in Support of Renew Missouri's Petition*, June 25, 2019, Missouri Public Service Commission Docket Ex-2019-0378.

[7] *See* https://www.sce.com/procurement/standard-contracts; https://www.natlawreview.com/article/california-puc-adopts-new-standard-offer-contract-small-purpa-projects; http://www.ieso.ca/en/Sector-Participants/Energy-Procurement-Programs-and-Contracts/Combined-Heat-and-Power;

[8] Missouri's Comprehensive State Energy Plan (October 2015), https://energy.mo.gov/comprehensive-state-energy-plan expressly recognizes cogeneration as a resource for helping to meet Missouri's short- and long-term needs for clean, reliable, affordable, and abundant energy.

Proposed Amendment #2: A Minimum 10-Year and Up to 20-Year Standard Contract Term

A cogeneration project can have a useful life in excess of 25 to 30 years; a typical estimate of the useful life for a cogeneration project is around 20 years. In terms of payback period, a typical simple, pre-tax, unlevered payback period for cogeneration projects is between 6 to 9 years. However, to meet minimum equity investor expectations and investment requirements, projects must typically be financed such that the equity investor can achieve a leveraged, after-tax, payback on investment in less than 5 years. To achieve this leveraged return on equity, a debt financing term of at least 7 to 10 years (best case), and often up to 15 or 20 years, must be negotiated with a long-term lender.

The length of the PPA term required by a lender in order to obtain financing for a cogeneration project must be at least as long as the debt amortization period for the project, and ideally would exceed the debt amortization period by 1 or 2 years to further mitigate risk. This results in a minimum PPA contract term of 7 to 10 years where the operation of a cogeneration project is reflective of its highest technical and economic potential. Many investors will not consider a cogeneration project economically viable nor attempt to procure third-party financing unless the PPA has a minimum 10-year duration. Preferably, investors want to see a PPA sufficient in length to fully amortize the project's debt over the project's estimated useful life, which would counsel policies that allow a PPA contract term up to 20 years for many cogeneration projects. See *Windham Solar LLC* and *Allco Finance Limited*, 157 F.E.R.C. P61,134, ¶ 8 ("[A] legally enforceable obligation should be long enough to allow QFs reasonable opportunities to attract capital from potential investors.").

Providing utilities with lengthy useful life assumptions while the same utilities have no obligation to provide a QF providing baseload generation with a similar term is discriminatory. Long-term standard contract lengths prevent discrimination against QFs because they put the QF in a position that approximates the position of the utility in resource planning. On the other hand, a standard offer term that is too short prejudices QFs when competing at "avoided cost" rates because utilities adding their own capacity generally use financing models that amortize capital costs over 20 years or longer, and "avoided costs" are supposed to be considered with, in part, the deferral of capacity additions. See 18 C.F.R. 292.304(e). In short, a contract term of sufficient length is required to meet PURPA's mandate for non-discriminatory market access for cogeneration.

This is nothing new. FERC and the courts have long found that PURPA entitles QFs to long-term fixed rate contracts. A federal district court in Massachusetts recently found that:

> FERC has stated that the purpose behind PUPRA [is] furthered by allowing a QF to establish a fixed contract price for its energy and capacity at the outset of its obligation. A Fixed contract price provides a potential investor in a QF with reasonable certainty about the expected return on a potential investment… FERC has consistently affirmed the right of QFs to long-term avoided cost contracts or other legally enforceable obligations with rates determined at the time the obligation is incurred, even if the avoided costs at the time of delivery ultimately differ from those calculated at the time the obligation is originally incurred. *Allco Renewable Energy, Ltd*, U.S. Dist. LEXIS 130617, at *23.

Based on cogeneration project life, financing requirements and the need for certain and non-discriminatory market access, MCA recommends that the Commission require that Missouri

utilities provide standard contracts with a minimum 10-year term and the option for individual projects to qualify for a contract term as long as 20-years based on the project useful life and appropriate generation guarantees.

Why Is MCA's Proposal Good For Missouri?

This proposal is good for Missouri because optimally sized energy efficient cogeneration can save Missouri businesses money on gas and electric costs while also allowing them to bolster grid resources with excess reliable baseload power. That is money Missouri businesses can pour into production which creates jobs for Missourians. While a cogeneration system can be sized for nearly any application, its benefits are particularly apparent in energy-intensive industries with large heat loads and agricultural operations with biogas production that create the potential for cogeneration meeting on-site electrical requirements and also exporting electricity to the grid. Properly sized on-site cogeneration systems can also ensure the resilience of critical infrastructure, such as hospitals, universities, data centers, municipal buildings, water supplies and wastewater treatment plants, during extreme weather events and security threats, while also supplying reliable excess power to the grid or a microgrid.

The other many benefits of increasing cogeneration projects in Missouri were highlighted in in Missouri's Comprehensive Statewide Energy Plan (2015).[9] These benefits include:

- Fewer fossil fuel inputs resulting in reduced greenhouse gas emissions
- Efficiency gains by cogenerating both heat and power from a single quantum of fuel
- Reliability and resiliency benefits during severe weather or grid blackouts
- Ability to anchor microgrids for district energy usage

MCA Also Supports Renew Missouri's Additional Recommendations

In addition to the specific amendments MCA offers above, MCA continues to support the proposal of Renew Missouri, which, in contrast to Staff's proposed rules, would grant Independent Power Producers ("IPPs") non-discriminatory access to the market, transparent avoided cost data, and the ability to enter into fixed-term contracts with utilities. The Renew Missouri proposal would significantly improve the general business conditions of the cogeneration industry in Missouri, allowing the state's residents to benefit from the numerous advantages of cogeneration, including energy efficiency, cost savings, reduced greenhouse gas emissions, and increased reliability. Particularly in light of challenges posed by extreme weather events or public health crises like COVID-19, Missouri residents would benefit from the resilience benefits of cogeneration.

Specifically, MCA supports the recommendations of Renew Missouri submitted pursuant to this rulemaking, including:

- Clarifying what obligation utilities have for various QF system sizes, especially for standard offer contracts and for contracts above the standard offer level;
- Standardizing the length of contracts between QFs and utilities to provide for long-term contracts so QFs can develop and finance projects;
- Establishing the method by which a utility's "Avoided Costs" are calculated;

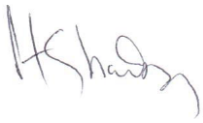
[9] Missouri's Comprehensive State Energy Plan (October 2015), https://energy.mo.gov/comprehensive-state-energy-plan

- Specifying when a “Legally Enforceable Obligation” is established between an electric utility and a QF; and
- Ensuring that the “Filing Requirements” section includes the opportunities for input from regulators and interested parties.

Conclusion

MCA urges that Staff’s proposed cogeneration rules be amended to allow cogeneration facilities with a nameplate capacity of ≤ 20 MW to access standard offer contracts and to require those standard offer contracts to include a minimum 10-year contract term and option for up to 20 year contract term. Additionally, to further encourage the development of clean, reliable, affordable, and abundant energy in Missouri, MCA supports the recommendations of Renew Missouri submitted pursuant to this rulemaking.

Respectfully,



Patricia Sharkey, Policy Director
Midwest Cogeneration Association

Environmental Law Counsel, P.C.
Suite 3700
180 North LaSalle Street
Chicago, Illinois 60601
312.981.0404 (Office)
773.338.0089 (Home Office)
773.578.0089 (Cell)
888.909.7404 (Fax)
psharkey@environmentallawcounsel.com
www.environmentallawcounsel.com