BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Proposed Amendments to 4 CSR 240-20.060, Filing Requirements for Electric Utility Cogeneration	)))	**File No. EX-2020-0006**

STAFF'S PROPOSED DRAFT RULES

COMES NOW the Staff of the Missouri Public Service Commission ("Commission"), by and through counsel, and in response to the Commission's August 2, 2019 *Order Denying Petition for Revision of Commission Rule 4 CSR 240.060*, states:

1. In file number EW-2017-0245 Staff began reviewing the Commission's cogeneration and net metering rules[1] as part of a working case exploring emerging issues. After reviewing stakeholders' comments and hosting a workshop, Staff filed its report on July 10, 2017. Staff's recommendation included addressing potential revisions to the cogeneration and net metering rules.[2]

2. Per Staff's request, on September 27, 2017, the Commission opened a separate working file to focus on cogeneration and net metering rules, to discuss Staff's recommendations, and to review its regulations consistent with the Governor Greitens' Executive Order 17-03 directing state agencies to streamline and eliminate redundant regulations.[3]

3. After reviewing the comments of numerous diverse stakeholders, Staff filed a *Notice of Draft Rule for Comment* on May 22, 2018, suggesting revisions to the

[1] 4 CSR 240-20.060 and 4 CSR 240-20.065.
[2] Missouri Public Service Commission Staff, *A Working Case to Explore Emerging Issues in Utility Regulation*, File No. EW-2017-0245 (July 7, 2017).
[3] Missouri Public Service Commission, *Order Opening a Working Case to Review the Commission's Rules Related to Cogeneration*, File No. EW-2018-0078 (Sept. 27, 2017), Executive Order 17-03 (Jan 10, 2017).

cogeneration and net metering rules.[4] On May 22, 2018 the Commission invited stakeholders to respond to these draft rules.[5] Numerous stakeholders filed comments.

4. On June 3, 2019 Renew Missouri Advocates ("Renew Missouri") filed a rulemaking petition requesting the Commission amend 4 CSR 240-20.060, the Commission's cogeneration rule.[6]

5. On June 4, 2019 the Commission directed Staff to investigate Renew Missouri's petition and by July 9, 2019, provide a recommendation whether the Commission should proceed with a rulemaking docket. Staff filed its pleading June 14, 2019, recommending that if the Commission intends to amend its cogeneration and net metering rules, it adopt Staff's proposed rules developed in File No. EW-2018-00708, which were developed after extensive stakeholder review and input. Staff additionally noted that its recommendations include the net metering rules (Renew Missouri's petition did not) and address the directives in Governor Greitens' Executive Order 17-03.[7]

6. In its June 4, 2019 Order, the Commission also invited comments from any person or entity regarding Renew Missouri's petition. OPC filed a recommendation stating that because ratepayers make large investments in photovoltaic systems, they should be informed that future rules and rate makings could affect the economic assumptions underlying their purchases.[8] Staff incorporates OPC's suggested

[4] Missouri Public Service Commission Staff, *Notice of Draft Rule for Comment*, File No. EW-2018-0078 (May 22, 2018).
[5] Missouri Public Service Commission, *Order Inviting Responses to Draft Rules*, File No. EW-2018-0078 (May 22, 2018).
[6] Renew Missouri, *Renew Missouri's Rulemaking Petition,* File No. EX-2019-0378 (June 3, 2019).
[7] Missouri Public Service Commission Staff, *Staff Recommendation*, File No. EX-2019-0378 (June 14, 2019), Executive Order 17-03 (Jan 10, 2017).
[8] Office of Public Counsel, *Public Counsel's Response to Staff Recommendation*, File No. EX-2019-0378 (July 9, 2019).

language into the net metering interconnection application/agreement on the Public Service Commission website.[9]

7. On July 15, 2019 the Commission opened a new rulemaking file (EX-2020-0006), and on July 17, 2019 the Commission denied Renew Missouri's petition, finding that Renew Missouri did not meet the criteria in Subsection 4 of Section 536.041, RSMo. The Commission directed Staff "to begin the formal rulemaking process with its proposed draft, incorporating any new changes that may have come to light in this proceeding." It ordered Staff to submit a revised rule by August 30, 2019.[10]

8. On July 29, 2019 Staff submitted its proposed amendments to the Commission's cogeneration and net metering rules for comment and requested the Commission invite stakeholders to file comments regarding the costs, if any, of implementing them.[11]

9. To comply with the Commission's July 17, 2019 Order Staff's proposed draft rules are attached as Appendix A. They incorporate the numbering system to be

[9] Staff's proposed net metering rule deletes the interconnection application/agreement. The interconnection application/agreement can be accessed at: https://psc.mo.gov/CMSInternetData/Electric/Net%20Metering/Interconnection%20Application.pdf
The language on the application and OPC's language is as follows:
10) Possible Future Rules and/or Rate Changes
Your PV system is subject to the Commission's current rates, rules and regulations. The Missouri Public Service Commission ("Commission") may alter its rules and regulations and/or change rates in the future. If this occurs, your PV system is subject to those changes, and you will be responsible for paying any future increases to electricity rates, charges, or service fees from the Company.
The Company's electricity rates, charges, and service fees are determined by the Commission and are subject to change based upon the decisions of the Commission. These future adjustments may positively or negatively impact any potential savings or the value of your PV system.
Any future electricity rate projections which may be presented to you are not produced, analyzed, or approved by the Company or the Commission. They are based on projections formulated by external third parties not affiliated with the Company of the Commission.

[10] Missouri Public Service Commission, *Order Denying Petition for Revision of Commission Rule 4 CSR 240-20.060,* File No. EX-2019-0378 (July 17, 2019).

[11] Missouri Public Service Commission *Staff, Notice of Draft Rule for Comment*, File No. EW-2018-0078 (July 29, 2019).

used when the Public Service Commission migrates, as part of state government reorganization, from the Department of Economic Development to the Department of Insurance, Financial Institutions, and Professional Registration, which will be renamed the Department of Commerce and Insurance.

10. The Commission's July 17, 2019 order directed Staff to file only a proposed cogeneration rule (4 CSR 240-20.060) for formal rulemaking, but Staff includes draft rules for cogeneration, tariff filing requirements for electric utility cogeneration operations (4 CSR 240-3.155), and net metering (4 CSR 240-20.065). Staff submits all three rules, because Staff developed them through the informal rulemaking process in the File No. EW-2018-0078 working docket. This is also consistent with Executive Order 17-03.[12]

DISCUSSION OF STAKEHOLDER RESPONSES TO COSTS OF IMPLEMENTING DRAFT RULES

11. On July 29, 2019 the Commission issued an *Order Inviting Responses Regarding the Cost to Comply with Draft Rule Amendment*, consistent with Staff's request.[13]

12. Two stakeholders filed comments in response. Renew Missouri stated that it "does not expect many costs to result from the Commission's resulting rule in this case, short of some administrative costs associated with compliance." It further stated utilities may need to hire an additional analyst to complete filings and support related proceedings.[14] Staff does not believe that if the draft rules are adopted, the utilities will

[12] Executive Order 17-03 (Jan 10, 2017). Staff's proposed rules rescind 4 CSR 240-3.155 and incorporate relevant language in 4 CSR 240-20.060.
[13] Missouri Public Service Commission, *Order Inviting Responses Regarding the Cost to Comply with Draft Rule Amendment*, File No. EW-2018-0078 (July 29, 2019).
[14] Renew Missouri, *Renew Missouri's Comments*, File No. EW-2018-0078, 1-2 (Aug. 8, 2019).

need to hire an additional analyst, because as described below, the utilities are already required to comply with most requirements under state or federal law.

13. Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") estimated initial costs ranging from $90,000 to $376,000 to comply with the draft cogeneration rules and $40,500 to $160,000 to comply with the draft net metering rules. It also estimated annual recurring costs of $17,500 to $70,500 to comply with the draft cogeneration rules and $2,500 to $5,000 to comply with the draft net metering rules. Ameren Missouri stated that these funds will be used for used to maintain data, comply with reporting requirements, and make information publicly available.[15]

14. Staff estimates Year 1 costs for complying with the proposed cogeneration rules of $17,500, with annual recurring costs of $7,000. Appendix B, attached, is an explanation of Staff's estimated costs and a comparison to Ameren Missouri's. Staff anticipates no additional costs for complying with the proposed net metering rules, because all utilities have systems for tracking net metering data and the proposed rule adds no additional requirements. Staff estimates no cost for compliance with 4 CSR 240-3.155, which it proposes to rescind.

15. The number of qualifying facilities ("QFs") is small. The proposed rules do not require a complete overhaul of existing databases; rather they would require additional information be tracked. The proposed rules do not specify whether existing QFs and net metered systems should be incorporated into the tracking system.

[15] Ameren Missouri, *Response Regarding Cost to Comply with Draft Rule Amendment*, File No. EW-2018-0078 (Aug. 8, 2019).

Therefore, utilities may comply by expanding existing databases to include new information.

16. Staff's estimate is less than Ameren Missouri's, because Ameren Missouri overlooks that, similar to all Commission-regulated electric utilities, it is already required to comply with many of these requirements pursuant to 4 CSR 240-3.155[16] and the Public Utility Regulatory Policies Act ("PURPA") and its implementing regulations.[17] Other proposed requirements make information more transparent; they alter how information is filed but do not additional data management or reporting burdens.

17. Staff also believes that Ameren Missouri overstates costs. For example, Ameren Missouri estimates between $25,000 and $50,000 for administrative time setting up a system to maintain data for QFs attached to its system. Assuming a rate of $160 per hour, Ameren Missouri estimates 156 to 312 hours to set up a system to manage data. Additionally, Ameren Missouri estimates another $12,500 to $25,000 of administrative time setting up the same system to maintain the same types of data for net metering customers.

WHEREFORE, Staff respectfully submits its proposed draft cogeneration and net metering rules in compliance with the Commission's July 17, 2019 order and recommends that the formal rulemaking procedure commence.

[16] Staff's proposed rules rescind 4 CSR 240-3.155 and incorporate its provisions in the draft cogeneration rule.
[17] 16 U.S.C. 2601 *et seq.* and 18 C.F.R. 292.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been electronically mailed to all parties and/or counsel of record on this 23rd day of August, 2019.

/s/ Karen E. Bretz

Title 4 – Department of Economic Development
Division 240 – Public Service Commission
Chapter 3 – Electric Utilities

PROPOSED RESCISSION

4 CSR 240-3.155 Requirements for Electric Utility Cogeneration Tariff Filings

PURPOSE: This rule is being rescinded in its entirety and relevant language is being streamlined into Chapter 20.

AUTHORITY: section 386.250 and 393.140, RSMo 2000. Original rule filed Aug. 16, 2002, effective April 30, 2003. Amended: Filed July 25, 2003, effective March 30, 2004.*

**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.*

Title 20 – Department of Economic Development
Division 4240 – Public Service Commission
Chapter 20 – Electric Utilities

PROPOSED AMENDMENT

20 CSR 4240-20.060 Cogeneration and Small Power Production. The Secretary is amending section (1), section (2), section (5), section (6), section (7), section (8), section (9), and section 10 and adding a new section (4), section (11), and section (12).

PURPOSE: This amendment expands the use of standard contracts and rates for purchase from qualifying facilities and removes unnecessary language.

(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) Avoided costs means the incremental costs to an electric utility of electric energy or 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.

(B) 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.

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

[*(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.

(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.]

(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.

(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.]

[*(F)*]**(D)** 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. **Any FERC-granted exemption granted from qualifying facility purchases also applies to qualifying facility purchases within the state of Missouri.**

(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*]**6**) 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) 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)(E)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) 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:

1. Of one hundred (100) kilowatts or less; or

2. Over one hundred (100) kilowatts to one thousand (1,000) kilowatts.

(B) There may be put into effect commission-approved standard rates for purchases from qualifying facilities with a design capacity of more than one thousand (1,000) kilowatts.

(C) The commission shall approve standard contract templates for purchases from qualifying facilities with the design capacities described in (4)(A). The approved standard contract templates will be the basis of the standard contracts utilized by each utility through its respective tariffs and shall include provisions for REC ownership. The terms and conditions of the standard contract templates will be established in accordance with Section 210 of the Public Utility Regulatory Policies Act of 1978 and the provisions of this rule. Standard contract templates will be made available through the commission website.

1. For systems which qualify for net-metering under 20 CSR 4240-20.065 and section 386.890 RSMo, the standard contract shall be substantially the same as the interconnection application located on the commission's website and incorporated by reference.

2. RECs associated with qualifying facilities shall be owned by the customer; however, as a condition of receiving solar rebates for systems operational after on or after January 1, 2019, customers transfer to the electric utility all right, title, and interest in and to the RECs associated

with the new or expanded solar electric system that qualified the customer for the solar rebate for a period of ten (10) years from the date the electric utility confirmed the solar electric system was installed and operational.

3. If the electric utility purchases S-RECs under a Standard Offer Contract in 20 CSR 4240-20.100(4)(H), the electric utility shall also offer purchase from qualifying facilities under the same rates and terms. S-RECs from qualifying facilities may be used for compliance with the RES requirements of §393.1030 subject to the same conditions as all RECs and S-RECs.

(D) Each electric utility will develop technical and performance standards and interconnection test specifications specific to its distribution system to be included in its standard contract template. Technical and performance standards will include provisions related to metering, protection equipment, and disconnect switches.

(E) The standard rates for purchases under this subsection shall be consistent with subsections (5)(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.

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

2. There may be put into effect standard rates for purchases from qualifying facilities with a design capacity of more than one hundred (100) 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.]

([*D*]**C**) 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.

([*E*]**D**) 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 (10) 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)(E)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.

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.

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

1. Any electric utility which gives notice pursuant to paragraph (4)(F)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)(F)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)(F)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)(F)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.

([*5*]**6**) 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 ([*5*]**6)**(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.

([*6*]**7**) 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 according to the provisions contained in the utility's tariffs for connections at distribution or the governing RTO provisions if connecting to transmission.**

(B) 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 20 CSR 4240-2.070**, 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.

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

([*8*]**9**) 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.

([*9*]**10**) 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.*] **As defined in PURPA §292.601 (a) & (b) and §292.602 (a) & (b).**

(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 of every odd-numbered year, unless otherwise ordered by the commission, all regulated electric utilities shall file, in accordance with 20 CSR 4240-2.065 (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 biennial filings will consider the factors affecting rates for purchases as described in section (5)(D) and be accompanied by the data described in section (11)(B) and the verification described in (11)(C) of this rule.

(B) 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.

(C) 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 1000 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.

(D) In establishing the avoided cost on the electric utility's system in accordance with section (10)(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.

3. Market Based Pricing. Qualifying facilities with access to competitive markets receive energy and capacity payments at market rates.

4. The electric utility may propose any other method that can be demonstrated to reflect avoided costs.

(12) Implementation of Certain Reporting Requirements. Any electric utility which fails to comply with the requirements of subsection (11)(B) 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.

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.*

Title 20 – Department of Economic Development
Division 4240 – Public Service Commission
Chapter 20 – Electric Utilities

PROPOSED AMENDMENT

20 CSR 4240-20.065 Net Metering. The Secretary is amending section (1), section (4), section (5), section (8), section (9), and section (10); and removing section (3), section (7), and deleting the forms which follow the rule in the *Code of State Regulations*.

PURPOSE: This amendment simplifies and improves rules by streamlining and eliminating duplicative requirements and provides clarity language.

(1) Definitions.

(A) Terms defined in 386.890 RSMo Supp. 2008 shall have the same meaning for purposes of this rule, unless further defined in this rule. Terms defined in 20 CSR 4240-20.100 shall have the same meaning for purposes of this rule.

([*A*]**B**) Avoided fuel cost **shall have the same meaning as** [*means avoided costs described in*] ([*4*]**20**) CSR (**4**)240-20.060 [*used to calculate the electric utility's cogeneration rate filed in compliance with 4 CSR 240-3.155*]. The information used to calculate this rate is provided to the commission biennially and maintained for public inspection.

[(B) Commission means the Public Service Commission of the state of Missouri.

(C) Customer-generator means the owner or operator of a qualified electric energy generation unit that meets all of the following criteria:

1. Is powered by a renewable energy resource;

2. Is an electrical generating system with a capacity of not more than one hundred kilowatts (100 kW);

3. Is located on premises that are owned, operated, leased, or otherwise controlled by the customer-generator;

4. Is interconnected and operates in parallel phase and synchronization with an electric utility and has been approved for interconnection by said electric utility;

5. Is intended primarily to offset part or all of the customer-generator's own electrical energy requirements;

6. Meets all applicable safety, performance, interconnection, and reliability standards established by the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, the Federal Energy Regulatory Commission, and any local governing authorities; and

7. Contains a mechanism that automatically disables the unit and interrupts the flow of electricity onto the electric utility's electrical lines whenever the flow of electricity to the customer-generator is interrupted.]

(D) Distribution system means facilities for the distribution of electric energy to the ultimate consumer thereof.

(E) Electric utility means every electrical corporation as defined in section 386.020(15), RSMo 2000, subject to commission regulation pursuant to Chapter 393, RSMo.

[*(F) Net metering means using metering equipment sufficient to measure the difference between the electrical energy supplied to a customer-generator by an electric utility and the electrical energy supplied by the customer- generator to the electric utility over the applicable billing period.*]

(G) Operational means all of the major components of the on-site system have been purchased and installed on the customer-generator's premises and the production of rated net electrical generation has been measured by the electric utility. If a customer has satisfied all of the System Completion Requirements by June 30 of indicated years, but the electric utility is not able to complete all of the

company's steps needed to establish an Operational Date on or before June 30, the rebate rate will be determined as though the Operational Date was June 30. If it is subsequently determined that the customer of the system did not satisfy all Completion Requirements required of the customer on or before June 30, the rebate rate will be determined based on the Operational Date.

[*(H) REC means Renewable Energy Credit or Renewable Energy Certificate which is tradable, and represents that one (1) megawatt-hour of electricity has been generated from a renewable energy resource.*]

[*(I) Renewable energy resources means, when used to produce electrical energy, the following: wind, solar thermal sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen produced by one (1) of the above-named electrical energy sources, and other sources of energy that become available after August 28, 2007, and are certified as renewable by the Missouri Department of Natural Resources or the Missouri Department of Economic Development's Division of Energy*.]

[*(J) Staff means the staff of the Public Service Commission of the state of Missouri.*]

(2) Applicability. This rule applies to electric utilities and customer-generators.

[(3) *REC Ownership. RECs associated with customer-generated net-metered renewable energy resources shall be owned by the customer-generator; however, as a condition of receiving solar rebates for systems operational after August 28, 2013, customers transfer to the electric utility all right, title, and interest in and to the RECs associated with the new or expanded solar electric system that qualified the customer for the solar rebate for a period of ten (10) years from the date the electric utility confirmed the solar electric system was installed and operational*.]

[*(4)*]**(3)** Electric Utility Obligations.

[*(A) Net-metering shall be available to customer- generators on a first-come, first-served basis until the total rated generating capacity of net metering systems equals five percent (5%) of the electric utility's Missouri jurisdictional single-hour peak load during the previous year. The commission may increase the total rated generating capacity of net metering systems to an amount above five percent (5%). However, in a given calendar year, no electric utility shall be required to approve any application for interconnection if the total rated generating capacity of all applications for interconnection already approved to date by said electric utility in said calendar year equals or exceeds one percent (1%) of said electric utility's single-hour peak load for the previous calendar year.*

(B) A tariff or contract shall be offered that is identical in electrical energy rates, rate structure, and monthly charges to the contract or tariff that the customer would be assigned if the customer were not an eligible customer- generator but shall not charge the customer-generator any additional standby, capacity, interconnection, or other fee or charge that would not otherwise be charged if the customer were not an eligible customer generator.

(C) The availability of the net metering program shall be disclosed annually to each of its customers with the method and manner of disclosure being at the discretion of the electric utility.

(D) For any cause of action relating to any damages to property or person caused by the generation unit of a customer-generator or the interconnection thereof, the electric utility shall have no liability absent clear and convincing evidence of fault on the part of the supplier.

(E) Any costs incurred under this rule by an electric utility not recovered directly from the customer-generator, as identified in (6)(F), shall be recoverable in that electric utility's rate structure.

(F) No fee, charge, or other requirement not specifically identified in this rule shall be imposed unless the fee, charge, or other requirement would apply to similarly situated customers who are not customer-generators.]

(A) In addition to the Electric Utility Obligations set forth in section 386.890, RSMo Supp. 2008, the Electric Utility shall describe in its tariffs the calculation of net electrical energy measurement.

(5) Customer-Generator Liability Insurance Obligation.

(A) Customer-generator systems greater than ten kilowatts (10 kW) shall carry no less than one hundred thousand dollars ($100,000) of liability insurance**, unless for good cause shown,** that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the net metering unit. Insurance may be in the form of an existing policy or an endorsement on an existing policy.
(B) Customer-generator systems ten kilowatts (10 kW) or less shall not be required to carry liability insurance.

(6) Qualified Electric Customer-Generator Obligations.
(A) Each qualified electric energy generation unit used by a customer-generator shall meet all applicable safety, performance, interconnection, and reliability standards established by any local code authorities, the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories (UL) for distributed generation; including,[*but not limited to*], IEEE 1547**a-2014**, UL 1703-**2002**, and UL 1741-**2010**.
(B) The electric utility may require that a customer-generator's system contain a switch, circuit breaker, fuse, or other easily accessible device or feature located in immediate proximity to the customer-generator's metering equipment that would allow an electric utility worker the ability to manually and instantly disconnect the unit from the electric utility's distribution system.
(C) No customer shall connect or operate an electric generation unit in parallel phase and synchronization with any electric utility without written approval by said electric utility that all of the requirements under subsection (9)(C) of this rule have been met. For a customer-generator who violates this provision, an electric utility may immediately and without notice disconnect the electric facilities of said customer-generator and terminate said customer-generator's electric service.
(D) A customer-generator's facility shall be equipped with sufficient metering equipment that can measure the net amount of electrical energy produced and consumed by the customer-generator. If the customer-generator's existing meter equipment does not meet these requirements or if it is necessary for the electric utility to install additional distribution equipment to accommodate the customer-generator's facility, the customer-generator shall reimburse the electric utility for the costs to purchase and install the necessary additional equipment. At the request of the customer-generator, such costs may be initially paid for by the electric utility, and any amount up to the total costs and a reasonable interest charge may be recovered from the customer-generator over the course of up to twelve (12) billing cycles. Any subsequent meter testing, maintenance, or meter equipment change necessitated by the customer-generator shall be paid for by the customer-generator.
(E) Each customer-generator shall, at least once every year, conduct a test to confirm that the net metering unit automatically ceases to energize the output (interconnection equipment output voltage goes to zero (0)) within two (2) seconds of being disconnected from the electric utility's system. Disconnecting the net metering unit from the electric utility's electric system at the visible disconnect switch and measuring the time required for the unit to cease to energize the output shall satisfy this test.
(F) The customer-generator shall maintain a record of the results of these tests and, upon request, shall provide a copy of the test results to the electric utility.
1. If the customer-generator is unable to provide a copy of the test results upon request, the electric utility shall notify the customer-generator by mail that the customer- generator has thirty (30) days from the date the customer-generator receives the request to provide the results of a test to the electric utility.
2. If the customer-generator's equipment ever fails this test, the customer-generator shall immediately disconnect the net metering unit.
3. If the customer-generator does not provide the results of a test to the electric utility within thirty (30) days of receiving a request from the electric utility or the results of the test provided to the electric utility show that the unit is not functioning correctly, the electric utility may immediately disconnect the net metering unit.
4. The net metering unit shall not be reconnected to the electric utility's electrical system by the customer-generator until the net metering unit is repaired and operating in a normal and safe manner.

[*(7) Determination of Net Electrical Energy. Net electrical energy measurement shall be calculated in the following manner:*
(A) For a customer-generator, an electric utility shall measure the net electrical energy produced or consumed during the billing period in accordance with normal metering practices for customers in the same rate class, either by employing a single, bidirectional meter that measures the amount of electrical energy produced and consumed, or by employing multiple meters that separately measure the customer-generator's consumption and production of electricity;
(B) If the electricity supplied by the electric utility exceeds the electricity generated by the customer-generator during a billing period, the customer-generator shall be billed for the net electricity supplied by the supplier in accordance with normal practices for customers in the same rate class;
(C) If the electricity generated by the customer- generator exceeds the electricity supplied by the electric utility during a billing period, the customer-generator shall be billed for the appropriate customer charges for that billing period in accordance with section (4) of this rule and shall be credited with the product of the excess kilowatt-hours generated during the billing period and the rate identified in the electric utility's net metering tariff sheet filed with the commission in the following billing period. This rate is calculated from the electric utility's avoided fuel cost; and
(D) Any credits granted by this subsection shall expire without any compensation at the earlier of either twelve (12) months after their issuance, or when the customer-generator disconnects service or terminates the net metering relationship with the electric utility.]

(8) Net Metering Rates. Each electric utility shall file**, in accordance with 4 CSR-2.065 (4),** on or before January 15 of each odd-numbered year [*for the commission's approval in the electric utility's tariff*], a rate schedule with a net metering rate that is the same rate as the utility's cogeneration rate **for systems not more than one hundred (100) kilowatts as required in 20 CSR 4240-20.060(4)(A)1**. [*The electric utility's cogeneration rate is filed for the commission's approval in the electric utility's tariff on or before January 15 of every odd-numbered year as required in 4 CSR 240-3.155 Requirements for Electric Utility Cogeneration Tariff Filings section (4). The cogeneration rate is stated in dollars per kilowatt-hour or cents per kilowatt-hour on the cogeneration rate tariff sheet and, likewise, the net metering rate shall be stated in dollars per kilowatt-hour or cents per kilowatt- hour on the net metering rate tariff sheet.*]

(9) Interconnection Application[*/Agreement*].
(A) Each customer-generator and electric utility shall enter into [*the*] **an** interconnection agreement**, substantially the same as the interconnection application located on the commission's website and incorporated by reference** [*included herein*].
1. The interconnection application shall include a signature page for the customer and solar installer to indicate acknowledgement of the entire interconnection application.
[*1.*] **2.** If the electric utility so chooses, it may allow customers to apply electronically through the electric utility's website.
A. The interconnection application[*/agreement*] on the electric utility's website shall substantially be the same as the interconnection application[*/agreement*]**, located on the commission's website and incorporated by reference** [*included herein*].
[*B.*] **A.** The electronic application[*/agreement*] shall be submitted**, or made available in test mode,** to the manager of the Energy Unit of the staff for review by staff prior to being placed on the electric utility's website.
[*C.*] **B.** The electric utility shall notify the manager of the Energy Unit of the staff of any revisions to the electronic application[*/agreement*] on its website within ten (10) working days of when the electronic **application**[*agreement*] is revised.
[*(B) References to a solar rebate in the interconnection application/agreement included herein are not required for electric utilities that are not required to offer solar rebates.*]

[*(C) Applications by a customer-generator for interconnection of a qualified electric energy generation unit to the distribution system shall be accompanied by the plan for the customer-generator's electrical generating system including, but not limited to, a wiring diagram and specifications for the generating unit, and shall be reviewed and responded to by the electric utility within thirty (30) days of receipt for systems ten kilowatts (10 kW) or less and within ninety (90) days of receipt for all other systems. Prior to the interconnection of the qualified generation unit to the electric utility's system, the customer-generator will furnish the electric utility a certification from a qualified professional electrician or engineer that the installation meets the requirements of subsections (6)(A) and (6)(B). If the application for interconnection is approved by the electric utility and the customer- generator does not complete the interconnection within one (1) year after receipt of notice of the approval, the approval shall expire and the customer-generator shall be responsible for filing a new application.*
(D) Upon the change in ownership of a qualified electric energy generation unit, the new customer-generator shall be responsible for filing a new application/agreement.]

(10) [*Electric Utility Reporting Requirements.*] **Annual Net Metering Report**
Each year prior to April 15, every electric utility shall—
(A) Submit an annual net metering report to the commission [*and make said report available to a consumer of the electric utility upon request*], including the following information for the previous calendar year:
1. The total number of customer-generator facilities connected to its distribution system;
2. The total estimated generating capacity of customer-generators that are connected to its distribution system; and
3. The total estimated net kilowatt-hours received from customer-generators**.**[*; and*]
(B) Supply to the manager of the energy department of the commission a copy of the standard information regarding net metering and interconnection requirements provided to customers or posted on the electric utility's website.
(C) Verify compliance with 10 CSR 4240-20.060(11)(C)1 for customer-generator systems.
(D) As soon as reasonably possible after the electric utility files its annual net metering report, the commission will place the electronic copies of each electric utility's annual net metering reports on the commission's website in order to facilitate public viewing, as appropriate.

**[*INTERCONNECTION APPLICATION/AGREEMENT FOR NET METERING SYSTEMS WITH CAPACITY OF ONE HUNDRED KILOWATTS (100 kW) OR LESS*

[Utility Name and Mailing Address]

For Customers Applying for Interconnection:

If you are interested in applying for interconnection to [Utility Name]'s electrical system, you should first contact [Utility Name] and ask for information related to interconnection of parallel generation equipment to [Utility Name]'s system and you should understand this information before proceeding with this Application.

If you wish to apply for interconnection to [Utility Name]'s electrical system, please complete sections A, B, C, and D, and attach the plans and specifications, including, but not limited to, describing the net metering, parallel generation, and interconnection facilities (hereinafter collectively referred to as the "Customer- Generator's System") and submit them to [Utility Name] at the address above. The company will provide notice of approval or denial within thirty (30) days of receipt by [Utility Name] for Customer-Generators of ten kilowatts (10 kW) or less and within ninety (90) days of receipt by [Utility Name] for Customer-Generators of greater than ten kilowatts (10 kW). If this Application is denied, you will be provided with the reason(s) for the denial. If this Application is approved and signed by both you and [Utility Name], it shall become a binding contract and shall govern your relationship with [Utility Name].

For Customers Who Have Received Approval of Customer-Generator System Plans and Specifications:

After receiving approval of your Application, it will be necessary to construct the Customer-Generator System in compliance with the plans and specifications described in the Application, complete sections E and F of this Application, and forward this Application to [Utility Name] for review and completion of section G at the address above. Prior to the interconnection of the qualified generation unit to [Utility Name] system, the Customer-Generator will furnish [Utility Name] a certification from a qualified professional electrician or engineer that the installation meets the plans and specification described in the application. If a local Authority Having Jurisdiction (AHJ) requires permits or certifications for construction or operation of the qualified generation unit, a customer generator must show the permit number and approval certification to the [Utility Name] prior to interconnection. If the application for interconnection is approved by [Utility Name] and the Customer-Generator does not complete the interconnection within one (1) year after receipt of notice of the approval, the approval shall expire and the Customer-Generator shall be responsible for filing a new application.

Within 21 days of when the customer-generator completes submission of all required post construction documentation, including sections E&F, other supporting documentation and local AHJ inspection approval (if applicable) to the electric utility, the electric utility will make any inspection of the customer-generators interconnection equipment or system it deems necessary and notify the customer-generator:

1. That the net meter has been set and parallel operation by customer-generator is permitted; or

2. That the inspection identified no deficiencies and the net meter installation is pending; or
3. That the inspection identified no deficiencies and the timeframe anticipated for the electric utility to complete all required system or service upgrades and install the meter; or
4. Of all deficiencies identified during the inspection that need to be corrected by the customer-generator before parallel operation will be permitted; or
5. Of any other issue(s), requirement(s), or condition(s) impacting the installation of the net meter or the parallel operation of the system.

For Customers Who Are Installing Solar Systems:

Customer-Generators who are Missouri electric utility retail account holders will receive a solar rebate, if available, based on the capacity stated in the application, or the installed capacity of the Customer-Generator System if it is lower, if the following requirements are met:

a. The [Utility Name] must have confirmed the Customer-Generator's System is operational; and
b. Sections H and I of this Application must be completed.

The amount of the rebate will be based on the system capacity measured in direct current. The rebate will be based on the schedule below up to a maximum of 25,000 watts (25kW).

$2.00 per watt for systems operational on or before June 30, 2014;
$1.50 per watt for systems operational between July 1, 2014 and June 30, 2015;
$1.00 per watt for systems operational between July 1, 2015 and June 30, 2016;
$0.50 per watt for systems operational between July 1, 2016 and June 30, 2019;
$0.25 per watt for systems operational between July 1, 2019 and June 30, 2020;
$0.00 per watt for systems operational after June 30, 2020.

For Customers Who Are Assuming Ownership or Operational Control of an Existing Customer-Generator System:

If no changes are being made to the existing Customer-Generator System, complete sections A, D, and F of this Application/Agreement and forward to [Utility Name] at the address above. [Utility Name] will review the new Application/Agreement and shall approve such, within fifteen (15) days of receipt by [Utility Name] if the new Customer-Generator has satisfactorily completed Application/Agreement, and no changes are being proposed to the existing Customer-Generator System. There are no fees or charges for the Customer-Generator who is assuming ownership or operational control of an existing Customer-Generator System if no modifications are being proposed to that system.

A. Customer-Generator's Information

Name on [Utility Name] Electric Account:

_____

Service/Street Address: _____

City: _____ *State:* _____ *Zip Code:* _____

Mailing Address (if different from above):

_____

City: _____ *State:* _____ *Zip Code:* _____

E-mail address (if available):

_____

Electric Account Holder Contact Person:

_____

Daytime Phone: _____ *Fax:* _____

Email: _____

Emergency Contact

*Phone:*_____

[Utility Name] Account No. (from Utility Bill):

_____

If account has multiple meters, provide the meter number to which generation will be connected:

_____

[Utility Name] Account No. (from Utility Bill): [Shall be inserted at the top of each page.]

B. Customer-Generator's System Information

Manufacturer Name Plate Power Rating: _____ *kW AC or DC (circle one)*

[Voltage: _____ *Volts]*

System Type: __Wind __Fuel Cell __Solar Thermal __Photovoltaic __Hydroelectric __Other (describe)

_____

_____

Inverter/Interconnection Equipment Manufacturer:

_____

Inverter/Interconnection Equipment Model No.:

_____

Outdoor Manual/Utility Accessible & Lockable Disconnect Switch Distance from Meter:

_____

Certify that the disconnect switch will be located adjacent to the Customer-Generator's electric service meter or explain where and why an alternative location of disconnect switch is being requested:

_____

_____

Existing Electrical Service Capacity: _____ Amperes Voltage: _____ Volts
Service Character: __ Single Phase __ Three Phase
Total capacity of existing Customer-Generator System (if applicable):_____kW

System Plans, Specifications, and Wiring Diagram must be attached for a valid application.

C. Installation Information/Hardware and Installation Compliance

Company Installing System: _____
Contact Person of Company Installing System: _____ Phone Number:_____
Contractor's License No. (if applicable):
_____
Approximate Installation Date:
_____
Mailing Address:
_____
City: _____ State: _____
Zip Code: _____
Daytime Phone: _____ Fax: _____
Email: _____
Person or Agency Who Will Inspect/Certify Installation:
_____

The Customer-Generator's proposed System hardware complies with all applicable National Electrical Safety Code (NESC), National Electrical Code (NEC), Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories (UL) requirements for electrical equipment and their installation. As applicable to system type, these requirements include, but are not limited to, UL 1703, UL 1741 and IEEE 1547.

The proposed installation complies with all applicable local electrical codes and all reasonable safety requirements of [Utility Name]. The proposed system has a lockable, visible AC disconnect device, accessible at all times to [Utility Name] personnel and switch is located adjacent to the Customer-Generator's electric service meter (except in cases where the Company has approved an alternate location). The system is only required to include one lockable, visible disconnect device, accessible to [Utility Name].
If the interconnection equipment is equipped with a visible, lockable, and accessible disconnect, no redundant device is needed to meet this requirement. The Customer-Generator's proposed system has functioning controls to prevent voltage flicker, DC injection, overvoltage, undervoltage, overfrequency, underfrequency, and overcurrent, and to provide for system synchronization to [Utility Name]'s electrical system. The proposed system does have an anti-islanding function that prevents the generator from continuing to supply power when [Utility Name]'s electric system is not energized or operating normally. If the proposed system is designed to provide uninterruptible power to critical loads, either through energy storage or back-up generation, the proposed system includes a parallel blocking scheme for this backup source that prevents any backflow of power to [Utility Name]'s electrical system when the electrical system is not energized or not operating normally.

*Signed (Installer): Printed Name*_____
*Signature:*_____
*Date:*_____

D. Additional Terms and Conditions

In addition to abiding by [Utility Name]'s other applicable rules and regulations, the Customer-Generator understands and agrees to the following specific terms and conditions:

1) Operation/Disconnection

If it appears to [Utility Name], at any time, in the reasonable exercise of its judgment, that operation of the Customer-Generator's System is adversely affecting safety, power quality, or reliability of [Utility Name]'s electrical system, [Utility Name] may immediately disconnect and lock-out the Customer-Generator's System from [Utility Name]'s electrical system. The Customer-Generator shall permit [Utility Name]'s employees and inspectors reasonable access to inspect, test, and examine the Customer-Generator's System.

2) Liability

Liability insurance is not required for Customer-Generators of ten kilowatts (10 kW) or less. For generators greater that ten kilowatts (10 kW), the Customer-Generator agrees to carry no less than one hundred thousand dollars ($100,000) of liability insurance that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the Customer-Generator's System. Insurance may be in the form of an existing policy or an endorsement on an existing policy. Customer-Generators, including those whose systems are ten kilowatts (10 kW) or less, may have legal liabilities not covered under their existing insurance policy in the event the Customer-Generator's negligence or other wrongful conduct causes personal injury (including death), damage to property, or other actions and claims.

3) Metering and Distribution Costs

A Customer-Generator's facility shall be equipped with sufficient metering equipment that can measure the net amount of electrical energy produced or consumed by the Customer-Generator. If the Customer-Generator's existing meter equipment does not meet these requirements or if it is necessary for [Utility Name] to install additional distribution equipment to accommodate the Customer-Generator's facility, the Customer- Generator shall reimburse [Utility Name] for the costs to purchase and install the necessary additional equipment. At the request of the Customer-Generator, such costs may be initially paid for by [Utility Name], and any amount up to the total costs and a reasonable interest charge may be recovered from the Customer-Generator over the course of up to twelve (12) billing cycles. Any subsequent meter testing, maintenance, or meter equipment change necessitated by the Customer-Generator shall be paid for by the Customer-Generator.

4) Ownership of Renewable Energy Credits or Renewable Energy Certificates (RECs)

RECs created through the generation of electricity by the Customer-Owner are owned by the Customer-Generator; however, if the Customer-Generator receives a solar rebate, the Customer-Generator transfers to the [Utility Name] all right, title, and interest in and to the RECs associated with the new or expanded solar electric system that qualified the Customer-Generator for the solar rebate for a period of ten (10) years from the date the electric utility confirms the solar electric system is installed and operational.

5) Energy Pricing and Billing

The net electric energy delivered to the Customer-Generator shall be billed in accordance with the Utility's Applicable Rate Schedules [Utility's Applicable Rate Schedules]. The value of the net electric energy delivered by the Customer-Generator to [Utility Name] shall be credited in accordance with the net metering rate schedule(s)
[Utility's Applicable Rate Schedules]. The Customer-Generator shall be responsible for all other bill components charged to similarly situated customers.

Net electrical energy measurement shall be calculated in the following manner:

(a) For a Customer-Generator, a retail electric supplier shall measure the net electrical energy produced or consumed during the billing period in accordance with normal metering practices for customers in the same rate class, either by employing a single, bidirectional meter that measures the amount of electrical energy produced and consumed, or by employing multiple meters that separately measure the Customer-
Generator's consumption and production of electricity;

(b) If the electricity supplied by the supplier exceeds the electricity generated by the Customer-Generator during a billing period, the Customer-Generator shall be billed for the net electricity supplied by the supplier in accordance with normal practices for customers in the same rate class;

(c) If the electricity generated by the Customer-Generator exceeds the electricity supplied by the supplier during a billing period, the Customer-Generator shall be billed for the appropriate customer charges as specified by the applicable Customer-Generator rate schedule for that billing period and shall be credited an amount for the excess kilowatt-hours generated during the billing period at the net metering rate identified in [Utility Name]'s tariff filed at the Public Service Commission, with this credit applied to the following billing period; and

(d) Any credits granted by this subsection shall expire without any compensation at the earlier of either twelve (12) months after their issuance, or when the Customer-
Generator disconnects service or terminates the net metering relationship with the supplier.

6) Terms and Termination Rights

This Agreement becomes effective when signed by both the Customer-Generator and [Utility Name], and shall continue in effect until terminated. After fulfillment of any applicable initial tariff or rate schedule term, the Customer-Generator may terminate this Agreement at any time by giving [Utility Name] at least thirty (30) days prior written notice. In such event, the Customer-Generator shall, no later than the date of termination of Agreement, completely disconnect the Customer-Generator's System from parallel operation with [Utility Name]'s system. Either party may terminate this Agreement by giving the other party at least thirty (30) days prior written notice that the other party is in default of any of the terms and conditions of this Agreement, so long as the notice specifies the basis for termination, and there is an opportunity to cure the default. This Agreement may also be terminated at any time by mutual agreement of the Customer- Generator and [Utility Name]. This agreement may also be terminated, by approval of the commission, if there is a change in statute that is determined to be applicable to this contract and necessitates its termination.

7) Transfer of Ownership

If operational control of the Customer-Generator's System transfers to any other party than the Customer-Generator, a new Application/Agreement must be completed by the person or persons taking over operational control of the existing Customer-Generator System. [Utility Name] shall be notified no less than thirty (30) days before the Customer-Generator anticipates transfer of operational control of the Customer- Generator's System. The person or persons taking over operational control of Customer-Generator's System must file a new Application/Agreement, and must receive authorization from [Utility Name], before the existing Customer-Generator System can remain interconnected with [Utility Name]'s electrical system. The new Application/Agreement will only need to be completed to the extent necessary to affirm that the new person or persons having operational control of the existing Customer-Generator System completely understand the provisions of this Application/Agreement and agree to them. If no changes are being made to the Customer-Generator's System, completing sections A, D, and F of this Application/Agreement will satisfy this requirement. If no changes are being proposed to the Customer-Generator System, [Utility Name] will assess no charges or fees for this transfer. [Utility Name] will review the new Application/Agreement and shall approve such, within fifteen (15) days if the new Customer-Generator has satisfactorily completed the Application/Agreement, and no changes are being proposed to the existing Customer-Generator System. [Utility Name] will then complete section G and forward a copy of the completed Application/Agreement back to the new Customer-Generator, thereby notifying the new
Customer-Generator that the new Customer-Generator is authorized to operate the existing Customer-Generator System in parallel with [Utility Name]'s electrical system.
If any changes are planned to be made to the existing Customer-Generator System that in any way may degrade or significantly alter that System's output characteristics, then the Customer-Generator shall submit to [Utility Name] a new Application/Agreement for the entire Customer-Generator System and all portions of the Application/Agreement must be completed.

8) Dispute Resolution

If any disagreements between the Customer-Generator and [Utility Name] arise that cannot be resolved through normal negotiations between them, the disagreements may be brought to the Missouri Public Service Commission by either party, through an informal or formal complaint. Procedures for filing and processing these complaints are described in 4 CSR 240-2.070. The complaint procedures described in 4 CSR 240-2.070 apply only to retail electric power suppliers to the extent that they are regulated by the Missouri Public Service Commission.

9) Testing Requirement

IEEE 1547 requires periodic testing of all interconnection related protective functions. The Customer-Generator must, at least once every year, conduct a test to confirm that the Customer-Generator's net metering unit automatically ceases to energize the output (interconnection equipment output voltage goes to zero) within two (2) seconds of being disconnected from [Utility Name]'s electrical system. Disconnecting the net metering unit from [Utility Name]'s electrical system at the visible disconnect switch and measuring the time required for the unit to cease to energize the output shall satisfy this test. The Customer-Generator shall maintain a record of the results of these tests and, upon request by [Utility Name], shall provide a copy of the test results to [Utility Name].
If the Customer-Generator is unable to provide a copy of the test results upon request, [Utility Name] shall notify the Customer-Generator by mail that Customer-Generator has thirty (30) days from the date the Customer-Generator receives the request to provide to [Utility Name], the results of a test. If the Customer-Generator's equipment ever fails this test, the Customer-Generator shall immediately disconnect the Customer-Generator's System from [Utility Name]'s system. If the Customer-Generator does not provide results of a test to [Utility Name] within thirty (30) days of receiving a request from [Utility
Name] or the results of the test provided to [Utility Name] show that the Customer-

Generator's net metering unit is not functioning correctly, [Utility Name] may immediately disconnect the Customer-Generator's System from [Utility Name]'s system.
The Customer-Generator's System shall not be reconnected to [Utility Name]'s electrical system by the Customer-Generator until the Customer-Generator's System is repaired and operating in a normal and safe manner.
I have read, understand, and accept the provisions of section D, subsections 1 through 9 of this Application/Agreement.
Signed (Customer-Generator): Printed Name_____
Signature:_____
Date: _____
Must be signature of [Utility Name] account holder (customer)

E. Electrical Inspection

If a local Authority Having Jurisdiction (AHJ) governs permitting/inspection of project:
Authority Having Jurisdiction (AHJ):
_____
Permit Number: _____
Applicable to all installations:
The Customer-Generator System referenced above satisfies all requirements noted in section C.
Inspector Name (print):_____
Inspector Certification: Licensed Engineer in Missouri ___ Licensed Electrician in Missouri ___
License No._____
Signed (Inspector):
_____
Date: _____

F. Customer-Generator Acknowledgement

I am aware of the Customer-Generator System installed on my premises and I have been given warranty information and/or an operational manual for that system.
Also, I have been provided with a copy of [Utility Name]'s parallel generation tariff or rate schedule (as applicable) and interconnection requirements. I am familiar with the operation of the Customer-Generator System.
I agree to abide by the terms of this Application/Agreement and I agree to operate and maintain the Customer-Generator System in accordance with the manufacturer's recommended practices as well as [Utility Name]'s interconnection standards. If, at any time and for any reason, I believe that the Customer-Generator System is operating in an unusual manner that may result in any disturbances on [Utility Name]'s electrical system, I shall disconnect the Customer-Generator System and not reconnect it to [Utility Name]'s electrical system until the Customer-Generator System is operating normally after repair or inspection. Further, I agree to notify [Utility Name] no less than thirty (30) days prior to modification of the components or design of the Customer-Generator System that in any way may degrade or significantly alter that system's output characteristics. I acknowledge that any such modifications will require submission of a new Application/Agreement to [Utility Name].
I agree not to operate the Customer-Generator System in parallel with [Utility Name]'s electrical system until this Application/Agreement has been approved by [Utility Name].
System Installation Date: _____
Printed name (Customer-Generator):
_____
Signed (Customer-Generator): _____

Date:_____

G. Utility Application/Agreement Approval (completed by [Utility Name])

[Utility Name] does not, by approval of this Application/Agreement, assume any responsibility or liability for damage to property or physical injury to persons due to malfunction of the Customer-Generator's System or the Customer-Generator's negligence.

This Application is approved by [Utility Name] on this _____day of _____(month), _____(year).

[Utility Name] Representative Name (print):

_____

Signed [Utility Name] Representative:

_____

H. Solar Rebate (For Solar Installations only)

Solar Module Manufacturer:_____ Inverter Rating: _____kW

Solar Module Model No.:_____ Number of Modules/Panel: _____

Module rating: _____DC Watts System rating (sum of solar panels):____kW

Module Warranty: _____ years (circle on spec sheet)

Inverter Warranty: _____ years (circle on spec sheet)

Location of modules: ____Roof ___Ground Installation type: ____ Fixed ___Ballast

Solar system must be permanently installed on the applicant's premises for a valid application

Required documents to receive solar rebate to be attached OR provided before [Utility Name] authorizes the rebate payment:

Copies of detail receipts/invoices with purchase date circled

Copies of detail spec sheets on each component

Copies of proof of warranty sheet (minimum of 10 year warranty)

Photo(s) of completed system

Completed Taxpayer Information Form

I. Solar Rebate Declaration (For Solar Installations only)

I understand that the complete terms and conditions of the solar rebate program are included in [Utility Name] [solar rebate tariff name].

I understand that this program has a limited budget, and that application will be accepted on a first-come, first-served basis, while funds are available. It is possible that I may be notified I have been placed on a waiting list for the next year's rebate program if funds run out for the current year. This program may be modified or discontinued at any time without notice from [Utility Name].

I understand that the solar system must be permanently installed and remain in place on premises for a minimum of 10 years and the system shall be situated in a location where a minimum of eighty-five percent (85%) of the solar resource is available to the solar system.

I understand the equipment must be new when installed, commercially available, and carry a minimum 10 year warranty.

I understand a rebate may be available from [Utility Name] in the amount of:

$2.00 per watt for systems operational on or before June 30, 2014;

$1.50 per watt for systems operational between July 1, 2014 and June 30, 2015;

$1.00 per watt for systems operational between July 1, 2015 and June 30, 2016;
$0.50 per watt for systems operational between July 1, 2016 and June 30, 2019;
$0.25 per watt for systems operational between July 1, 2019 and June 30, 2020;
$0.00 per watt for systems operational after June 30, 2020.
I understand an electric utility may, through its tariff, require applications for solar rebates to be submitted up to one hundred eighty-two (182) days prior to the applicable June 30 operational date for the solar rebate.
I understand that a maximum of 25 kilowatts of new or expanded system capacity will be eligible for a rebate.
I understand the DC wattage rating provided by the original manufacturer and as noted in section H will be used to determine rebate amount.
I understand I may receive an IRS Form related to my rebate amount. (Please consult your tax advisor with any questions.)
I understand that as a condition of receiving a solar rebate, I am transferring to [Utility Name] all right, title, and interest in and to the solar renewable energy credits (SRECs) associated with the new or expanded system for a period of ten (10) years from the date [Utility Name] confirmed that the system was installed and operational, and during this period, I may not claim credit for the SRECs under any environmental program or transfer or sell the SRECs to any other party.
The undersigned warrants, certifies, and represents that the information provided in this form is true and correct to the best of my knowledge; and the installation meets all Missouri Net Metering and Solar Electric Rebate program requirements.

_____ _____

Applicant's Signature Installer's Signature

_____ _____

Print Solar Rebate Applicant's Name Print Installer's Name]

Year 1 Costs

Proposed Code Section	Description	Ameren's Est Costs	Staff's Est Ameren Costs	Staff's Est Empire Costs	Staff's Est KCPL/GMO Costs	Total Staff's Estimated Costs	Notes
20 CSR 240-20.060(4)(A)	Utilities develop standard rates	Less than $1,000	$0	$650	$0	**$650**	Ameren & KCPL/GMO have existing standard rates for QF's with more than 100kW capacity. Staff estimates Empire's cost: 8 hrs Analyst @ $50/hr and 2 hrs Atty @ $125 hr. $400 + $250 = $650. All utilities have existing standard rates for less than 100 kW (net metering).
20 CSR 240-20.060(4)(C)	Utilities adopt Commission-developed standard contract	$5,000 - $30,000	$1,800	$1,800	$1,800	**$5,400**	Utilities currently required to submit a standard contract pursuant to 4 CSR 240-3.155(2)(B). They will incur minimal costs adopting the Commission's. Staff estimates 16 hrs Analyst @ $50/hr and 8 hrs Atty @ $125/hr. $800 + $1,000 = $1,800.
20 CSR 240-20.060(4)(D)	Utilities develop interconnection standards	$5,000 - $15,000	$3,550	$0	$3,550	**$7,100**	Empire has an interconnection standards document. Staff estimates costs to Ameren & KCPL/GMO to develop: 2 hrs Analyst @ $50/hr, 40 hrs Engineer @ $80/hr, and 2 hrs Atty @ $125/hr. $100 + $3,200 + $250 = $3,550.
20 CSR 240-20.060(11)(A)	Utilities make biannual tariff filings with standard contracts & standard rates	$3,000 - $30,000	$0	$0	$0	**$0**	This is an existing requirement under current 4 CSR 240-3.155(3).
20 CSR 240-20.060(11)(B)	Utilities make avoided cost & capacity plans publicly available	$1,000	$0	$0	$0	**$0**	This is an existing requirement under 18 C.F.R. 292.302(b) (PURPA implementing regulation) and 4 CSR 240-3.155(4).
20 CSR 240-20.060(11)(C)	Utilities maintain & aggregate circuit & feeder data	$25,000 - $50,000, plus $50,000 - $250,000 for tracking system	$1,440	$1,440	$1,440	**$4,320**	Rule does not require additional software purchases. Utility may chose a more robust solution for its own purposes. Staff's estimates initial costs for each utility: 16 hrs Analyst time @ $50/hr and 8 hrs Engineer time @ $80/hr. $800 + $640 = $1,440.
TOTAL		**$90,000 - $375,000**	**$6,790**	**$3,890**	**$6,790**	**$17,470**	

Recurring Costs

Proposed Code Section	Description	Ameren's Est Costs	Staff's Est Ameren Costs	Staff's Est Empire Costs	Staff's Est KCPL/GMO Costs	Total Staff's Estimated Costs	Notes
20 CSR 240-20.060(4)(A)	Utilities develop standard rates	$0	$0	$0	$0	**$0**	This cost is not expected to recur.
20 CSR 240-20.060(4)(C)	Utilities adopt Commission-developed standard contract	$5000 - $30,000 biennially	$700 biennially	$700 biennially	$875 biennially	**$2275 biennially**	See Year 1 Costs for 20 CSR 240-20.060(4)(C), above. For recurring costs, Staff estimates Ameren & Empire: 4 hrs Analyst @ $50/hr and 4 hrs Atty @ $125/hr. $200 + $500 = $700. KCPL/GMO: 5 hrs Analyst @ $50/hr and 5 hrs Atty @ $125/hr. $250 + $625 = $875.
20 CSR 240-20.060(4)(D)	Utilities develop interconnection standards	unknown	$990 annually	$990 annually	$990 annually	**$2,970 annually**	Occasional updates may occur but not because of this rule. Staff's estimated costs for review for each utility: 2 hrs Analyst @ $50/hr, 8 hrs Engineer @ $80/hr, and 2 hrs Atty @ $125/hr. $100 + $640 + $250 = $990.
20 CSR 240-20.060(11)(A)	Utilities make biannual tariff filings with standard contracts & standard rates	$3000 - $30,000 biennially	$250 biennially	$250 biennially	$250 biennially	**$750 biennially**	This is an existing requirement under current 4 CSR 240-3.155(3). Under the proposed rule, utilities will have to file as a case, compared to the current JE filing. Staff estimates costs for each utility: 2 hrs Atty @ $125/hr. = $250.
20 CSR 240-20.060(11)(B)	Utilities make avoided cost & capacity plans publicly available	$500 annually	$0	$0	$0	**$0**	This is an existing requirement under 18 C.F.R. 292.302(b) (PURPA implementing regulation) and 4 CSR 240-3.155(4).
20 CSR 240-20.060(11)(C)	Utilities maintain & aggregate circuit & feeder data	$5,000 - $10,000 annually	$770 annually	$770 annually	$900 annually	**$2,440 annually**	Rule does not require additional software purchases. Staff's estimated recurring costs: 4 hrs Analyst @ $50/hr and 4 hrs Engineer @ $80/hr. $320 + $250 = $770.
TOTAL	**Annually:**	**$5,500 - $10,000**	**$1,760**	**$1,760**	**$1,890**	**$5,410**	
	Biennially:	**$8,000 - $60,000**	**$950**	**$950**	**$1,125**	**$3,025**	
ANNUALIZED		**$17,000 - $70,500**				**$7,000**	

Staff annualized by adding half of biennial costs to annual costs.