BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Renew Missouri's	)	
petition for amendment of Commission	)	File No. EX-2019-____
Rule 4 CSR 240-20.060	)	

RENEW MISSOURI'S RULEMAKING PETITION

COMES NOW Renew Missouri Advocates d/b/a Renew Missouri ("Renew Missouri"), pursuant to Section 536.041 RSMo and 4 CSR 240-2.180(2) and asks the Commission to revise and amend its cogeneration rules at 4 CSR 240-20.060:

Introduction

1. Congress passed the Public Utility Regulatory Policies Act ("PURPA") (16 U.S.C. §2601) in 1978, with the aim of diversifying the country's power supply by facilitating market access for small renewable energy generators and cogeneration facilities. PURPA requires utilities to purchase power generated from Qualifying Facilities ("QFs") at the price that it would have cost the utility to generate or purchase the power, commonly referred to as the utility's "Avoided Cost." To date, the Commission's cogeneration rules have been ineffective at implementing PURPA and opening market access to diverse and least-cost, renewable generation in Missouri.

2. Moreover, the Commission has recently recognized the need to review the effectiveness of its cogeneration rules in two working dockets. First, through its work in evaluating distributed energy resources in File No. EW-2017-0245. Then, after cogeneration issues were discussed in that case, the Commission's Staff asked the Commission to open a workshop docket to "Address potential revisions to the following Commission rules: Cogeneration (4 CSR 240-20.060), Filing Requirements for Electric Utility Cogeneration Tariff Filings (4 CSR 240-3.155), and Net Metering (4 CSR 240-20.065), with discussions related to methodologies of calculating avoided

costs; standardized Public Utility Regulatory Policies Act ("PURPA") contracts; net metering excess generation credits; and disconnect standards."[1] On September 27, 2017, the Commission issued its *Order Opening a Working Case to Review the Commission's Rules Related to Cogeneration* to facilitate discussion on the possible amendment of its rules related to Cogeneration.[2]

3. Since that time, stakeholders have filed multiple rounds of comments including general comments and specific comments on a draft rule put forward by the Commission's Staff. Having reviewed those comments, Renew Missouri believes the Commission's existing cogeneration rules must be amended to 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, as Federal law requires. Further delay is unwarranted and so Renew Missouri submits this rulemaking petition that will make the cogeneration rule more effective at implementing PURPA and allow Missouri to begin seeing the energy and economic benefits effective rules will bring.

Petitioner

4. Section 536.041, RSMo, allows any person to petition a state agency requesting the adoption, amendment, or repeal of any rule. That section further requires the agency to submit a written response to the rulemaking petition within sixty days of receipt of the petition, indicating its determination of whether the proposed rule should be adopted. Similarly, Commission Rule 4 CSR 240-2.180 requires the Commission to respond to rulemaking petitions filed by an interested party.

5. Renew Missouri is a non-profit corporation organized under the laws of Missouri with its principal place of business at 409 Vandiver, Building 5, Suite 205, Columbia, Missouri 65202.

[1] File No. EW-2018-0078, Doc. No. 1.
[2] File No. EW-2018-0078, Doc. No. 2.

Renew Missouri is a registered fictitious name of Renew Missouri Advocates under § 417.200, RSMo. Renew Missouri is a non-profit policy group whose mission is to transform Missouri into a leading state in renewable energy and energy efficiency.

6. Pleadings, notices and other correspondence in this case should be directed to undersigned counsel.

Need for Rule Change

7. The current cogeneration rules have not been effective in achieving the PURPA's statutory goals. In particular Section 210, states that Federal Energy Regulatory Commission ("FERC") must issue rules "to encourage cogeneration and small power production" which require electric utilities to offer to "purchase electric energy from such facilities." Today, few PURPA-eligible solar qualifying facilities ("QFs") are operating in Missouri.

8. This failure to effectively implement PURPA has caused Missouri to lag behind other states in developing renewable energy and realizing the attendant economic benefits. Renew Missouri has previously filed comments discussing the example of North Carolina, which has used PURPA to catapult the state to 2nd in the nation in installed utility-scale solar owned by IPPs, which are collectively responsible for billions of dollars in private sector energy investment. While North Carolina has a comparable solar resource and population profile to Missouri, the state had approximately 25 times the amount of installed solar.[3] Private companies in North Carolina have invested more than $7.75 billion in solar and employ over 6,500 people, compared to Missouri's investment of about $548.97 million and 2,819 employees.[4] One of the primary reasons for these differences is North Carolina's approach to implementing PURPA.

[3] According to SEIA's website, Missouri has a total of 202.32 MW installed, while North Carolina has roughly 5,260 MW. See: https://www.seia.org/state-solar-policy/north-carolina-solar, https://www.seia.org/state-solar-policy/missouri-solar

[4] *Id.*

9. Below, Renew Missouri proposes several changes to the Commission's rule at 4 CSR 240-20.060 that can help Missouri get on the right track for encouraging the types of valuable market investment that will make Missouri's grid more decentralized, efficient, diverse, and resilient.

10. Since PURPA facilitates utilities purchasing least-cost, renewable energy at the avoided costs, these rule revisions will create savings to utility customers. Furthermore, because this rule has been extensively examined through two separate dockets, Renew Missouri expects the public cost will be minimal.

Proposed Rule Amendment

11. The full text of the current cogeneration rules, 4 CSR 240-20.060, with proposed amendments marked, is attached as **Schedule A**. To the extent possible, the amendments incorporate Staff's draft rules filed in EW-2018-0078. The substance of the proposed amendments is described more fully below and fits into the following categories:

- *Part a*: Clarifying what obligation utilities have for various QF system sizes, especially for standard offer contracts and for contracts above the standard offer level;
- *Part b*: Standardizing the length of contracts between QFs and utilities to provide for long-term contracts so QFs can develop and finance projects;
- *Part c*: Establishing the method by which a utility's "Avoided Costs" are calculated;
- *Part d*: Specifying when a "Legally Enforceable Obligation" is established between an electric utility and a QF;
- *Part e*: Ensuring that the "Filing Requirements" section includes the opportunities for input from regulators and interested parties;
- *Part f*: Recommending various changes to the "Definitions" section of the rule.

a. System Size Limits for QFs.

12. PURPA requires each electric utility to have a standard rate for purchase for QF with a capacity of 100 KW or less. The current rule allows the option to have a standard rate for QFs larger than 100 KW. However, a larger size limitation for QFs that qualify for the standard offer program will make the rule more effective. Historical utility-scale solar development at or below 100 KW is extremely limited because 100 KW does not afford developers sufficient economies of scale to allow for financially viable projects that would be a least-cost energy source for customers if permitted to be implemented on a larger scale. Additionally, capping the standard offer program to projects 100 KW and below limits the amount of new solar generation in Missouri. States that have successfully implemented PURPA typically have standard offers above 100 KW. For example, North Carolina's 5,000 KW standard offer program facilitated billions of dollars of solar development in the state.[5]

13. In addition, PURPA requires that utilities also purchase the output of QFs above the standard offer pursuant to long-term, fixed price long-term contracts, unless the QF has non-discriminatory access to wholesale markets.[6] Therefore Missouri's Cogeneration rule should also require that utilities purchase the output of QF up to 20,000 KW in size pursuant to long-term fixed price contracts.

14. The Staff's draft rule wisely anticipates the benefits of QF development but Renew Missouri strongly believes that QF development between the standard offer cap up to 20,000 KW (e.g. 5,000 KW to 20,000 KW) is necessary to optimize benefits to ratepayers and to achieve the scale that would allow the aggregate output of dispersed small systems to enhance the reliability

[5] The North Carolina General Assembly recently reduced the standard offer program to 1 MW given that almost 3 GW of solar had come on line in the state.
[6] Such a determination has not been made with respect to QFs less than or equal to 20 MW in size in Missouri.

of the larger electricity system. Given the Commission's demonstrated interest in encouraging PURPA development we ask that the Commission make the proposed changes to the rule under the headings "Standard Rates for Purchase and Standard Contracts" and "Rates for Purchases."

b. Standard Contract Term Length.

15. The future of PURPA development in Missouri will hinge on the whether the Commission adopts specific requirements regarding contract term lengths. The otherwise commendable proposed rule changes in the Staff's draft lack the language to clearly define the term of the standard contract. Standard contract term lengths are paramount to any successful PURPA market. From Cyprus Creek Renewable's Joint Comments with Renew Missouri in File No. EW-2018-0078:

> "Fundamentally, all energy assets are financed through long term capital investments that are recouped through relatively fixed revenue streams over many years. This is true whether or not an energy asset is owned by a utility or an independent power producer ("IPP"). For utilities, the recouping of costs over many years comes in the form of Commission approved cost recovery. For IPPs, recouping costs over many years comes in the form of a power purchase agreements. Regardless of ownership structure of a generating asset, recouping costs over a longer period of time means a lower levelized cost of energy paid by ratepayers. In addition, PURPA requires that utilities offer power purchase agreements to that are of sufficient duration "to allow QFs reasonable opportunities to attract capital from potential investors." FERC has recognized that without a long enough contract term, IPPs cannot finance facilities with private capital. Additionally, an IPP asset is much more likely to provide competitive power relative to a rate-based, utility owned asset with a contract length that is comparable to Commission approved amortization timeframes for IOU assets.
>
> "Thus, to level the playing field between utilities and independent power producers, and to comply with the requirements of PURPA, we propose that the rule include a minimum or standard contract term length. Specifically, we propose a standard contract term of 20 years."[7]

[7] Joint Comments of Renew Missouri and CCR. File No. EW-2018-0078. Pg. 8. October 18th, 2017. https://www.efis.psc.mo.gov/mpsc/commoncomponents/view_itemno_details.asp?caseno=EW-2018-0078&attach_id=2018005200

16. A common refrain from utilities is that long-term contracts are subject to the risk of forecast error, which is ironic because investment in investor owned generation is also subject to the same forecast risk. Indeed, no large-scale utility investments get made by any party without certainty regarding project revenues, which necessarily subjects ratepayers to some price risk in exchange for certainty of generation supply. But in the case of investor owned utilities the ratepayer also carries the risk of construction cost overruns, operation and maintenance expenses, and, with non-renewable resources, fuel price volatility, whereas the IPP (as a private company), and its financiers, developing a QF wear all these risks. Renew Missouri proposes the amendments to the rule language be inserted in Section (5)(D) under the heading "Standard Contract Term Length for Purchases."

c. Avoided Cost Methodology.

17. There is no more important and complex aspect of PURPA implementation than the calculation of the avoided costs of energy and capacity. Renew Missouri believes there should be a transparent, standard method for all utilities that is based on each utilities most recent Integrated Resource Plan ("IRP") filings. This consistency would greatly improve the management of the administrative effort of avoided cost proceedings and would facilitate both the ability of third parties to participate effectively in such proceedings and aid the Commission's ability to provide effective oversight and decision making. To accomplish this, Renew Missouri offers amendments to the electric utility obligations in the new Section (11) of this rule.

d. Legally Enforceable Obligation

18. A key provision of PURPA that is referenced in Staff's draft rule changes but not defined is the legally enforceable obligation ("LEO"). The LEO is important for many reasons, but in particular, two stand out. First, the LEO establishes the commitment from the QF to sell its energy

and capacity to the utility and the obligation on the electric utilities to purchase energy and capacity from a QF. Second, the date a LEO is established determines the avoided cost rates paid to a QF for time-of-obligation rates.

19. In considering how to define the LEO, it is imperative that the Commission's rules provide clear guidance on when and how an LEO is established. Specifically, it is important that it be through the action of a QF that an LEO is established. The objective of the proposed language is to create a mechanism that provides that when the QF executes the form QF PPA and returns to the utility, it has "unequivocally committed itself" to sell energy and capacity to the utility and in turn, the LEO is established and the utility is obligated to purchase such energy and capacity. Renew Missouri proposes amending the rule to address this point in Section (13) under the heading "Legally Enforceable Obligations."

e. Filing Requirements

20. Renew Missouri applauds the Commission's Staff for its inclusion in its draft rule of a set of rules that clearly dictates an appropriate level of avoided cost detail must be made available to the public. However, these robust filing requirements should be paired with a procedure for public review in a docket before the Commission. Avoided cost rate disputes are more likely to occur without a thorough public review of avoided cost filings. To effectively implement PURPA, all stakeholders should have a voice in reviewing the rates that will encourage investment in the state of Missouri. The amendments incorporating these changes are located in Section (11) under the heading "Filing Requirements."

f. Definitions

21. Renew Missouri proposes several modifications and additions to the Definitions section of the rule. This includes modifying the definitions for "As-delivered rates," "Avoided Costs,"

"Capacity," "Capacity Costs," "Electric utility," "Fuel Costs," "Purchase," and "Time-of-obligation rates." These definition modifications are necessary to define terms that are used in sections Renew Missouri proposes to include in the rule as well as preserve the definitions of terms in the current rule that remain necessary to define. These amendments are included in section (1) under the heading "Definitions."

Conclusion

22. PURPA was created to remove market barriers to competition in electric generation because it is widely accepted economic theory that increased competition leads to decreased prices. Missouri's current cogeneration rules have failed to fully and effectively implement the goals and requirements of the law. Through this rulemaking, Missouri can design and execute a PURPA regime that will increase market access for small, non-utility generators, which in turn will put downward pressure on prices, particularly with respect to solar generators. For these reasons, Renew Missouri asks the Commission to commence this formal rulemaking so that Missouri can reap the benefits of solar, and solar plus storage generation in Missouri.

WHEREFORE, Renew Missouri requests the Commission commence rulemaking proceedings to consider and approve the amendments attached as **Schedule A** to the Commission's cogeneration rules at 4 CSR 240-20.060.

Respectfully,

/s/ Tim Opitz
Tim Opitz, Mo. Bar No. 65082
409 Vandiver Drive, Building 5, Ste. 205
Columbia, MO 65202
T: (573) 303-0394 Ext. 4
F: (573) 303-5633
tim@renewmo.org

Attorney for Renew Missouri

Certificate of Service

I hereby certify that copies of the foregoing have been mailed, emailed or hand-delivered to all counsel of record this 3rd day of June 2019:

/s/ Tim Opitz

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Renew Missouri's petition for amendment of Commission Rule 4 CSR 240-20.060	)))	File No. EX-2019-____

VERIFICATION

STATE OF MISSOURI)
) **ss**
COUNTY OF BOONE)

COMES NOW James Owen, and on his oath states that he is of sound mind and lawful age; that he is the Executive Director of Renew Missouri Advocates, and as such is authorized to make this verification on its behalf as required by 4 CSR 240-2.180(2)(f); that he is has read the attached Rulemaking Petition; and that facts set forth in the petition are true and correct to the best of his knowledge and belief.

Further the Affiant sayeth not.

James Owen

Subscribed and sworn before me this 31st day of May 2019.

Notary Public

My commission expires: 1-19-2020

MATTHEW PATTERSON
Notary Public, Notary Seal
State of Missouri
Boone County
Commission # 11274306
My Commission Expires 01-19-2020

Title 4—DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240—Public Service Commission
Chapter 20—Electric Utilities.

4 CSR 240-20.060 Cogeneration

PURPOSE: This rule implements Sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 with regard to small power production and cogeneration. The objective of Sections 201 and 210 of Public Utility Regulatory Policies Act is to provide a mechanism to set up a cogeneration program for Missouri for regulated utilities. Additional requirements regarding this subject matter are also found at 4 CSR 240-3.155.

(1) Definitions. Terms defined in the Public Utility Regulatory Policies Act of 1978 (PURPA) shall have the same meaning for purposes of this rule as they have under PURPA, unless further defined in this rule.

(A) As-delivered Rates means rates based on the Avoide Costs for energy and capacity of the Electric Utility that are determined at the time the Qualifying Facility delievers electricity to the Electric Utility.

(**B**[*A*]) Avoided costs means the incremental costs to an electric utility of electric energy [*or*] **and** capacity [*or both*] which, but for the purchase from the qualifying facility or qualifying facilities, that utility would generate itself or purchase from another source**, taking into account the estimated costs included in the electric utility's last commission-approved integrated resource plan**.

(C) Capacity means the capability to produce electrical energy.

(D) Capacity Costs means the costs associated with providing the capability to deliver energy.

(E) Electric Utility means any electrical corporation as defined by section 386.020, RSMo.

(F) Fuel costs, or energy costs, means the variable costs associated with the production of electric energy and represent the cost of fuel and operating and maintenance expenses.

(G) Purchase means the purchase of electric energy or capacity or both from a qualifying facility by an electric utility.

[*(B) Back-up power means electric energy or capacity supplied by an electric utility to replace energy ordinarily generated by a facility's own generation equipment during an unscheduled outage of the facility.*

(C) Interconnection costs means the reasonable costs of connection, switching, metering, transmission, distribution, safety provisions and administrative costs incurred by the electric utility directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a qualifying facility, to the extent those costs are in excess of the corresponding costs which the electric utility would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection costs do not include any costs included in the calculation of avoided costs.

(D) Interruptible power means electric energy or capacity supplied by an electric utility subject to interruption by the electric utility under specified conditions.

(E) Maintenance power means electric energy or capacity supplied by an electric utility during scheduled outages of the qualifying facility.

(F) Purchase means the purchase of electric energy or capacity or both from a qualifying facility by an electric utility.]

(**H**[*G*]) Qualifying facility means a cogeneration facility or a small power production facility which is a qualifying facility under Subpart B of Part 292 of the Federal Energy Regulatory Commission's (FERC) regulations.

[*(H) Rate means any price, rate, charge or classification made, demanded, observed or received with respect to the sale or purchase of electric energy or capacity or any rule or practice respecting any such rate, charge or classification and any contract pertaining to the sale or purchase of electric energy or capacity.*

(I) Sale means the sale of electric energy or capacity or both by an electric utility to a qualifying facility.

(J) Supplementary power means electric energy or capacity supplied by an electric utility, regularly used by a qualifying facility in addition to that which the facility generates itself.

(K) System emergency means a condition on a utility's system which is likely to result in imminent significant disruption of service to consumers or is imminently likely to endanger life or property.]

(I)Time-of-Obligation rates means rates based on the avoided costs for energy and capacity of the Electric Utility that are determined: (1) for a Qualifying Facility that is already constructed, at the time a Qualifying Facility commits to selling its output to the Electric Utility; or (2) for a Qualifying Facility not already constructed, at the time a Qualifying Facility establishes a Legally Enforceable Obligation.

(2) Arrangements Between Electric Utilities and Qualifying Cogeneration and Small Power Production Facilities Under Section 210 of the Public Utility Regulatory Policies Act of 1978.

(A) Applicability. This section applies to the regulation of sales and purchases between qualifying facilities and electric utilities.

(B) Negotiated Rates or Terms. Nothing in this section—

1. Limits the authority of any electric utility or any qualifying facility to agree to a rate for any purchase or terms or conditions relating to any purchase, which differ from the rate or terms or conditions which would otherwise be required by this rule; or

2. Affects the validity of any contract entered into between a qualifying facility and an electric utility for any purchase.

Schedule A

(C) Every regulated utility which provides retail electric service in this state shall enter into a contract for parallel generation service with any customer which is a qualifying facility, upon that customer's request, where that customer may connect a device to the utility's delivery and metering service to transmit electrical power produced by that customer's energy generating system into the utility's system.

[*1. The utility shall supply, install, own and maintain all necessary meters and associated equipment used for billing. The costs of any such meters and associated equipment which are beyond those required for service to a customer which is not a qualifying facility shall be borne by the customer. The utility may install and maintain, at its expense, load research metering for monitoring the customer's energy generation and usage.*

2. The customer shall supply, install, operate and maintain, in good repair and without cost to the utility, the relays, locks and seals, breakers, automatic synchronizer, a disconnecting device and other control and protective devices required by the utility to operate the customer's generating system parallel to the utility's system. The customer also shall supply, without cost to the utility, a suitable location for meters and associated equipment used for billing, load research and disconnection.

3. The customer shall be required to reimburse the utility for the cost of any equipment or facilities required as a result of connecting the customer's generating system with the utility's system.

4. The customer shall notify the utility prior to the initial testing of the customer's generating system and the utility shall have the right to have a representative present during the testing.

5. Meters and associated equipment used for billing, load research and connection and disconnection shall be accessible at all times to utility personnel.

6. A manual disconnect switch for the qualifying facility must be provided by the customer which will be under the exclusive control of the utility dispatcher. This manual switch must have the capability to be locked out of service by the utility-authorized switchmen as a part of the utility's workman's protection assurance procedures. The customer must also provide an isolating device which the customer has access to and which will serve as a means of isolation for the customer's equipment during any qualifying facility maintenance activities, routine outages or emergencies. The utility shall give notice to the customer before a manual switch is locked or an isolating device used, if possible; and otherwise shall give notice as soon as practicable after locking or use.

(D) No customer's generating system or connecting device shall damage the utility's system or equipment or present an undue hazard to utility personnel.

(E) If harmonics, voltage fluctuations or other disruptive problems on the utility's system are directly attributable to the operation of the customer, these problems will be corrected at the customer's expense.]

(**D**[*F*]) Every contract shall provide fair compensation for the electrical power supplied to the utility by the customer. **For qualifying facilities whose systems fall out of the standard contract ranges described in Section (4),** [*I*]**i**f 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. Those terms and conditions will be established in accordance with Section 210 of the Public Utility Regulatory Policies Act of 1978 and the provisions of this rule.

(3) Electric Utility Obligations Under This Rule.

(A) Obligation to Purchase From Qualifying Facilities. Each electric utility shall purchase, in accordance with section (4), any energy and capacity which is made available from a qualifying facility—

1. Directly to the electric utility; or

2. Indirectly to the electric utility in accordance with subsection (3)(D) of this rule.

(B) Obligation to Sell to Qualifying Facilities. Each electric utility shall sell to any qualifying facility, in accordance with section (5) of this rule, any energy and capacity requested by the qualifying facility.

(C) Obligation to Interconnect.

1. Subject to paragraph (3)(C)2. of this rule, any electric utility shall make interconnections with any qualifying facility as may be necessary to accomplish purchases or sales under this rule. The obligation to pay for any interconnection costs shall be determined in accordance with section ([*6*]**7**) of this rule.

2. No electric utility is required to interconnect with any qualifying facility if, solely by reason of purchases or sales over the interconnection, the electric utility would become subject to regulation as a public utility under Part II of the Federal Power Act.

(D) Transmission to Other Electric Utilities. If a qualifying facility agrees, an electric utility which would otherwise be obligated to purchase energy or capacity from a qualifying facility may transmit the energy or capacity to any other electric utility. Any electric utility to which energy or capacity is transmitted shall purchase energy or capacity under this subsection (3)(D) as if the qualifying facility were supplying energy or capacity directly to the electric utility. The rate for purchase by the electric utility to which such energy is transmitted shall be adjusted up or down to reflect line losses pursuant to paragraph ([*4*]**5**)([*E*]**F**)4. of this rule and shall not include any charges for transmission.

(E) Parallel Operation. Each electric utility shall offer to operate in parallel with a qualifying facility, provided that the qualifying facility complies with any applicable standards established in accordance with section ([*8*]**9**) of this rule.

(4) Standard Rates for Purchase and Standard Contracts

(A) Each electric utility shall put into effect commission-approved standard rates for purchases from qualifying facilities with a design capacity of five thousand (5,000) kilowatts or less. Such standard rates shall include both as-availalbe and time-of-obligation options for avoided costs.

(B) Each electric utility shall put into effect commission-approved avoided cost rates and contract terms and conditions for purchases from qualifying facilities of more than five thousand (5,000) kilowatts and up to twenty thousand (20,000)

Schedule A

kilowatts. These rates shall include both as-available and time-of-obligation options for avoided costs. These rates shall be calculated in accordance with the methods used to calculate the standard offer rates pursuant to sections (5), (6), and (11). However, these rates shall be updated annually and published per the guidelines set forth in section (11) filing requirements.

(C) Each electric utility shall put into effect commission-approved standard contract terms and conditions for purchases from qualifying facilities. Such standard terms must include a contract tenure of at least 15 years. Such standard terms and conditions are subject to commission approval. Such standard terms and conditions may vary for qualifying facilities above the standard offer to twenty thousand 20,000 kilowatts.

Schedule A

(**5**[*4*]) Rates for Purchases.

(A) Rates for purchases shall be just and reasonable to the electric consumer of the electric utility and in the public interest and shall not discriminate against qualifying cogeneration and small power production facilities. Nothing in this rule requires any electric utility to pay more than the avoided costs for purchases.

(B) Relationship to Avoided Costs.

1. For purposes of this section, new capacity means any purchase from capacity of a qualifying facility, construction of which was commenced on or after November 9, 1978.

2. Subject to paragraph (**5**[*4*])(B)3. of this rule, a rate for purchases satisfies the requirements of subsection (**5**[*4*](A) of this rule if the rate equals the avoided costs determined after consideration of the factors set forth in subsection (**5**[*4*])([*E*]**F**) of this rule.

3. A rate for purchases (other than from new capacity) may be less than the avoided cost if the [*PSC*] **commission** determines that a lower rate is consistent with subsection (**5**[*4*])(A) of this rule and is sufficient to encourage cogeneration and small power production.

4. Rates for purchases from new capacity shall be in accordance with paragraph (**5**[*4*](B)2. of this rule, regardless of whether the electric utility making the purchases is simultaneously making sales to the qualifying facility.

[*5. In the case in which the rates for purchases are based upon estimates of avoided costs over the specific term of the contract or other legally enforceable obligation, the rates for the purchases do not violate this paragraph if the rates for the purchases differ from avoided costs at the time of delivery.*]

(C) Standard Rates for Purchases.

1. There shall be put into effect (with respect to each electric utility) standard rates for purchases from qualifying facilities with a design capacity of [*one hundred (100)*] **five thousand (5,000)** kilowatts or less.

2. There [*may*]**shall** be put into effect standard rates for purchases from qualifying facilities with a design capacity of more than one [*hundred (100)*]**five thousand (5,000)** kilowatts **but less than twenty thousand (20,000) kilowatts**.

3. [*The standard rates for purchases under this subsection shall be consistent with subsections (4)(A) and (E) of this rule, and may differentiate among qualifying facilities using various technologies on the basis of the supply characteristics of the different technologies.*]**Such rates shall include the option for qualifying facilities to sell energy at the avoided cost on either as-available or time-of-obligation basis.**

(D). Standard Contract Tenure Length for Purchases.

1. There shall be put into effect (with respect to each utility) a standard contract term length of fifteen (15) years for purchases from qualifying facitlities taking service under a Standard Offer Conract;

2. There shall be put into effect a standard contract term length of fifteen (15) years from qualifying facilities with a design capacity greater than five thousand (5,000) kilowatts and up to twenty thousand (20,000) kilowatts.

(**E**[*D*]) Purchases as Available or Pursuant to a Legally Enforceable Obligation. Each qualifying facility shall have the option either—

1. To provide energy as the qualifying facility determines this energy to be available for the purchases, in which case the rates for the purchases shall be based on the purchasing utility's avoided costs calculated at the time of delivery; or

2. To provide energy or capacity pursuant to a legally enforceable obligation for the delivery of energy or capacity over a specified term, in which case the rates for the purchases, at the option of the qualifying facility exercised prior to the beginning of the specified term, shall be based on either the avoided costs calculated at the time of delivery or the avoided costs calculated at the time the obligation is incurred.

(**F**[*E*]) Factors Affecting Rates for Purchases. In determining avoided costs, the following factors, to the extent practicable, shall be taken into account:

1. The data provided pursuant to [*4 CSR 240-3.155*] **section (11) of this rule**, including [*PSC*] **commission** review of any such data;

2. The availability of capacity or energy from a qualifying facility during the system daily and seasonal peak periods, including:

A. The ability of the utility to dispatch the qualifying facility;

B. The expected or demonstrated reliability of the qualifying facility;

C. The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for noncompliance;

D. The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the utility's facilities;

E. The usefulness of energy and the capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation;

F. The individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system; and

G. The smaller capacity increments and the shorter lead times available with additions of capacity from qualifying facilities;

3. The relationship of the availability of energy or capacity from the qualifying facility as derived in paragraph ([*4*]**5**)([*E*]**F**)2. of this rule, to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of [*oil*] **fossil fuel** use; [*and*]

4. 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.

Schedule A

5. The stochastic effect achieved by the aggregate output of dispersed small systems, that is, statistically a dispersed array of facilities may produce a level of reliability not available by any one (1) of the units taken separately. When that aggregate capacity value which allows the utility to avoid a capacity cost occurs and can be reasonably estimated, a corresponding credit must be included in the standard rates. The tariffs should take into account patterns of availability of particular energy sources such as the benefits to a summer peaking utility from photovoltaic systems or to a winter peaking utility for wind facilities. For the purposes of this rule, rate means any price, rate, charge or classification made, demanded, observed or received with respect to the sale or purchase of electric energy or capacity or any rule or practice respecting any such rate, charge or classification and any contract pertaining to the sale or purchase of electric energy or capacity.

(**G**[*F*]) Periods During Which Purchases not Required.

1. Any electric utility which gives notice pursuant to paragraph ([*4*]**5**)([*F*]**G**)2. of this rule will not be required to purchase electric energy or capacity during any period which, due to operational circumstances, purchases from qualifying facilities will result in costs greater than those which the utility would incur if it did not make the purchases, but instead generated an equivalent amount of energy itself.

2. Any electric utility seeking to invoke paragraph ([*4*]**5**)([*F*]**G**)1. of this rule must notify, in accordance with applicable state law or rule, each affected qualifying facility in time for the qualifying facility to cease the delivery of energy or capacity to the electric utility.

3. Any electric utility which fails to comply with the provisions of paragraph ([*4*]**5**)([*F*]**G**)2. of this rule will be required to pay the same rate for the purchase of energy or capacity as would be required had the period described in paragraph ([*4*]**5**)([*F*]**G**)1. of this rule not occurred.

4. A claim by an electric utility that this period has occurred or will occur is subject to verification by the [*PSC*] **commission** as the [*PSC*] **commission** determines necessary or appropriate, either before or after the occurrence.

(**6**[*5*]) Rates for Sales.

(A) Rates for sales shall be just and reasonable and in the public interest and shall not discriminate against any qualifying facility in comparison to rates for sales to other customers served by the electric utility. Rates for sales which are based on accurate data and consistent system-wide costing principles shall not be considered to discriminate against any qualifying facility to the extent that those rates apply to the utility's other customers with similar load or other cost-related characteristics.

(B) Additional Services to be Provided to Qualifying Facilities.

1. Upon request of a qualifying facility, each electric utility shall provide supplementary power, back-up power, maintenance power and interruptible power.

2. The [*PSC*] **commission** may waive any requirement of paragraph (**6**[*5*])(B)1. of this rule if, after notice in the area served by the electric utility and after opportunity for public comment, the electric utility demonstrates and the [*PSC*] **commission** finds that compliance with that requirement will impair the electric utility's ability to render adequate service to its customers or place an undue burden on the electric utility.

(C) Rates for Sale of Back-Up and Maintenance Power. The rate for sales of back-up power or maintenance power—

1. Shall not be based upon an assumption (unless supported by factual data) that forced outages or other reductions in electric output by all qualifying facilities on an electric utility's system will occur simultaneously or during the system peak or both; and

2. Shall take into account the extent to which scheduled outages of the qualifying facilities can be usefully coordinated with scheduled outages of the utility's facilities.

(**7**[*6*]) Interconnection Costs.

(A) The customer shall be required to reimburse the utility for the interconnection costs of any equipment or facilities which result from connecting the customer's generating system with the utility's system.

(**B**[*A*]) If the utility and the qualifying facility cannot reach agreement as to the amount or the manner of payment of the interconnection costs to be paid by the qualifying facility, the [*PSC*] **commission**, after hearing **under the procedure of 4 CSR 240-2.070**, shall assess against the qualifying facility those interconnection costs to be paid to the utility, on a nondiscriminatory basis with respect to other customers with similar load characteristics or shall determine the manner of payments of the interconnection costs, which may include reimbursement over a reasonable period of time, or both. In determining the terms of any reimbursement over a period of time, the commission shall provide for adequate carrying charges associated with the utility's investment and security to insure total reimbursement of the utility's incurred costs, if it deems necessary.

(**8**[*7*]) System Emergencies.

(A) Qualifying Facility Obligation to Provide Power During System Emergencies. A qualifying facility shall be required to provide energy or capacity to an electric utility during a system emergency only to the extent provided by agreement between the qualifying facility and electric utility or ordered under section 202(c) of the Federal Power Act.

(B) Discontinuance of Purchases and Sales During System Emergencies. During any system emergency, an electric utility may discontinue purchases from a qualifying facility if those purchases would contribute to the emergency**. During any system emergency, an electric utility may discontinue** [*and*] sales to a qualifying facility, provided that discontinuance is on a nondiscriminatory basis.

(**9**[*8*]) Standards for Operating Reliability. The [*PSC*] **commission** may establish reasonable standards to ensure system safety and reliability of interconnected operations. Those standards may be recommended by any electric utility, any qualifying facility or any other person. If the [*PSC*] **commission** establishes standards, it shall specify the need for the standards on the basis of system safety and reliability.

Schedule A

(**10**[*9*]) Exemption to Qualifying Facilities From the Public Utility Holding Company Act and Certain State Law and Rules.

(A) Applicability. This section applies to qualifying cogeneration facilities and qualifying small power production facilities which have a power production capacity which does not exceed thirty (30) megawatts and to any qualifying small power production facility with a power production capacity over thirty (30) megawatts if that facility produces electric energy solely by the use of biomass as a primary energy source.

(B) A qualifying facility described [*in subsection (1)(A)*]**in PURPA** shall not be considered to be an electric utility company as defined in section 2(a)(3) of the Public Utility Holding Company Act of 1935, 15 U.S.C. 79b(a)(3).

(C) Any qualifying facility shall be exempted (except as otherwise provided) from Missouri [*PSC*] **commission** law or rule respecting the rates of electric utilities and the financial and organizational regulation of electric utilities. A qualifying facility may not be exempted from Missouri PSC law and rule implementing subpart C of PURPA.

(11) Filing Requirements.

(A) On or before January 15 each year, unless otherwise ordered by the commission, all regulated electric utilities shall file, in accordance with 4 CSR-2.065 (4), tariffs which contain the standard contracts as described in section (4) of this rule and the standardized rates for sales and purchase described in section (5) and section (6) of this rule. The annual filings will consider the factors affecting rates for purchases as described in section (5)(F) and be accompanied by the data described in section (11)(C) and the verification described in (11)(D) of this rule.

(B) Within thirty (30) days of the January 15 avoided cost filings required by subdivision (A) of subsection (11) of this rule, the commission shall open a file allowing the staff for the commission, the office of public counsel, and other interested parties to participate fully in the proceeding, including through the presentation of testimony and other evidence and the cross-examination of utility witnesses. Based on the record in such proceeding, the commission shall issue an order directing each regulated electric utility to adopt such avoided cost methodology, standard offer contracts, inputs and rates that the commission determined to be just and reasonable.

(C) Each regulated electric utility shall maintain for public inspection the following data:

1. The estimated avoided cost on the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. These levels of purchases shall be stated in blocks of not more than one hundred (100) megawatts for systems with peak demand of one thousand (1,000) megawatts or more, and in blocks equivalent to not more than ten percent (10%) of the system peak demand for systems of less than one thousand (1,000) megawatts. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily and seasonal peak and off-peak periods, by year, for the current calendar year and each of the next five (5) years;

2. The electric utility's plans for the addition of capacity by amount and type, for purchases of firm energy and capacity and for capacity retirements for each year during the succeeding ten (10) years; and

3. The estimated capacity costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt and the associated energy costs of each unit, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases.

(D) Each regulated electric utility shall verify it maintains and aggregates the following information:

1. For systems less than 100 kW:

A. Characterization of the distribution circuits where the systems are connected,

B. Aggregate capacity of the systems for each feeder or load, and

C. Relevant interconnection standard requirement that specify the performance of the system.

2. For systems over 100 kW and under 20,000 kW:

A. Type of generating resource,

B. Distribution bus nominal voltage where the system is connected,

C. Feeder characteristics for connecting the system to distribution bus, if applicable,

D. Capacity of each resource,

E. Relevant interconnection standard requirements, and

F. Actual plant control modes in operation.

(E) In establishing the avoided cost on the electric utility's system in accordance with section (11)(C)1., the following methodologies may be utilized:

1. Proxy Unit. This methodology assumes that the electric utility avoids building a proxy generating unit by utilizing the qualifying facilities power. The fixed costs of the hypothetical proxy unit set the avoided capacity cost and variable costs set the energy payment.

2. IRP Based avoided cost. This methodology relies on the electric system resource planning to predict future needs and costs that may be avoided by qualifying facilities.

Schedule A

(12) Implementation of Certain Reporting Requirements. Any electric utility which fails to comply with the requirements of subsection (11)(C) shall be subject to the same penalties to which it may be subjected for failure to comply with the requirements of the Federal Energy Regulatory Commission's (FERC's) regulations issued under Section 133 of PURPA.

(13) Legally Enforceable Obligations

(A) A qualifying facility may establish a legally enforceable obligation by one of the following methods:

1. A qualifying facility may tender an executed copy of a commission-approved standard offer contract or form power purchase agreement pursuant to a commission-approved standard rate for purchase, after which the electric utility shall countersign within 30 days to establish a legally enforceable obligation. If the electric utility fails to countersign within 30 days, a legally enforceable obligation will be established for the date on which the qualifying facility tendered the executed standard offer contract or form power purchase agreement.

2. A qualifying facility may tender a modified form power purchase agreement pursuant to a commission-approved standard rate for purchase, after which the electric utility shall respond to the qualifying facility within 30 days. If after 60 days the parties have failed to execute a power purchase agreement, the qualifying facility may submit a claim to the commission for resolution.

AUTHORITY: sections 386.250 and 393.140, RSMo 2000. Original rule filed Oct. 14, 1980, effective May 15, 1981. Amended: Filed Aug. 16, 2002, effective April 30, 2003.*

**Original authority: 386.250, RSMo 1939, amended 1963,1967, 1977, 1980, 1987, 1988, 1991, 1993, 1995, 1996 and 393.140, RSMo 1939, amended 1949, 1967.*

Schedule A