4 CSR 240-20.XXX Electric Utility Renewable Energy Standard Requirements

PURPOSE: This rule sets the definitions, structure, operation, and procedures relevant to compliance with the Renewable Energy Standard.

- (1) Definitions. For the purpose of this rule:
- (A) Co-fire means simultaneously using multiple fuels in a single generating unit to produce electricity;
- (B) Commission means the Public Service Commission of the State of Missouri;
- (C) Calendar year means a period of 365 days (or 366 days for leap years) that includes January 1 of the year and all subsequent days through and including December 31 of the same year;
- (D) Customer-generator means the owner or operator of an electric energy generation unit that meets all of the following criteria:
 - 1. Generates a renewable energy resource;
- 2. Is located on premises that are owned, operated, leased, or otherwise controlled by the customer-generator;
- 3. Is interconnected and operates in parallel phase and synchronization with an electric utility and has been approved for interconnection by said electric utility;
- 4. 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 Electronic Engineers, Underwriters Laboratories, the Federal Energy Regulatory Commission, and any local governing authorities; and
- 5. Contains a mechanism that automatically disables the unit and interrupts the flow of electricity onto the electric utility's electrical system whenever the flow of electricity from the electric utility to the customer-generator is interrupted.
 - (E) Department means the department of natural resources;
- (F) Electric utility means an electrical corporation as defined in section 386.020, RSMo;
- (G) General rate proceeding means a general rate increase proceeding or complaint proceeding before the commission in which all relevant factors that may affect the costs, or rates and charges of the electric utility are considered by the commission;
- (H) Green pricing program means a voluntary program that provides an electric utility's retail customers an opportunity to purchase renewable energy or RECs;

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- (I) REC, Renewable Energy Credit, or Renewable Energy Certificate means a tradable certificate, certified by an entity allowed as an acceptable accreditation authority by the commission. RECs must be validated through an attestation signed by an authorized individual of the company owning the renewable energy resource. Such attestation shall contain the name and address of the generator, the type of renewable energy resource, and the time and date of the generation. A REC represents that one megawatt-hour of electricity has been generated from renewable energy resourcestechnologies. RECs include, but are not limited to solar renewable energy credits. A REC expires three (3) years from the date the electricity associated with that REC was generated. AnyA REC or S-REC valid during any part of the calendar year for which compliance is being attained may be used to comply with the RES or RES solar requirements of this rule, respectively for a calendar year in which it expired so long as it was valid during some portion of that year;
- (J) Renewable energy resource(s) means electric energy produced from the following:
 - 1. Wind;
- 2. Solar, including solar thermal sources utilized to generate electricity, photovoltaic cells or panels;
 - 3. Dedicated crops grown for energy production;
 - 4. Cellulosic agricultural residues;
 - 5. Plant residues;
 - 6. Methane from landfills or wastewater treatment;
 - 7. Clean and untreated wood, such as pallets;
- 8. Hydropower (not including pumped storage) that does not require a new diversion or impoundment of water and that has generator nameplate rating(s) of ten (10) megawatts or less;
- 9. Fuel cells using hydrogen produced by one of the renewable energy technologies in paragraphs 1 through 8 of this subsection; and
- 10. Other sources of energy not including nuclear that become available after November 4, 2008 and are certified as renewable by rule by the department.
- (K) RES or Renewable Energy Standard means sections 393.1025 and 393.1030, RSMo;
- (L) RESRAM or Renewable Energy Standard Rate Adjustment Mechanism means a mechanism that allows periodic rate adjustments to recover prudently incurred RES compliance costs and pass-through to customers the benefits of any savings achieved in meeting the requirements of the Renewable Energy Standard;
- (M) RES compliance costs means prudently incurred costs, both capital and expense, directly related to compliance with the

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Renewable Energy Standard. Prudently incurred costs do not include any increased costs resulting from negligent or wrongful acts or omissions by the electric utility;

- (N) RES requirements means the numeric values and other requirements established by section 393.1030.1, RSMo and section (2)(A) and (B) of this rule;
 - (O) The RES revenue requirement means the following:
- 1. All expensed RES compliance costs (other than taxes and depreciation associated with capital projects) that are included in the electric utility's revenue requirement in the rate proceeding in which the RESRAM is established; and
- 2. The costs (i.e., the return, taxes and depreciation) of any capital projects whose primary purpose is to permit the electric utility to comply with any RES requirement. The costs of such capital projects shall be those identified on the electric utility's books and records as of the last day of the test year, as updated, utilized in the rate proceeding in which the RESRAM is established;
- (P) Solar renewable energy credit or S-REC means a REC created by generation of electric energy from solar thermal sources, photovoltaic cells and panels;
 - (Q) Staff means the staff of the commission;
- (R) Standard Test Conditions means solar incidence of one (1) kilowatt per square meter and a cell or panel temperature of twenty-five (25) degrees centigrade as related to measuring the capability of solar electrical generating equipment;
- (S) Total retail electric sales, or total retail electric energy usage, means the megawatt-hours of electricity delivered in a specified time period by an electric utility to its Missouri retail customers as measured at the customers' meters;
- (T) Utility renewable energy resources mean those renewable energy resources that are owned, controlled or purchased by the electric utility.
- (2) Requirements. Pursuant to the provisions of this rule and 393.1025 and 393.1030, RSMo, all electric utilities must generate or purchase renewable energy resources or purchase RECs and/or S-RECs associated with electricity from renewable energy resources in sufficient quantity to meet both the RES requirements and RES solar energy requirements respectively on a calendar year basis. , subject to the following:
- (A) Electric energy or RECs associated with electric energy are eligible to be counted towards the RES requirements only if the generation facility for the renewable energy resource is either located in Missouri or, if located outside of Missouri, the renewable energy resource is delivered to Missouri electric energy retail customers. For renewable energy resources

generated at facilities located outside Missouri, an electric utility shall provide proof that the electric energy was delivered to Missouri customers.

- (B) The amount of renewable energy resources or RECs associated with renewable energy resources that can be counted towards meeting the RES requirements are as follows:
- 1. If the facility generating the renewable energy resources is located in Missouri, the allowed amount is the amount of megawatt-hours generated by the applicable generating facility, further subject to the additional .25 credit pursuant to subsection (3) (H) of this rule;
- 2. If the facility generating the renewable energy resources is located outside Missouri, the allowed amount is the amount of megawatt-hours generated by the applicable generating facility that is delivered into Missouri and used by Missouri customers. For the purposes of (A) and (B) of this subsection, electric energy customers shall include retail customers of regulated utilities as well as customers of municipal utilities and rural electric cooperatives.
- (C) Utility renewable energy resources utilized for compliance with this rule must include the RECs or S-RECs associated with the generation. The RES requirements and the RES solar energy requirements are based on total retail electric sales of the electric utility. Compliance may be achieved through the prudent purchase and retirement of RECs and S-RECs that are not associated with electrical energy delivered to the utility's Missouri retail customers.
 - (\underline{AD}) The RES requirements are:
- 1. No less than two percent (2%) in each calendar year 2011 through 2013;
- 2. No less than five percent (5%) in each calendar year 2014 through 2017;
- 3. No less than ten percent (10%) in each calendar year 2018 through 2020; and
- 4. No less than fifteen percent (15%) in each calendar year beginning in 2021.
- ($\underbrace{\mathtt{BE}}$) At least two percent (2%) of each RES requirement listed in subsection ($\underbrace{\mathtt{AD}}$) of this section shall be derived from solar energy. The RES solar energy requirements are:
- 1. No less than four-hundredths percent (0.04%) in each calendar year 2011 through 2013;
- 2. No less than one-tenth percent (0.1%) in each calendar year 2014 through 2017;
- 3. No less than two-tenths percent (0.2%) in each calendar year 2018 through 2020; and
- 4. No less than three-tenths percent (0.3%) in each calendar year beginning in 2021.

- (CF) If compliance with the above RES and RES solar energy requirements would cause retail rates to increase on average in excess of one percent (1%), the above requirements shall be limited to providing renewable energy in amounts that would cause retail rates to increase on average one percent (1%).
- ($\underbrace{\text{PG}}$) If an electric utility is not required to meet the RES requirements of subsection ($\underbrace{\text{AD}}$) of this section in a calendar year, because doing so would cause retail rates to increase on average in excess of one percent (1%), then the RES solar energy requirement specified in subsection ($\underbrace{\text{BE}}$) shall be two percent (2%) of the renewable energy that can be acquired subject to the one percent (1%) average retail rates limit.
- (3) Renewable Energy Credits. <u>Subject to the requirements of subsection (2) of this rule</u>, RECs and S-RECs shall be utilized to satisfy the RES requirements of this rule. A utility may use RECs or S-RECs to satisfy the RES requirements. RECs or S-RECs acquired by contracts or through a system of tradable RECs, exchanges or brokers may be utilized to comply with the RES requirements. S-RECs shall be utilized to comply with the RES solar energy requirements. S-RECs may also be utilized to satisfy the non-solar RES requirements.
- (A) The REC or S-REC creation is linked to the associated renewable energy resource. For purposes of retaining RECs or S-RECs, the utility, person, or entity responsible for creation of the REC or S-REC must maintain verifiable records including generator attestation that prove the creation date.
- (B) A REC may only be used once to comply with this rule. RECs or S-RECs used to comply with this rule may not also be used to satisfy any similar nonfederal renewable energy standard or requirement. Electric utilities may not use RECs or S-RECs retired under a green pricing program to comply with this rule.
- (C) RECs or S-RECs associated with customer-generated renewable energy resources shall be owned by the customer-generator. All contracts between electric utilities and the owners of netmetered generation sources entered into after the effective date of these rules shall clearly specify the entity or person who shall own the RECs or S-RECs associated with the energy generated by the net-metered generation source. Electric metering associated with net metered sources shall meet the meter accuracy and testing requirements of 4 CSR 240-10.030, Standards of Quality. For solar electric systems utilizing the provisions of subsection (4)(H) of this rule, no meter accuracy or testing requirements are applicable.
- (D) RECs that are generated with fuel cell energy using hydrogen derived from a renewable energy resource are eligible

for compliance purposes only to the extent that the energy used to generate the hydrogen did not create RECs.

- (E) If an electrical generator co-fires an eligible renewable energy fuel source with an ineligible fuel source, only the proportion of the electrical energy output associated with the eligible renewable energy fuel source shall be permitted to count toward compliance with the RES. For co-fired generation of electricity the renewable energy resources shall be determined by multiplying the electricity output by the direct proportion of the BTU content of the fuel burned that is a source of renewable energy resources as defined in this rule to the BTU content of the total fuel burned.
- (F) Electric utilities shall record REC information in a database. The database shall include, but not be limited to, a list of renewable energy resources the electric utility utilizes for compliance with the RES, including type, location, owner, operator, commencement of operations, and actual REC generation.
- (G) All electric utilities shall use a commission designated common central third-party registry or other equivalent electronic tracking mechanism for REC accounting for RES requirements. Use of this tracking mechanism may suffice for compliance with subsection (F) of this section.
- (H) RECs that are created by the generation of electricity by a renewable energy resource physically located in the state of Missouri shall count as one and twenty-five hundredths (1.25) RECs for purposes of compliance with this rule. This additional credit shall not be tracked in the tracking systems specified in subsections (F) or (G) of this section. This additional credit of twenty-five hundredths (0.25) shall be recognized when the electric utility files its annual compliance report in accordance with section (7) of this rule.
- (I) RECs that are purchased by an electric utility from a facility that subsequently fails to meet the requirements for renewable energy resources shall continue to be created through the date of facility decertification.
- (J) Entities may purchase or sell RECs, either bilaterally or in any open market system, inside or outside the state, without prior commission approval.

$\{ \text{No changes are proposed to subsections } (4) - (12) \text{ for geographic sourcing.} \}$

AUTHORITY: section 393.1030 RSMo; sections 386.040 and 386.610, RSMo 1939; section 386.250, RSMo 1939, amended 1963, 1967, 1977, 1980, 1987, 1988, 1991, 1993, 1995, 1996; and section 393.140, RSMo 1939, amended 1949, 1967.