Title 4 – Department of Economic Development
Division 240 – Public Service Commission
Chapter 20 – Electric Utilities

PROPOSED AMENDMENT

4 CSR 240-20.065 Net Metering

PURPOSE: This rule implements the ~~Consumer Clean Energy~~Net Metering and Easy Connection Act (section 386.~~887~~890, RSMo Supp. ~~2002~~2007) and establishes standards for interconnection of qualified net metering units (generating capacity of one hundred kilowatts (100 kW) or less) with ~~retail~~distribution systems of electric ~~power suppliers~~utilities.

(1) Definitions.

~~(A) Commission means the Public Service Commission of the state of Missouri.~~

~~(B) Customer-generator means a consumer of electric energy who purchases electric energy from a retail electric power supplier and is the owner of a qualified net metering unit.~~

~~(C) Local distribution system means facilities for the distribution of electric energy to the ultimate consumer thereof.~~

~~(D) Qualified net metering unit means an electric generation unit which—~~

(A) Avoided fuel cost means the current annual average cost of fuel for the electric utility as calculated from information contained in the most recent annual report submitted to the commission pursuant to 4 CSR 240-3.165. Annual average cost of fuel will be calculated from information on the Steam-Electric Generating Plant Statistics Sheets of the annual report. This annual average cost of fuel shall be identified in the net metering tariffs on file with the commission and shall be updated annually within thirty (30) days after the electric utility's annual report is submitted;

(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 which meets all of the following criteria:

1. ~~Is owned by a customer-generator~~ Is powered by a renewable energy resource;

2. Is ~~a hydrogen fuel cell or is powered by sun, wind or biomass;~~

~~3. Has~~ an electrical generating system with a capacity of not more than one hundred kilowatts (100 kW);

~~4.~~3. Is located on ~~premises that are~~ a premise owned, operated, leased, or otherwise controlled by the customer-generator;

~~5.~~4. Is interconnected ~~with,~~ and operates in parallel phase and ~~in~~ synchronization with ~~a retail~~an electric ~~power supplier;~~utility and has been approved for interconnection by said electric utility;

~~6~~5. Is intended primarily to offset part or all of the customer-generator's own ~~electric power~~ electrical energy requirements~~.~~;

~~(E) Retail electric power supplier means any entity that sells electric energy to the ultimate consumer thereof.~~

~~(F) Value of electric energy means the total resulting from the application of the appropriate rates, which may be time-of-use rates at the option of the retail electric power supplier, to the quantity of electric energy delivered to the retail electric power supplier from a qualified net metering unit or to the quantity of electric energy sold to a customer-generator.~~

~~(2) Applicability.~~

~~(A) This rule applies to retail electric power suppliers and customer-generators.~~

~~(3) Retail Electric Power Supplier Obligations.~~

~~(A) Each retail electric power supplier shall develop a tariff or rate schedule applicable to net metering customer-generators that shall—~~

~~1. Be made available to qualifying customer-generators upon request; and~~

~~2. Shall be posted with any other tariffs or rate schedules on the retail electric power supplier's website.~~

~~(B) Each retail electric power supplier shall provide net metering service on a first-come, first-served basis, until the total rated generating capacity used by customer-generators is equal to or in excess of the lesser of ten thousand kilowatts (10,000 kW) or one-tenth of one percent (0.1%) of the capacity necessary to meet the retail electric power supplier's aggregate customer peak demand for the preceding calendar year.~~

~~(C) Each retail electric power supplier shall notify the commission when total generating capacity of customer-generators is equal to or in excess of the lesser of ten thousand kilowatts (10,000 kW) or one-tenth of one percent (0.1%) of the capacity necessary to meet the retail electric power supplier's aggregate customer peak demand for the preceding calendar year.~~

~~(D) Each retail electric power supplier shall maintain and make available to the public, records of the total generating capacity of customer-generators, the type of generating systems and the energy sources used.~~

~~(E) The retail electric power supplier's tariff, tariff rider, or rate schedule used to provide service to the customer-generator shall be identical in rate structure, all retail rate components, and any monthly charges, to the tariff or rate schedule provisions to which the same customer would be assigned if that customer were not a customer-generator.~~

~~1. Time-of-use rates, which may be applied at the option of the retail electric power supplier, shall be the time-of-use rates applicable to the customer-generator's assigned rate classification, absent the output of the net metering unit.~~

~~(F) No retail electric power supplier's tariff or rate schedule for net metering shall require customer-generators to—~~

~~1. Perform or pay for additional tests or analysis beyond those required to determine the effect of the operation of the net metering system on the local distribution system; or~~

~~2. Purchase additional liability insurance beyond that required by section (4) of this rule.~~

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 back onto the electric utility's electrical lines in the event that service to the customer-generator is interrupted

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

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

(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) Renewable energy resources means electrical energy produced from 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;

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

(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 (5) percent 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 (5) percent. 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 (1) percent 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 (5) (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.

(4) Customer- Generator Liability Insurance Obligation.

(A) ~~The customer~~Customer-generator systems greater that ten kilowatts (10 kW) shall 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 net metering unit. Insurance may be in the form of an existing policy or an endorsement on an existing policy~~.~~;

(~~5) Determination of Net Value of Energy.~~

~~(A) Each retail electric power supplier shall calculate the net value of energy for a customer-generator in the following manner—~~

~~1. The retail electric power supplier shall individually measure both—~~

~~A. The electric energy delivered by the customer-generator to the retail electric power supplier; and~~

B~~. The electric energy provided by the retail electric power supplier to the customer-generator during each billing period by using metering capable of such function—either by a single meter capable of registering the flow of electricity in two (2) directions, or by using two (2) meters. The customer-generator is responsible for the costs of the metering described in this subsection beyond those a retail electric power supplier would incur in providing electric service to a customer in the same rate class as the customer-generator but who is not a customer-generator.~~) Customer-generator systems ten kilowatts (10kW) or less shall not be required to carry liability insurance;

~~2. If the value of the electric energy supplied by the retail electric power supplier exceeds the value of the electric energy delivered by the customer-generator to the retail electric power supplier during a billing period, then the customer-generator shall be billed for the net value of the electric energy supplied by the retail electric power supplier in accordance with the rates, terms and conditions established by the retail electric power supplier for customer-generators.~~

~~3. If the value of the electric energy delivered by the customer-generator to the retail electric power supplier exceeds the value of the electric energy supplied by the retail electric power supplier, then the customer-generator—~~

~~A. Shall be billed for the appropriate customer charges for that billing period; and~~

~~B. Shall be credited for the net value of the electric energy delivered to the retail electric power supplier during the billing period, calculated using the retail electric power supplier's avoided cost (time-of-use or non-time-of-use), with this credit appearing on the customer-generator's bill no later than the following billing period.~~

~~(B) The retail electric power supplier, at its own expense, may install additional special metering (e.g. load research meter) to monitor the flow of electricity in each direction, not to include meters needed to comply with subsection (5)(A) of this rule.~~

~~(6) Interconnection Agreement.~~

~~(A) Each customer-generator and retail electric power supplier shall enter into the interconnection agreement included herein.~~

~~(7) Retail Electric Power Supplier Reporting Requirements.~~

~~(A) Each retail electric power supplier shall —~~

~~1. Supply the commission staff with a copy of the standard information regarding net metering and interconnection requirements provided to customers or posted on the retail electric power supplier's website; and~~

~~2. Supply the commission staff with a description of additional requirements, if these additional requirements are applicable to all net metering customers and not specific to individual interconnection situations, beyond those needed to meet the specific requirements outlined in section C of the interconnection agreement included herein.~~

~~(8) Customer-Generator Testing Requirements.~~

~~(A~~

(5) 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, and Underwriters Laboratories for distributed generation; including, but not limited to IEEE 1547 and UL 1741;

(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 consumer 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 (7)(B) 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 ~~retail~~ electric ~~power supplier's~~utility's system. Disconnecting the net metering unit from the ~~retail~~ electric ~~power~~

~~supplier's~~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~~.~~;

(~~B~~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 ~~retail~~ electric ~~supplier~~utility.

1. If the customer-generator is unable to provide a copy of the test results upon request, the ~~retail~~ electric ~~power supplier~~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 ~~retail~~ electric ~~power supplier.~~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 ~~retail~~ electric ~~power supplier~~utility within thirty (30) days of receiving a request from the ~~retail~~ electric ~~power supplier~~utility or the results of the test provided to the ~~retail~~ electric ~~power supplier~~utility show that the unit is not functioning correctly, the ~~retail~~ electric ~~power supplier~~utility may immediately disconnect the net metering unit~~.~~;

4. The net metering unit shall not be reconnected to the ~~retail~~ electric ~~power supplier's~~utility's electrical system by the customer-generator until the net metering unit is repaired and operating in a normal and safe manner.

(6) Determination of Net Electrical Energy. Net electrical energy measurement shall be calculated in the following manner:

(A) For a customer-generator, a 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 (3) of this rule and shall be credited an amount at least equal to the avoided fuel cost of the excess kilowatt-hours generated during the billing period, with this credit applied to the following billing period.

(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.

(7) Interconnection Agreement.

(A) Each customer-generator and electric utility shall enter into the interconnection agreement included herein.

(B) 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 (5)(A) and (5)(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.

(C) Upon the change in ownership of a qualified electric energy generation unit, the new customer-generator shall be responsible for filing a new application.

(8) Electric Utility Reporting Requirements. Each year prior to April 15, every electric utility shall:

1. 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:

A. The total number of customer-generator facilities connected to its distribution system;

B. The total estimated generating capacity of customer-generators that are connected to its distribution system; and

C. The total estimated net kilowatt-hours received from customer-generators.

2. 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 retail electric power supplier's website.

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

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 the wiring diagram, 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:

[Utility Mailing Address]

~~You~~Company will ~~be provided with an~~ provide notice of approval or denial ~~of this Application~~ within thirty (30) days of receipt by [Utility Name] for Customer-Generators of ten kilowatts (10kW) or less and within ninety (90) days of receipt by [Utility Name~~].~~] for Customer-Generators greater than ten kilowatts (10kW). 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:

[Utility Mailing Address]

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 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.

[Utility Name] will complete the utility portion of section G and, upon receipt of a completed Application/Agreement form and payment of any applicable fees, ~~permit~~schedule a date for the interconnection of the Customer-Generator System to [Utility Name]'s electrical system within fifteen (15) days of receipt by [Utility Name] if electric service already exists to the premises, unless the Customer-Generator and [Utility Name] agree to a later date. Similarly, upon receipt of a completed

Application/Agreement form and payment of any applicable fees, if electric service does not exist to the premises, [Utility Name] will ~~permit~~schedule a date for the interconnection of the Customer-Generator System to [Utility Name]'s electrical system no later than fifteen (15) days after service is established to the premises, unless the Customer-Generator and [Utility Name] agree to a later date.

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:

[Utility Mailing Address]

[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:_____

_____

City:_____ State:_____ Zip_____

Mailing Address:_____

~~City:~~ _____ ~~State:~~ _____ ~~Zip Code:~~ _____

_____

City:_____ State:_____ Zip_____

Service/Street Address (if different from above~~):~~ _____:

~~City:~~ _____ ~~State:~~ _____ ~~Zip Code:~~ _____

_____

City:_____ State:_____ Zip_____

Daytime Phone~~:~~ :_____ Fax~~:~~ _____ ~~E-Mail:~~ _____:_____

~~Emergency Contact Phone:~~ _____

E-Mail:_____

Emergency Contact Phone:_____

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

B. Customer- Generator's System Information

Manufacturer Name Plate (if applicable) AC Power Rating~~:~~ _____ :_____kW

Voltage: _____ Volts
System Type: _Solar Thermal__ Wind __ Biomass __Fuel Cell __ Photovoltaic ____ Hydroelectric ____Other (describe): _____
Service/Street Address: _____

_____

Inverter/Interconnection Equipment Manufacturer: _____

_____

Inverter/Interconnection Equipment Model No.: _____

_____

Are Required System Plans & Specifications & Wiring Diagram Attached? Yes___ No ____

Inverter/Interconnection Equipment Location (describe): _____

_____

_____

Outdoor Manual/Utility Accessible & Lockable Disconnect Switch Location (describe): _____

_____

Existing Electrical Service Capacity: _____Amperes _____Voltage: _____ Volts
Service Character: Single Phase ___ Three Phase ___

C. Installation Information/Hardware and Installation Compliance

Person or Company Installing: _____

Contractor's License No. (if applicable): _____

Approximate Installation Date: _____

_____

Mailing Address: _____

_____

City: _____ State: _____
Zip Code: _____
Daytime Phone: _____ Fax: _____
Daytime Phone: _____ Fax: _____

E-Mail: _____

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 Electric 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 1741 and IEEE ~~929-2000.~~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 disconnect device, accessible at all times to [Utility Name~~]~~].personnel. 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):_____

Date:_____

Name (Print):_____

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~~ of 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~~generator's System.

2) Liability

~~The~~Liability insurance is not required for Customer-Generators when generators are ten kilowatts (10 kW) or less. For generators greater that ten kilowatts (10kW), the Customer-Generator agrees to carry no less ~~than~~ that 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.

~~3) Interconnection Costs~~ **3) Metering and Distribution Costss**

~~The Customer-Generator shall, at the Customer-Generator's cost and expense, install, operate, maintain, repair, and inspect, and shall be fully responsible for the Customer-Generator's System. The Customer-Generator further agrees to pay or reimburse to [Utility Name] all of [Utility Name]'s Interconnection Costs. Interconnection Costs are the reasonable costs incurred by [Utility Name] for: (1) additional tests or analyses of the effects of the operation of the Customer-Generator's System on [Utility Name]'s local distribution system, (2) additional metering, and (3) any necessary controls. These Interconnection Costs must be related to the installation of the physical facilities necessary to permit interconnected operation of the Customer-Generator's System with [Utility Name]'s system and shall only include those costs, or corresponding costs, which would not have been incurred by [Utility Name] in providing service to the Customer-Generator solely as a consumer of electric energy from [Utility Name] pursuant to [Utility Name]'s standard cost of service policies in effect at the time the Customer-Generator's System is first interconnected with [Utility Name]'s system. Upon request, [Utility Name] shall provide the Customer-Generator with a not-to-exceed cost statement for interconnection with [Utility Name]'s based upon the plans and specifications provided by the Customer-Generator to [Utility Name].~~

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) Energy Pricing and Billing

~~Section 386.887, RSMo Supp. 2002 sets forth the valuation and billing of~~The net electric energy ~~provided by [Utility Name] to the Customer Generator and to [Utility Name] from Customer Generator. The value of the electric energy~~ delivered to the Customer-Generator shall be billed in accordance with rate schedule(s)
[Utility's Applicable Rate Schedules]. The value of the electric energy delivered by the Customer-Generator to [Utility Name] shall be credited in accordance with rate schedule(s) [Utility's Applicable Rate Schedules].

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

(1) 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;

(2) 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;

(3) 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 for that billing period and shall be credited an amount at least equal to the avoided fuel cost of the excess kilowatt-hours generated during the billing period, with this credit applied to the following billing period.

(4) 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.

5) 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.

6) 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]'~~f~~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 operation~~al~~ 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.

7) 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.

8) 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 (0)) 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~~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 8 of this Application/Agreement.

Signed (Customer-Generator):_____ Date:_____

E. Electrical Inspection

The Customer-Generator System referenced above satisfies all requirements noted in Section C.

Inspector Name (print):_____

Inspector Certification: I am a ~~Licensed~~licensed Engineer in Missouri___ or_____ I am a ~~Licensed~~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~~than 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].

Signed (Customer-Generator):_____

Date:_____

G. Utility Application 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: _____

AUTHORITY: sections 386.250, RSMo 2000, and 386.~~887,~~890 RSMo Supp. ~~2002.~~2007*. Original rule filed March 11, 2003, effective Aug~~.~~ust 30, 2003.*

**Original authority: 386.250, RSMo 1939, amended 1963, 1967, 1977, 1987, 1988, 1991, 1993, 1995, 1996 and 386.~~887~~890, RSMo ~~2002~~Supp. 2007.*

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than $500 in the aggregate.

PRIVATE COST: This proposed rule will not cost private entities more than $500 in the aggregate.

NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: Anyone may file comments in support of or in opposition to this proposed amendment with the Missouri Public Service Commission, Cully Dale, Secretary of the Commission, P.O. Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the Commission's offices on or before Month/Day/Year, and should include a reference to Commission Case No. EX-2008-____. Comments may be submitted via a filing using the Commission's electronic filing and information system at https://www.efis.psc.mo.gov/mpsc/index.html. A public hearing regarding this proposed amendment is scheduled for Month/Day/Year at hh:mm in Room ____ of the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed rule, and may be asked to respond to commission questions. Any person with special needs as addressed by the American with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-573-522-9061.