sundes
Jan 13, 9:23 AM
Added Text

sundes
Jan 13, 9:23 AM
Formatted: Align Center

Karl Rábago
Yesterday, 9:43 PM
Added Text

sundes
Jan 13, 9:23 AM
Formatted: Align Center

Karl Rábago
Yesterday, 9:43 PM
Formatted: Green Background

sundes
Jan 13, 9:23 AM
Added Text

sundes
Jan 13, 9:24 AM
Deleted: rule implements the Net Metering and E...

sundes
Jan 13, 9:24 AM
Added Text

sundes
Jan 13, 9:24 AM
Added Text

sundes
Jan 13, 9:24 AM
Formatted: Superscript

sundes
Jan 13, 9:25 AM
Formatted: Yellow Background

Karl Rábago
Yesterday, 9:35 PM
Added Text

Karl Rábago
Yesterday, 9:35 PM
Formatted: Green Background

Proposed Amendment

RÁBAGO EDITS HIGHLIGHTED

4 CSR 240-20.065 Net Metering

PURPOSE: This ~~rule implements the Net Metering and Easy Connection Act (section 386.890, RSMo Supp. 2008) and establishes~~amendment modifies standards for interconnection of qualified net metering units (generating capacity of one hundred kilowatts (100 kW) or less) with distribution systems of electric utilities to accommodate changes as a result of HB 142, 97th General Assembly and to provide clarity on issues that have been identified since implementation of the rule in X.

(1) Definitions.

(A) Avoided fuel cost means the fuel component of avoided costs described in 4 CSR 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 2000.

(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.

sundes
Jan 13, 9:25 AM
Added: Paragraph Break

sundes
Jan 13, 9:26 AM
Added Text

Karl Rábago
Yesterday, 9:35 PM
Deleted: has been measured

Karl Rábago
Yesterday, 9:35 PM
Formatted: Green Background

Karl Rábago
Yesterday, 9:35 PM
Added Text

sundes
Jan 13, 9:26 AM
Added Text

sundes
Jan 13, 9:41 AM
Added Text

sundes
Jan 13, 9:41 AM
Deleted: until explicitly transferred to another entity

sundes
Jan 13, 9:42 AM
Deleted: . Nothing in this rule gives the electric utility …

sundes
Jan 13, 9:42 AM
Added Text

Karl Rábago
Yesterday, 9:36 PM
Added Text

Karl Rábago
Yesterday, 9:37 PM
Formatted: Green Background

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~~can be measured.

(G) 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.

(H) 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.

(I) 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, ~~until explicitly transferred to another entity. Nothing in this rule gives the electric utility any preferential entitlement to the RECs generated by the customer-generator's qualified electric energy generation system~~ as a condition of receiving solar rebates, customers shall 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. The electric utility shall reduce its cost of compliance and any RESRAM by an amount equal to the value of the RECs assigned by the customer-generator, and shall provide customer-generators with information about the value of the RECs they assigned to the electric utility on an annual basis. The electric utility shall provide guidance to customer-generators on the proper formulation of claims relating to renewable energy generation, in accordance with federal regulations relating to environmental marketing claims, under 16 CFR part 260.

(4) 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.

(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 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; however, any tariff or contract offered by a utility to customer-generators shall contain language stating that absent clear and convincing evidence of fault on the part of the retail electric supplier, those retail electric suppliers cannot be held liable for any action or cause of action relating to any damages to property or persons caused by the generation unit of a customer-generator or the interconnection thereof pursuant to section 386.890.11., RSMo. Further, any tariff or contract offered by utilities to customer-generators shall state that customer-generators 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.

(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 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 (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 full 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 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~~calculates the full avoided cost and value of distributed solar to the utility and its ratepayers, taking into account avoided energy and capacity, avoided transmission and distribution energy and capacity related costs, avoided fuel price volatility, avoided environmental costs and avoided risk of environmental regulation, and other such known and measurable costs avoided by the utility when energy is produced by a customer-generator facility. 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 Agreement.

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

1. If the electric utility so chooses, it may allow customers to apply electronically through the electric utility's website.

A. The interconnection agreement on the electric utility's website shall substantially be the same as the interconnection agreement included herein.

B. The electronic agreement shall be submitted 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. The electric utility shall notify the manager of the Energy Unit of the staff of any revisions to the electronic agreement on its website within ten (10) working days of when the electronic agreement is revised.

Karl Rábago
Yesterday, 9:38 PM
Added Text

Karl Rábago
Yesterday, 9:38 PM
Formatted: Green Background

Karl Rábago
Yesterday, 9:38 PM
Deleted: fuel

Karl Rábago
Yesterday, 9:38 PM
Deleted: is the same rate as the utility's cogeneration rate

Karl Rábago
Yesterday, 9:40 PM
Formatted: Green Background

Karl Rábago
Yesterday, 9:38 PM
Added Text

(B) References to a solar rebate in the interconnection 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.

(10) Electric Utility Reporting Requirements. 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.

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 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, schedule a date for 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 schedule a date for interconnection of

sundes
Jan 13, 9:49 AM
Added Text

sundes
Jan 13, 9:49 AM
Deleted: of $2/watt

sundes
Jan 13, 9:49 AM
Added Text

sundes
Jan 13, 9:49 AM
Deleted: is available from

sundes
Jan 13, 9:50 AM
Added Text

sundes
Jan 13, 9:50 AM
Deleted: on an expanded or new system that beco…

sundes
Jan 13, 9:50 AM
Added: Paragraph Break

sundes
Jan 13, 9:50 AM
Deleted: Invisible Character

sundes
Jan 13, 9:50 AM
Added Text

sundes
Jan 13, 9:51 AM
Added Text

sundes
Jan 13, 9:52 AM
Added Text

sundes
Jan 13, 9:53 AM
Added Text

sundes
Jan 13, 9:50 AM
Added: Paragraph Break

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 Installing Solar Systems:

Upon completion of section H and I, a solar rebate ~~of $2/watt~~ up to 25,000 watts (25kW) per system measured in direct current that was confirmed by~~is available from~~ [Utility Name] to have become operational ~~on an expanded or new system that becomes operational after 12/31/2009~~ with a maximum rebate of $50,000.

The solar rebates shall be:

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

sundes
Jan 13, 9:56 AM
Deleted: Mailing
Address:_____…

~~Mailing Address:~~ _____
_____
~~City:~~ _____ ~~State:~~ _____ ~~Zip Code:~~ _____

sundes
Jan 13, 9:57 AM
Deleted: (if different from above)

Service/Street Address ~~(if different from above)~~:
_____
City: _____ State: _____ Zip Code: _____

sundes
Jan 13, 9:57 AM
Added Text

Mailing Address (if different from above):_____

City: _____ State: _____ Zip Code: _____

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: _____

sundes
Jan 13, 9:58 AM
Added Text

[Utility Name] Account No. (from Utility Bill): [Shall be inserted at the tope 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.: _____

Inverter/Interconnection Equipment Location (describe): _____

_____

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

sundes
Jan 13, 10:10 AM
Added Text

Describe the location of the disconnect switch, including an explanation as to why an alternate location of disconnect switch is being requested, if applicable:_____

_____

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 <u>attached</u> 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 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. 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: _____

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) <u>Operation/Disconnection</u>

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.

sundes
Jan 13, 10:12 AM
Deleted: owner

sundes
Jan 13, 10:12 AM
Added Text

sundes
Jan 13, 10:12 AM
Added Text

sundes
Jan 13, 10:13 AM
Deleted: until explicitly transferred to another enti...

sundes
Jan 13, 10:13 AM
Added Text

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

RECs created through the generation of electricity by the Customer-~~Owner~~ Generator are owned by the Customer-Generator; however, if the customer-generator receives a ~~until explicitly transferred to another entity. Nothing in this contract gives [Utility Name] any preferential entitlement to the RECs generated by the Customer-Generator's system~~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

sundes
Jan 13, 10:15 AM
Added Text

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 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) <u>Terms and Termination Rights</u>

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) <u>Transfer of Ownership</u>

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) <u>Dispute Resolution</u>

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) <u>Testing Requirement</u>

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.

sundes
Jan 13, 10:16 AM
Added Text

Printed name:

Signed (Customer-Generator): _____ Date: _____

Must be signature of [Utility Name] account holder (customer)

sundes
Jan 13, 10:16 AM
Added Text

E. Electrical Inspection

If a local Authority Having Jurisdiction (AHJ) governs permitting/inspection of project:

sundes
Jan 13, 10:17 AM
Added Text

Authority Having Jurisdiction (AHJ):

Permit Number:

sundes
Jan 13, 10:16 AM
Added: Paragraph Break

Applicable to all installations:

sundes
Jan 13, 10:18 AM
Added: Paragraph Break

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].

sundes
Jan 13, 10:18 AM
Added Text

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
~~System Installation Date: _____~~

sundes
Jan 13, 10:19 AM
Deleted: System Installation Date: _____➔ ¶

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

Required documents to receive solar rebate (required to be attached for a valid application):

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 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 the duration of its useful life – a minimum of 10 years.

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

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

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

~~$2/watt up to 25,000 watts (25 kW) is available from [Utility Name] on expanded or new systems that become operational after 12/31/2009 with~~

I understand there is a maximum rebate of $50,000.

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 business corporations receiving a rebate of $600 or more will receive a 1099. (Please consult your tax advisor with any questions.)

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

AUTHORITY: section 386.250, RSMo 2000, and section 386.890.9., RSMo Supp. 2011. Original rule filed March 11, 2003, effective Aug. 30, 2003. Amended: Filed June 17, 2008,*

sundes
Jan 13, 10:19 AM
Added Text

sundes
Jan 13, 10:19 AM
Added Text

sundes
Jan 13, 10:21 AM
Added: Paragraph Break

sundes
Jan 13, 10:19 AM
Added: Paragraph Break

sundes
Jan 13, 10:21 AM
Added Text

sundes
Jan 13, 10:19 AM
Added: Paragraph Break

sundes
Jan 13, 10:22 AM
Deleted: $2/watt up to 25,000 watts (25 kW)...

sundes
Jan 13, 10:22 AM
Added Text

effective Feb. 28, 2009. Amended: Filed Feb. 20, 2009, effective Oct. 30, 2009. Amended: Filed Jan. 26, 2012, effective Aug. 30, 2012.

**Original authority: 386.250, RSMo 1939, amended 1963, 1967, 1977, 1980, 1987, 1988, 1991, 1993, 1995, 1996 and 386.890, RSMo 2007.*