## FIRST REGULAR SESSION

## SENATE BILL NO. 420

## 97TH GENERAL ASSEMBLY

INTRODUCED BY SENATOR LAGER.

Read 1st time February 27, 2013, and ordered printed.

1850S.03I

TERRY L. SPIELER, Secretary.

## AN ACT

To repeal sections 386.890 and 393.1030, RSMo, and to enact in lieu thereof two new sections relating to renewable energy.

Be it enacted by the General Assembly of the State of Missouri, as follows:

Section A. Sections 386.890 and 393.1030, RSMo, are repealed and two

- 2 new sections enacted in lieu thereof, to be known as sections 386.890 and
- 3 393.1030, to read as follows:

386.890. 1. This section shall be known and may be cited as the "Net

- 2 Metering and Easy Connection Act", and it reflects the policy of the state to
- B promote customer ownership of small electric generating systems
- 4 powered by renewable energy resources and designed primarily to
- 5 satisfy the customer-generator's demand for electricity; to recognize the
- 6 benefits distributed generation may offer; to ensure that financial
- 7 incentives for retail electric suppliers are aligned with promoting
- 8 renewable resources and aiding customers in the development of
- 9 renewable resources; and to allow retail electric suppliers to fully and
- 10 timely recover all reasonable and prudent costs, including any foregone
- 11 revenues resulting from complying with the requirements of this
- 12 section.
- 13 2. As used in this section, the following terms shall mean:
- 14 (1) "Avoided [fuel] cost", [the current average cost of fuel for the entity
- 15 generating electricity, as defined by the governing body with jurisdiction over any
- 16 municipal electric utility, rural electric cooperative as provided in chapter 394,
- 17 or electrical corporation as provided in this chapter] for an electrical
- 18 corporation, the weighted average nontime of use avoided costs,

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Energy;

19 expressed in cents per kilowatt-hour, provided to the commission under 20 4 CSR 240-3.155(4)(A) in effect for the calendar year at issue;

- 21 (2) "Calculated kilowatt-hours of electricity", the annual kilowatt22 hours calculated using the default values in the United States
  23 Department of Energy's National Renewable Energy Laboratory's
  24 PVWatts calculator for the latitude and longitude where the electrical
  25 corporation's primary load center is located, or such successor
  26 calculator, if any, developed by the United States Department of
- 28 (3) "Commission", the public service commission of the state of Missouri;
- [(3)] (4) "Customer-generator", the owner or operator of a qualified 30 electric energy generation unit which:
  - (a) Is powered by a renewable energy resource;
- 32 (b) Has an electrical generating system with a capacity of not more than 33 [one] **two** hundred kilowatts;
- 34 (c) Is located on a premises owned[, operated,] **or** leased, or otherwise 35 controlled by the customer-generator;
- 36 (d) Is interconnected and operates in parallel phase and synchronization 37 with a retail electric supplier and has been approved by said retail electric 38 supplier;
- 39 (e) Is [intended primarily] **designed** to offset [part or all] **not more** 40 **than one hundred percent** of the customer-generator's own electrical energy 41 requirements;
- 42 (f) Meets all applicable safety, performance, interconnection, and 43 reliability standards established by the National Electrical Code, the National 44 Electrical Safety Code, the Institute of Electrical and Electronics Engineers, 45 Underwriters Laboratories, the Federal Energy Regulatory Commission, and any 46 local governing authorities; and
- 47 (g) Contains a mechanism that automatically disables the unit and 48 interrupts the flow of electricity back onto the supplier's electricity lines in the 49 event that service to the customer-generator is interrupted;
- [(4)] (5) "Department", the department of natural resources;
- [(5)] (6) "Foregone revenues", a sum determined by multiplying the actual kilowatt-hours, when metered, or the calculated kilowatthours of electricity, when not metered, produced by customergenerators within the electrical corporation's service territory for each

of the electrical corporation's rate classes since the end of the effective date of new base rates established in a general rate proceeding by the difference between the electrical corporation's applicable class average retail rate for each respective rate class and the electrical corporation's avoided costs for each respective rate class;

- (7) "Minimum bill", all charges on a customer's bill that are not calculated on a kilowatt-hour basis, such as a service charge, customer charge, meter charge, facilities charge, demand charge, billed demand charge, or any other charges billed to customers for services, including special facilities, late fees, taxes, etc.;
- (8) "Net excess energy", the amount of energy, expressed in kilowatt-hours, delivered by a customer-generator to a retail electric supplier that exceeds the amount of energy delivered by the retail electric supplier to the customer-generator over a single billing period;
- (9) "Net metering", using metering equipment sufficient to measure the difference between the electrical energy supplied to a customer-generator by a retail electric supplier and the electrical energy supplied by the customer-generator to the retail electric supplier over the applicable billing period;
- [(6)] (10) "Net metering costs", shall include, but are not limited to, all costs incurred by the electrical corporation associated with this section including labor and associated benefits associated with administering net metering, the electrical corporation's foregone revenues and sums paid for solar rebates;
- (11) "Renewable energy resources", electrical energy produced from wind, solar thermal sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen produced by one 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 department;
- [(7)] (12) "Retail electric supplier" or "supplier", any municipal utility, electrical corporation regulated under this chapter, or rural electric cooperative under chapter 394 that provides retail electric service in this state.
  - 3. A retail electric supplier shall:
- 88 (1) Make net metering available to customer-generators on a first-come, 89 first-served basis until the total rated generating capacity of net metering 90 systems equals five percent of the [utility's] supplier's single-hour peak load

during the previous year, after which the commission for [a public utility] an electrical corporation regulated under this chapter or the governing body for [other] another retail electric [utilities] supplier may increase the total rated generating capacity of net metering systems to an amount above five percent. However, in a given calendar year, no retail electric supplier 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 supplier in said calendar year equals or exceeds one percent of said supplier's single-hour peak load for the previous calendar year;

- (2) Offer to the customer-generator a tariff or contract 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]. An electrical corporation regulated under this chapter may charge a one hundred dollar application fee. A retail electric supplier 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; and
- (3) Disclose annually the availability of the net metering program to each of its customers with the method and manner of disclosure being at the discretion of the supplier.
- 4. 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 the electric supplier to install additional distribution equipment to accommodate the customer-generator's facility, the customer-generator shall reimburse the retail electric supplier for the costs to purchase and install the necessary additional equipment. For systems of ten kilowatts or less, this reimbursement shall be limited to the installed cost of the meter. At the request of the customer-generator, such costs may be initially paid for by the retail electric supplier, 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 billing cycles. Any subsequent meter testing, maintenance or meter equipment change necessitated by the customer-generator shall be paid for by the customer-generator.
  - 5. Consistent with the provisions in this section, the net electrical energy

127 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] received from 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] received from 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] minimum bill for that billing period in accordance with subsection 3 of this section 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] all net excess energy shall be carried forward from month-to-month and credited at a ratio of one-to-one against the customer-generator's energy consumption in subsequent months;
- (4) [Any credits granted by this subsection shall expire without any compensation at the earlier of either twelve months after their issuance or when the customer-generator disconnects service or terminates the net metering relationship with the supplier] Net excess energy may be accumulated over multiple billing periods except any accumulated net excess energy remaining in a customer-generator's account shall expire, without compensation, as of the earlier of the end of the March billing period of a twelve month billing period or when the customer-generator discontinues service or terminates net metering;
- (5) For any rural electric cooperative under chapter 394, or municipal utility, upon agreement of the wholesale generator supplying electric energy to the retail electric supplier, at the option of the retail electric supplier, the credit to the customer-generator may be provided by the wholesale generator.
  - 6. (1) Each qualified electric energy generation unit used by a

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163 customer-generator shall meet all applicable safety, performance, interconnection, 164 and reliability standards established by any local code authorities, the National Electrical Code, the National Electrical Safety Code, the Institute of Electrical 165 166 and Electronics Engineers, and Underwriters Laboratories for distributed 167 generation. No supplier shall impose any fee, charge, or other requirement not 168 specifically authorized by this section or [the], for customer-generators 169 served by an electrical corporation regulated under this chapter, 170 authorized by rules promulgated [under subsection 9 of this section] by the 171 commission unless the fee, charge, or other requirement would apply to similarly situated customers who are not customer-generators, except that a retail 172173 electric supplier may require that a customer-generator's system contain a switch, 174 circuit breaker, fuse, or other easily accessible device or feature located in 175 immediate proximity to the customer-generator's metering equipment that would allow a utility worker the ability to manually and instantly disconnect the unit 176 177 from the [utility's] **supplier's** electric distribution system;

- (2) For systems of ten kilowatts or less, a customer-generator whose system meets the standards and rules under subdivision (1) of this subsection shall not be required to install additional controls, perform or pay for additional tests or distribution equipment, or purchase additional liability insurance beyond what is required under subdivision (1) of this subsection and subsection 4 of this section;
- 184 (3) For customer-generator systems of greater than ten kilowatts, the 185 commission for [public utilities] **electrical corporations** and the governing 186 body for other [utilities] **retail electric suppliers** shall, by rule or equivalent 187 formal action by each respective governing body:
- 188 (a) Set forth safety, performance, and reliability standards and 189 requirements; and
  - (b) Establish the qualifications for exemption from a requirement to install additional controls, perform or pay for additional tests or distribution equipment, or purchase additional liability insurance.
- 7. (1) Applications by a customer-generator for interconnection of a qualified electric energy generation unit meeting the requirements of subdivision (3) of subsection 2 of this section 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 retail electric supplier within

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199 [thirty] forty-five days of receipt for systems [ten] twenty-six kilowatts or less 200 and within ninety days of receipt for all other systems. Prior to the 201 interconnection of the qualified generation unit to the supplier's system, the 202 customer-generator will furnish the retail electric supplier a certification from a 203 qualified professional electrician or engineer that the installation meets the 204 requirements of subdivision (1) of subsection 6 of this section. If the application 205 for interconnection is approved by the retail electric supplier and the 206 customer-generator does not complete the interconnection within one year after 207 receipt of notice of the approval, the approval shall expire [and the customer-generator shall be responsible for filing a new application]. For 208 209 systems of ten kilowatts or less, the application process shall use an all-210 in-one document that includes a simple interconnection request, simple 211 procedures, and a brief set of terms and conditions;.

- (2) [Upon the change in ownership] If the customer-generator of a qualified electric energy generation unit changes, the new customer-generator shall be responsible for filing with the supplier a new application under subdivision (1) of this subsection. If a new application is not timely filed, the supplier may terminate the net metering arrangement or disconnect the qualified electrical energy generation unit from the supplier's system.
- 8. Each [commission-regulated supplier] electrical corporation regulated under this chapter shall submit an annual net metering report to the commission, and all other nonregulated suppliers shall submit the same report to their respective governing body and make said report available to [a] any consumer of the supplier upon request, including the following information for the previous calendar year:
  - (1) The total number of customer-generator facilities;
- 226 (2) The total estimated generating capacity of its net-metered 227 customer-generators; and
- 228 (3) The total estimated net kilowatt-hours received from 229 customer-generators.
- 9. [The commission shall, within nine months of January 1, 2008, promulgate initial rules necessary for the administration of this section for public utilities, which shall include regulations ensuring that simple contracts will be used for interconnection and net metering. For systems of ten kilowatts or less, the application process shall use an all-in-one document that includes a simple

interconnection request, simple procedures, and a brief set of terms and conditions. Any rule or portion of a rule, as that term is defined in section 536.010, that is created under the authority delegated in this section shall become effective only if it complies with and is subject to all of the provisions of chapter 536 and, if applicable, section 536.028. This section and chapter 536 are nonseverable and if any of the powers vested with the general assembly under chapter 536 to review, to delay the effective date, or to disapprove and annul a rule are subsequently held unconstitutional, then the grant of rulemaking authority and any rule proposed or adopted after August 28, 2007, shall be invalid and void.

- 10.] The governing body of a rural electric cooperative or municipal utility shall, within nine months of January 1, 2008, adopt policies establishing a simple contract to be used for interconnection and net metering. [For systems of ten kilowatts or less, the application process shall use an all-in-one document that includes a simple interconnection request, simple procedures, and a brief set of terms and conditions.
- 11.] 10. 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 retail electric supplier shall have no liability absent clear and convincing evidence of fault on the part of the supplier.
  - [12.] 11. The estimated generating capacity of all net metering systems operating under the provisions of this section shall count [towards] toward the respective retail electric supplier's [accomplishment] satisfaction of any renewable energy portfolio target or mandate adopted by the Missouri general assembly.
  - [13.] 12. The sale of qualified electric generation units to any customer-generator shall be subject to the provisions of sections 407.700 to 407.720. The attorney general shall have the authority to promulgate in accordance with the provisions of chapter 536 rules regarding mandatory disclosures of information by sellers of qualified electric generation units. Any [interested] person who believes that the seller of any electric generation unit is misrepresenting the safety or performance standards of [any] such [systems] unit, or who believes that any electric generation unit poses a danger to any property or person, may report the same to the attorney general, who shall be authorized to investigate such claims and take any necessary and appropriate actions.

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[14. Any costs incurred under this act by a retail electric supplier shall be recoverable in that utility's rate structure.

- 15.] 13. An electrical corporation shall be entitled to recover all prudently incurred net metering costs using a tracking mechanism. Under the tracking mechanism the electrical corporation's net metering costs will be deferred on the electrical corporation's books and accumulated in a regulatory asset. The balance in the regulatory asset shall be included in the determination of the electrical corporation's revenue requirement in the electrical corporation's next general rate proceeding through an amortization over a period of three years without any offset, reduction, or adjustment based upon consideration of any other factor or otherwise, with the unamortized balance to be included in the electrical corporation's rate base. The electrical corporation may also transfer to the regulatory asset provided for above any sums paid by the electrical corporation for solar rebates that are included in a different regulatory asset that existed on the effective date of this section. The commission shall retain its authority to review the net metering costs for prudence in the electrical corporation's next general rate proceeding.
- 14. No consumer shall connect or operate an electric generation unit in parallel phase and synchronization with any retail electric supplier without written approval by said supplier that all of the requirements under subdivision (1) of subsection 7 of this section have been met. For a consumer who violates this provision, a supplier may immediately and without notice disconnect the electric facilities of said consumer and terminate said consumer's electric service.
- [16. The manufacturer of any electric generation unit used by a customer-generator may be held liable for any damages to property or person caused by a defect in the electric generation unit of a customer-generator.
- 17. The seller, installer, or manufacturer of any electric generation unit who knowingly misrepresents the safety aspects of an electric generation unit may be held liable for any damages to property or person caused by the electric generation unit of a customer-generator.]

393.1030. 1. The commission shall, in consultation with the department, prescribe by rule a portfolio requirement for all electric utilities to generate or purchase electricity generated from renewable energy resources. Such portfolio requirement shall provide that electricity from renewable energy resources shall

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constitute the following portions of each electric utility's sales:

- (1) No less than two percent for calendar years 2011 through 2013;
- 7 (2) No less than five percent for calendar years 2014 through 2017;
- 8 (3) No less than ten percent for calendar years 2018 through 2020; and
- 9 (4) No less than fifteen percent in each calendar year beginning in 2021.
- At least two percent of each portfolio requirement shall be derived from solar 10
- energy. The portfolio requirements shall apply to all power sold to Missouri 11
- 12 consumers whether such power is self-generated or purchased from another
- source in or outside of this state. A utility may comply with the standard in 13
- 14 whole or in part by purchasing RECs. Each kilowatt-hour of eligible energy
- generated in Missouri shall count as 1.25 kilowatt-hours for purposes of 15
- 16 compliance.

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2. The commission, in consultation with the department and within one year of November 4, 2008, shall select a program for tracking and verifying the 18 19 trading of renewable energy credits. An unused credit may exist for up to three years from the date of its creation. A credit may be used only once to comply with sections 393.1020 to 393.1030 and may not also be used to satisfy any similar 22 nonfederal requirement. An electric utility may not use a credit derived from a green pricing program. Certificates from net-metered sources shall initially be owned by the customer-generator. The commission, except where the department is specified, shall make whatever rules are necessary to enforce the renewable

energy standard. Such rules shall include:

(1) A maximum average retail rate increase of one percent determined by estimating and comparing the electric utility's cost of compliance with least-cost renewable generation and the cost of continuing to generate or purchase electricity from entirely nonrenewable sources, taking into proper account future environmental regulatory risk including the risk of greenhouse gas regulation. Notwithstanding the foregoing, until June 30, 2018, if the maximum average retail rate increase would be less than or equal to one percent if an electric utility's investment in solar-related projects initiated, owned or operated by the electric utility is ignored for purposes of calculating the increase, then additional solar rebates may be paid and included in rates in an amount up to the amount that would produce a retail rate increase equal to the difference between a one percent retail rate increase and the retail rate increase calculated when ignoring an electric utility's investment in solar-related projects SB 420

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initiated, owned, or operated by the electric utility. Notwithstanding anything to the contrary in this section, even if the payment of additional solar rebates will produce a maximum average retail rate increase of greater than one percent when an electric utility's investment in solar-related projects initiated, owned or operated by the electric utility are included in the calculation, the additional solar rebate costs shall be included in the prudently incurred costs to be recovered as contemplated by subdivision (4) of this subsection;

- (2) Penalties of at least twice the average market value of renewable energy credits for the compliance period for failure to meet the targets of subsection 1 of this section. An electric utility will be excused if it proves to the commission that failure was due to events beyond its reasonable control that could not have been reasonably mitigated, or that the maximum average retail rate increase has been reached. Penalties shall not be recovered from customers. Amounts forfeited under this section shall be remitted to the department to purchase renewable energy credits needed for compliance. Any excess forfeited revenues shall be used by the department's energy center solely for renewable energy and energy efficiency projects;
- 59 (3) Provisions for an annual report to be filed by each electric utility in 60 a format sufficient to document its progress in meeting the targets;
  - (4) Provision for recovery outside the context of a regular rate case of prudently incurred costs and the pass-through of benefits to customers of any savings achieved by an electrical corporation in meeting the requirements of this section.
- 65 3. Except for those electric utilities that qualify for an exemption 66 under subsection 3 of section 393.1050, for calendar years 2013 through 67 2017, each electric utility shall make available to its retail customers a [standard] solar rebate [offer of at least two dollars per installed watt] for new 68 or expanded solar electric systems sited on customers' premises, up to a 69 maximum of twenty-five kilowatts per system, measured in direct current 70 that [become operational after 2009] were confirmed by the electric utility to have become operational in compliance with the provisions of 72section 386.890. The solar rebates shall be two dollars per watt for 73 systems becoming operational on or before June 30, 2014; one dollar 74and fifty cents per watt for systems becoming operational between July 751, 2014, and June 30, 2015; one dollar per watt for systems becoming

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operational between July 1, 2015, and June 30, 2016; fifty cents per watt for systems becoming operational between July 1, 2016, and June 30, 2017; fifty cents per watt for systems becoming operational between July 1, 2017, and June 30, 2018; and zero cents per watt for systems becoming operational after June 30, 2018. If the electric utility 81 determines the maximum average retail rate increase provided for in subdivision (1) of subsection 2 of this section will be reached in any calendar year, the electric utility will be entitled to cease paying rebates to the extent necessary to avoid exceeding the maximum average retail rate increase if the electrical corporation files with the commission to suspend its rebate tariff for the remainder of that calendar year at least sixty days prior to the change taking effect. The filing will include the calculation reflecting that the maximum average retail rate increase will be reached and supporting documentation. The commission shall rule on the suspension filing within sixty days of the date it is filed and if the commission determines that the maximum average retail rate increase will be reached the commission will 93 approve the tariff suspension. The electric utility will continue to process and pay applicable solar rebates until a final commission ruling, however, if the continued payment causes the electric utility to pay rebates that cause it to exceed the maximum average retail rate increase, the expenditures shall be considered prudently incurred costs as contemplated by subdivision (4) of subsection 2 of this section and 100 shall be recoverable as such by the electric utility. As a condition of receiving a rebate, customers shall transfer to the electric utility all 102 right, title, and interest in and to the renewable energy credits associated with the new or expanded solar electric system that qualified the customer for the solar rebate for a period of ten years from the date the electric utility confirmed that the solar electric system was installed and operational.

4. The department shall, in consultation with the commission, establish by rule a certification process for electricity generated from renewable resources and used to fulfill the requirements of subsection 1 of this section. Certification criteria for renewable energy generation shall be determined by factors that include fuel type, technology, and the environmental impacts of the generating facility. Renewable energy facilities shall not cause undue adverse air, water, or land use impacts, including impacts associated with the gathering of generation

feedstocks. If any amount of fossil fuel is used with renewable energy resources, only the portion of electrical output attributable to renewable energy resources shall be used to fulfill the portfolio requirements.

- 5. In carrying out the provisions of this section, the commission and the department shall include methane generated from the anaerobic digestion of farm animal waste and thermal depolymerization or pyrolysis for converting waste material to energy as renewable energy resources for purposes of this section.
- 6. The commission shall have the authority to promulgate rules for the implementation of section 393.1025 and this section, as amended, but only to the extent such rules are consistent with, and do not delay the implementation of, the provisions of this section, as amended. Any rule or portion of a rule, as that term is defined in section 536.010 that is created under the authority delegated in this section shall become effective only if it complies with and is subject to all of the provisions of chapter 536, and, if applicable, section 536.028. This section and chapter 536 are nonseverable and if any of the powers vested with the general assembly pursuant to chapter 536 to review, to delay the effective date, or to disapprove and annul a rule are subsequently held unconstitutional, then the grant of rulemaking authority and any rule proposed or adopted after August 28, 2013, shall be invalid and void.

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