

**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 party as retail account holder and which corresponds to the service address for the retail account;

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;

(I) REC, Renewable Energy Credit, or Renewable Energy Certificate means a tradable certificate, that is either certified by an entity approved as an acceptable authority by the commission or as validated through a generator's attestation. Regardless of whether RECs have been certified, 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 technology, and the time and date of the generation. A REC represents that one megawatt-hour of electricity has been generated from renewable energy resources. 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;

(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

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 sections (2)(A) and (2)(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 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 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 reflected in the retail customers' monthly billing statements;

(T) Utility renewable energy resources mean those renewable energy resources that are owned, controlled or purchased by the electric utility.

### **Alternative A**

(2) Requirements. Pursuant to the provisions of this rule and 393.1025 and 393.1030, RSMo, all electric utilities must generate or purchase RECs and 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. 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.

#### **Alternative B**

(2) Requirements. Pursuant to the provisions of this rule and 393.1025 and 393.1030, RSMo, all electric utilities must generate or purchase RECs and 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. 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.

#### **Alternative C**

(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 renewable energy resources in sufficient quantity to meet both the RES requirements and RES solar energy requirements respectively. The RES requirements and the RES solar energy requirements are based on total retail electric sales of the electric utility.

#### **Alternative A**

No new sections inserted.

#### **Alternative B (new sections inserted, following sections renumbered accordingly)**

(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 section, Missouri electric energy retail customers shall include retail customers of regulated Missouri utilities as well as customers of Missouri municipal utilities and Missouri rural electric cooperatives.

(A) 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.

(B) At least two percent (2%) of each RES requirement listed in subsection (A) 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.

(C) 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%) as calculated per section (5) of this rule, the above requirements shall be limited to providing renewable energy in amounts that would cause retail rates to increase on average one percent (1%).

**Alternative A**

(D) If an electric utility is not required to meet the RES requirements of subsection (A) 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 (B) shall be two percent (2%) of the renewable energy that can be acquired subject to the one percent (1%) average retail rates limit.

**Alternative B**

(D) If an electric utility is not required to meet the RES requirements of subsection (A) 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 (B) shall be two percent (2%) of the RES requirements of subsection (A).

**Alternative A**

No subsection (E) inserted.

**Alternative B**

(E) If an electric utility intends to accept proposals for renewable energy resources to be owned by the electric utility or an affiliate of the electric utility, it shall include a written separation policy and name an independent auditor whom the electric utility proposes to hire to review and report to the commission on the fairness of the competitive acquisition process. The independent auditor shall have at least five (5) years experience conducting and/or reviewing the conduct of competitive electric utility resource acquisition, including computerized portfolio costing analysis. The independent auditor shall be unaffiliated with the electric utility; and shall not, directly or indirectly, have benefited from employment or contracts with the utility in the preceding five (5) years, except as an independent auditor under these rules. The independent auditor shall not participate in, or advise the electric utility with respect to, any decisions in the bid solicitation or bid evaluation process. The independent auditor shall conduct an audit of the electric utility's bid solicitation and evaluation process to determine whether it was conducted fairly. For purposes of such audit, the electric

utility shall provide the independent auditor immediate and continuing access to all documents and data reviewed, used or produced by the electric utility in its bid solicitation and evaluation process. The utility shall make all its personnel, agents, and contractors involved in the bid solicitation and evaluation available for interview by the auditor. The electric utility shall conduct any additional modeling requested by the independent auditor to test the assumptions and results of the bid evaluation analyses. Within sixty (60) days of the utility's selection of renewable energy resources, the independent auditor shall file a report with the commission containing the auditor's findings on whether the electric utility conducted a fair bid solicitation and bid evaluation process, with any deficiencies specifically reported. After the filing of the independent auditor's report, the electric utility, other bidders in the renewable energy resource acquisition process, and other interested parties shall be given the opportunity to review and comment on the independent auditor's report.

**Alternative A**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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.

**Alternative B**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this rule shall be created by the generation of electricity from a renewable energy resource located within the geographic boundaries of the state of Missouri. 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.

#### **Alternative C**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this rule shall be created by the generation of electricity from a renewable energy resource located within the boundaries of an independent transmission system operator or regional transmission organization associated with a Missouri electric utility. 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.

#### **Alternative D**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this rule shall be created by the generation of electricity from a renewable energy resource located within the geographic boundaries of the state of Missouri or within the boundaries of an independent transmission system operator or regional transmission organization associated with a Missouri electric utility. 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.

#### **Alternative E**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this



rule shall be created by the generation of electricity from a renewable energy resource located within the geographic boundaries of the state of Missouri or within the boundaries of an independent transmission system operator or regional transmission organization associated with the Missouri electric utility. 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.

#### **Alternative F**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this rule shall be created by the generation of electricity from a renewable energy resource located within the geographic boundaries of the contiguous forty-eight (48) states of the United States of America. 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.

#### **Alternative G**

(3) Renewable Energy Credits. Subject to the requirements of section(2) of this rule, 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. RECs or S-RECs utilized for compliance with this rule shall be created by the generation of electricity from a renewable energy resource located within the geographic boundaries of the North American continent. 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. A REC or S-REC may be used for compliance with the RES or RES solar requirements of this rule for a calendar year in which it expired so long as it was valid during some portion of that year.

(C) RECs or S-RECs associated with customer-generated net-metered renewable energy resources shall be owned by the customer-generator. All contracts between electric utilities and the owners of net-metered 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 as-fired BTU content of the fuel burned that is a source of renewable energy resources as defined in this rule to the as-fired 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) Electric utilities required to comply with this rule may purchase or sell RECs, either bilaterally or in any open market system, inside or outside the state, without prior commission approval.

#### **Alternative A**

(K) For compliance purposes, utilities shall retire RECs in sufficient quantities to meet the requirements of this rule. The RECS shall be retired during the calendar year for which compliance is being achieved. Utilities may retire RECs during the month of January, following the calendar year for which compliance is being achieved, and designate those retired RECs as counting towards the requirements of that previous calendar year. Any RECs retired in this manner shall be specifically annotated in the registry designated in accordance with subsection (G) of this section and the annual compliance report filed in accordance with section (7) of this rule. RECs retired in January, to be counted towards compliance for the previous calendar year in accordance with this subsection, shall not exceed ten percent (10%) of the total RECs necessary to be retired for compliance for that calendar year.

#### **Alternative B**

(K) For compliance purposes, utilities shall retire RECs in sufficient quantities to meet the requirements of this rule. The RECS shall be retired during the calendar year for which compliance is being achieved.

(L) Fractional RECs may be aggregated with other fractional RECs and utilized for compliance purposes.

(4) Solar Rebate. Pursuant to section 393.1030, RSMo, and this rule, electric utilities shall include in their tariffs a provision regarding retail account holder rebates for solar electric systems. These rebates shall be available to Missouri electric utility retail account holders who install new or expanded solar electric systems that become operational after December 31, 2009. The minimum amount of the rebate shall be two dollars (\$2.00) per installed watt up to a maximum of twenty-five (25) kilowatts per retail account (\$50,000). The customer-owned solar generating equipment shall be interconnected with the electric utility's system.

(A) The retail account holder must be an active account on the electric utility's system and in good payment and credit standing.

(B) The solar electric system must be permanently installed on the account holder's premises. As installed, the solar electric system shall be situated in a location where a minimum of eighty-five percent (85%) of the solar resource is available to the system.

(C) The installed solar electric system must remain in place on the account holder's premises for the duration of its useful life which shall be deemed to be ten (10) years unless determined otherwise by the Commission.

#### **Alternative A**

(D) Solar electric systems installed by retail account holders must consist of equipment that is commercially available and factory new when installed on the original account holder's premises and the principal system components (i.e. photovoltaic modules and inverters) shall be covered by a functional warranty from the manufacturer for a minimum period of five (5) years. Rebuilt, used or refurbished equipment is not eligible to receive the rebate, unless it is covered by a manufacturer warranty for a minimum of five (5) years and has not been previously recognized for a solar rebate under this rule. For any applicable solar electric system, only one rebate shall be paid for the lifetime of the solar electric system. For situations involving multiple installations by a single customer-generator, each such customer-generator without regard to the number of accounts or premises shall only be eligible for an aggregate solar rebate up to the twenty-five (25) kilowatt limit of this section (\$50,000).

#### **Alternative B**

(D) Solar electric systems installed by retail account holders must consist of equipment that is commercially available and factory new when installed on the original account holder's premises and the principal system components (i.e. photovoltaic modules and inverters) shall be covered by a functional warranty from the manufacturer for a minimum period of ten (10) years, with the exception of solar battery components. Rebuilt, used or refurbished equipment is not eligible to receive the rebate. For any applicable solar electric system, only one rebate shall be paid for the lifetime of the solar electric system. For situations involving multiple installations by a single customer-generator, each such customer-generator without regard to the number of accounts or premises shall only be eligible for an aggregate solar rebate up to the twenty-five (25) kilowatt limit of this section (\$50,000). Retail accounts which have been awarded rebates for an aggregate of less than twenty-five (25) kilowatts shall qualify to apply for rebates for system expansions up to an aggregate of twenty-five (25) kilowatts. Systems greater than twenty-five (25) kilowatts but less than one hundred (100) kilowatts in size shall be eligible for a solar rebate up to the twenty-five (25) kilowatt limit of this section (\$50,000).

(E) The solar electric system shall meet all requirements of 4 CSR 240-20.065, Net Metering or tariff approved by the commission for customer-owned generation.

(F) The electric utility may inspect retail account holder owned solar electric systems for which it has paid a solar rebate pursuant to this section, at any reasonable time, with prior notice of at least three (3) business days provided to the retail account holder. Advance notice is not required if there is reason to believe the unit poses a safety risk to the retail account holder, the premises, the utility's electrical system or the utility's personnel.

#### **Alternative A**

(G) For the purpose of determining the amount of solar rebate, the solar electric system wattage rating shall be established as the direct current wattage rating provided by the original manufacturer with respect to standard test conditions.

#### **Alternative B**

(G) For the purpose of determining the amount of solar rebate, the solar electric system wattage rating shall be established as the direct current wattage rating provided by the original manufacturer with respect to standard test conditions netted for losses through the inverter system.

#### **Alternative A**

(H) At the time of the rebate payment or anytime thereafter, the electric utility may negotiate a one-time lump sum payment or annual payments for any S-RECs created by the installed solar electric system provided that the customer shall not be required to sell any or all S-RECs to the electric utility that supplies the retail customer. The sale of any S-RECs created by the installed solar electric system shall not be included as a requirement of the utility's interconnection agreement. For purposes of this subsection, the energy that shall be generated by a solar photovoltaic system with a nameplate capacity of ten (10) kW or less shall be estimated using generally accepted analytical tools, unless such smaller systems are equipped with monitoring technology to track actual production. The selection and use of these analytical tools shall be conducted in consultation with the staff of the commission.

#### **Alternative B**

(H) At the time of the rebate payment or anytime thereafter, the electric utility shall offer a one-time lump sum payment, called a Standard Offer Contract, for the current twenty (20) year fixed price for associated S-RECs. The sale of any S-RECs created by the installed solar electric system shall not be included as a requirement of the utility's interconnection agreement. For purposes of this subsection, the energy that shall be generated by a solar photovoltaic system with a nameplate capacity of ten (10) kW or less shall be estimated using generally accepted analytical tools, unless such smaller systems are equipped with monitoring technology to track actual production. The selection and use of these analytical tools shall be conducted in consultation with the staff of the commission.

#### **Alternative C**

(H) At the time of the rebate payment or anytime thereafter, the electric utility shall offer a one-time lump sum payment, called a Standard Offer Contract, for the current twenty (20) year fixed price for associated S-RECs. Preference shall be given to customers with systems under ten (10) kilowatt capacity. Any customer that receives the rebate and the one-time lump sum S-REC payment shall not be entitled to any other compensation for S-RECs transferred to the electric utility. To facilitate installations of these less than ten (10) kilowatt systems, all procedures, forms and requirements shall be clear, simple, and straight-forward to minimize time and effort of residential and small business customers. The sale of any S-RECs created by the installed solar electric system shall not be included as a requirement of the utility's interconnection agreement. For purposes of this subsection, the energy that shall be generated by a solar photovoltaic system with a nameplate capacity of ten (10) kW or less shall be estimated using generally accepted analytical tools, unless such smaller systems are equipped with monitoring technology to track actual production. The selection and use of these analytical tools shall be conducted in consultation with the staff of the commission.

(I) Electric utilities that have purchased S-RECs under a one-time lump sum payment in accordance with subsection (H) of this section may continue to account for purchased S-RECs even if the owner of the solar electric system ceases to operate the system or the system is decertified as a renewable energy resource.

(J) Electric utilities that have purchased S-RECs under a one-time lump sum payment shall utilize the associated S-RECs in equal annual amounts over the lifetime of the purchase agreement.

#### **Alternative A**

No new subsection (K) inserted

#### **Alternative B (new subsection (K) inserted, following subsections renumbered accordingly)**

(K) For systems up to twenty-five (25) kilowatts in size, and separately for systems between twenty-five (25) kilowatts and one hundred (100) kilowatts in size, the value of associated S-

RECs shall be determined annually by a collaborative workshop hosted by the staff, to be held no later than sixty (60) days before January 1 of the coming calendar year, and the S-REC values shall be announced no later than thirty (30) days before January 1 of the coming calendar year. The S-REC values determined by the collaborative workshop shall be approved by the commission. Workshop participants shall include representatives of Missouri electric utilities, solar installers, staff, department of natural resources staff, and public counsel. To establish a balanced and fair distribution of S-REC value to each size category, the distribution rates per category shall also be determined on an annual basis. For systems above one hundred (100) kilowatts in size, the S-REC value shall be determined by request for proposal on at least an annual basis. S-REC values shall best approximate market values and shall not be less than S-REC value established through S-RECs procured outside this program.

#### **Alternative A**

(K) The electric utility shall provide the solar rebate payment to qualified retail account holders within thirty (30) days of receipt of the application for such rebate or in accordance with the utility's tariff provisions approved by the commission.

#### **Alternative B**

(K) The electric utility shall provide a rebate offer for solar rebates within thirty (30) days of application, and shall provide the solar rebate payment to qualified retail account holders within thirty (30) days of substantial completion of the solar electric system. Applicants who are accepted for the solar rebates shall have up to twelve (12) months from the date of receipt of a rebate offer to demonstrate substantial completion of their proposed solar electric system. Substantial completion means the purchase and installation on the retail account holder's premises of all major system components of the on-site solar electric system. If substantial completion is not achieved within six (6) months of acceptance of the Standard Offer Contract or rebate offer, in order to keep eligibility for the rebate offer and or Standard Offer Contract, the applicant shall file a report demonstrating substantial project progress and indicating continued interest in the rebate. The six (6)



month report shall include proof of purchase of the majority of the solar electric system components, partial system construction, and building permit, if required by the jurisdictional authority. Customers who do not demonstrate substantial progress within six (6) months of receipt of the rebate offer, or achieve substantial completion within one (1) year of receipt of rebate offer, will be required to reapply for any solar rebate.

(L) If the solar rebate program for an electric utility causes the utility to meet or exceed the retail rate impact limits of section (5) of this rule, the solar rebates shall be paid on a first-come, first-served basis, as determined by the solar rebate application date. Any solar rebate applications that are not honored in a particular calendar year due to the requirements of this subsection shall be the first applications considered in the following calendar year.

#### **Alternative A**

##### (5) Retail Rate Impact.

(A) The retail rate impact, as calculated in 5 (B), may not at any time exceed one percent (1%) for prudent costs directly attributable to RES compliance. The rate impact shall be calculated for each calendar year. The limit of this section is applicable to cost recovery in accordance with section (6) of this rule or through a rate proceeding outside or in a general rate case.

(B) The RES retail rate impact shall be determined by subtracting the total retail revenue requirement incorporating a non-renewable generation and purchased power portfolio from the total retail revenue requirement including a RES-compliant generation and purchased power portfolio. The non-renewable generation and purchased power portfolio shall be determined by adding to the utility's existing generation and purchased power resource portfolio, excluding all renewable energy resources, additional non-renewable resources sufficient to meet the utility's needs on a least-cost basis. The RES-Compliant portfolio shall be determined by adding to the utility's existing generation and purchased power resource portfolio an amount of renewable resources sufficient to achieve the standard set forth in Section (2) of this rule, and an amount of least-cost non-renewable resources, the combination of which is sufficient to meet the utility's needs with the same reliability as the non-renewable portfolio. These comparisons will be

conducted utilizing modeling consistent with electric utility resource planning in accordance with 4 CSR 240-22. This modeling shall consider any costs or benefits attributed to the replacement of existing renewable energy resources. Any variables utilized in the modeling shall be consistent with values established in prior rate proceedings or RES compliance plans, unless specific justification is provided for deviations.

(C) Rebates made during any calendar year in accordance with Section (4) of this rule shall be included in the cost of generation from renewable energy resources.

(D) If the revenue requirement including the RES-compliant resource mix at any time exceeds the revenue requirement that includes the non-renewable resource mix by more than 1%, the utility shall adjust downward the proportion of renewable resources so that the revenue requirement differential does not at any time exceed 1%. In making this adjustment, the solar requirement shall be in accordance with subsection (2)(D) of this rule. Prudently incurred costs to comply with the RES standard, and passing this rate impact test, may be recovered in accordance with Section (6) of this rule or in a general rate case.

#### **Alternative B**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) shall be allowed for prudent costs directly attributable to RES compliance. The average annual retail rate increase shall be calculated based upon an averaging period of at least ten years projected forward from the current calendar year. This calculation is intended to be consistent with electric utility resource planning in accordance with 4 CSR 240-22.

(B) Within 90 days of the enactment of this rule and thereafter with its annual RES Compliance Plan, each utility shall submit a filing consistent with the requirements of this section. The utility shall fully disclose to interested parties all aspects and assumptions included in its calculations pursuant to this section, including the range of inputs used in its modeling runs. The utility shall provide sufficient access to its modeling program and software used to make its calculations and estimates of hypothetical rate impacts in order to allow interested parties the opportunity to analyze alternative modeling runs. All calculations, modeling, and assumptions shall be subject to the review and approval of the Commission.

(C) Each utility shall estimate its least cost renewable generation as follows:

1. The utility shall identify all eligible renewable energy resource alternatives commercially available to it through ownership, power purchase agreements, or purchase of RECs.

2. The utility shall screen these resource alternatives based upon annualized costs. Installed capacity costs and fixed and variable O&M costs shall be levelized over the useful life of a resource. Capital costs will be given less anticipated depreciation. The utility shall indicate which resource alternatives are considered candidates for its RES compliance portfolio and, if it has eliminated any alternatives, provide a detailed explanation for elimination.

3. The utility shall assemble various combinations of eligible renewable resources for the purpose of determining the lowest cost RES compliance portfolio that will meet but not exceed the RES targets. The utility shall use load projections in its calculations that are reasonably anticipated based upon its most recently accepted Integrated Resource Plan, unless a more accurate assessment has since been found. The utility shall exclude from its calculation nonrenewable generation that is not needed to meet anticipated load requirements for each of the years after taking into account the required increment of renewable generation.

4. The utility shall assess the relative performance of its portfolios by calculating the value for each of the following performance measures: present worth of utility revenue requirements, including rebate costs and program administration costs, and levelized average rates. Administration costs shall be capped at five percent of total annual costs. The analysis shall cover a planning horizon of at least ten years. All present worth and levelization calculations shall use the utility discount rate and costs shall be expressed in nominal dollars.

5. The utility shall deduct from its rate impact calculations all additional costs associated with achieving any federal renewable energy standard.

6. The portfolio that achieves the lowest average rate will be used for the forward comparison of rate impacts.

(D) The cost of continuing to generate or purchase electricity from entirely nonrenewable sources shall be determined by adding:

1. The cost of service most recently approved by the commission for the utility, exclusive of the cost of service associated with RES compliance;

2. Cost of service changes since the approval of the utility's revenue requirement, exclusive of cost of service changes associated with RES compliance;

3. The present value of the potential revenue requirement impact associated with the incremental addition of RES-ineligible generating resources, both owned and purchased, from the preferred plan adopted in the utility's most recent electric utility resource planning filing in accordance with 4 CSR 240-22, that would correspond to the applicable RES requirements for each year in the RES planning horizon; and

4. The quantified probable cost of compliance with future environmental regulations, derived from modeling a range of reasonably probable costs, averaged over the same RES planning horizon used in the calculations for subsection (C), including greenhouse gas regulations, for each type of nonrenewable generation.

(E) The average retail rate impact as determined under subsection (5)(C) should not exceed 1% of the average retail rate impact determined under subsection (5)(D).

(F) If the calculation shows that the utility has a substantial risk of the hypothetical average rate impact to consumers under Scenario 1 being greater than one percent over the hypothetical rate impact to consumers under Scenario 2, then the utility may at the time of its compliance or IRP filing petition the Commission for a hearing to review the plan and the utility's calculations. The Commission shall determine if the utility's conclusions are accurate and the course of action that should be taken to meet the requirements of the RES. The Commission may order the utility to use different models, different modeling assumptions, revise its plan to implement the RES, use a course of action that implements the full compliance of the RES with lowest cost renewable resources regardless of source, and make such other orders as it deems appropriate to meet the requirements of the RES. The Commission shall take into account the ability of rates to be passed through and carried forward under the pass-through mechanism established in section (6).

(G) The calculation of retail rate impacts shall be filed with the utility's RES compliance plan as required by this rule, and shall be updated and filed at least as often as the year preceding the effective date of a new RES requirement under section (2) of this rule.

**Alternative C (requires Alternative B for Section 7)**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) as calculated in this section 5 of the rules shall be allowed for prudent costs directly attributable to RES compliance.

(B) The maximum allowable retail rate impact shall be determined by calculating the cost for the base plan as reflected by the electric utility's commission approved jurisdictional revenue requirement for the test year used as the basis for the utility's most recent general rate proceeding tried up for appropriate adjustments prior to the development of the RES Compliance Plan detailed in section (7) of this rule. This base plan shall reflect the cost of continuing to purchase or generate energy supplies from entirely nonrenewable sources. Entirely nonrenewable sources for the purpose of use in these rules shall be deemed to have the meaning: no incremental renewable sources beyond what is imbedded in the electric utility's base plan. For its base plan, the utility shall use the alternative plan defined in 4 CSR 22.060(3)(A)2 as amended. This base amount shall be adjusted by the impact of future environmental regulatory risk including the risk of greenhouse gas legislation to determine the maximum allowable retail rate impact.

1. For the first year after a completed general rate proceeding, the base allowable rate impact shall be 1% of the test year revenue requirement adjusted for the impacts of future environmental regulatory risk plus any test year value attributed to a pre-existing RESRAM.

2. For subsequent years, the base allowable rate impact shall be 101% of the previous year's maximum allowable rate impact.

3. To account for future environmental regulatory risk including greenhouse gas regulation, the utility shall be required to estimate the present value of future compliance with greenhouse gas regulation per megawatt-hour of non-renewable energy generated by its system. This compliance cost shall be reflected in the form of a cost per ton of carbon dioxide emitted.

4. The base allowable rate impact shall be adjusted by the cost of the carbon dioxide emitted by the electric utility's base plan annual non-renewable based generation above the RES requirement for that year, assuming the utility's average carbon emission rate for its non-renewable portfolio.

5. The base allowable rate impact for a particular year plus the cost of carbon dioxide emissions over the target for that year is the maximum allowable rate impact that year and the utility's compliance requirements for that year will be

reduced to that amount of the requirements that keep rates within the maximum allowed 1% as defined above.

6. The maximum allowable rate impact for a previous year shall be the value calculated for that calendar year when it was the current year of a compliance plan as defined in section (7), and shall not change over time.

(E) Costs or benefits attributed to compliance with a federal renewable energy standard or portfolio requirement shall be considered as part of compliance with the Missouri RES.

(6) Cost Recovery and Pass-through of Benefits.

#### **Alternative A**

(A) Applications to Establish, Continue, or Modify a RESRAM. Pursuant to this rule and sections 393.1030 and 393.1045, RSMo, an electric utility outside or in a general rate proceeding may file an application and rate schedules with the commission to establish, continue, or modify a Renewable Energy Standard Rate Adjustment Mechanism (RESRAM) that shall allow for the adjustment of its rates and charges to provide for recovery of prudently incurred costs or pass-through of benefits received as a result of compliance with RES requirements; provided that the RES compliance retail rate impact on average retail customer rates does not exceed one percent (1%). The pass-through of benefits has no single-year cap or limit. Any party in a rate proceeding in which a RESRAM is in effect or proposed may seek to continue as is, modify, or oppose the RESRAM. The commission shall approve, modify, or reject such applications and rate schedules to establish a RESRAM only after providing the opportunity for an evidentiary hearing.

#### **Alternative B**

(A) Applications to Establish, Continue, or Modify a RESRAM. Pursuant to this rule and sections 393.1030 and 393.1045, RSMo, an electric utility outside or in a general rate proceeding may file an application and rate schedules with the commission to establish, continue, or modify a Renewable Energy Standard Rate Adjustment Mechanism (RESRAM) that shall allow for the adjustment of its rates and charges to provide for recovery of prudently incurred costs or pass-through of benefits received as a result of compliance with RES requirements; provided that

the RES compliance retail rate impact does not at any time exceed one percent (1%). The pass-through of benefits has no single-year cap or limit. Any party in a rate proceeding in which a RESRAM is in effect or proposed may seek to continue as is, modify, or oppose the RESRAM. The commission shall approve, modify, or reject such applications and rate schedules to establish a RESRAM only after providing the opportunity for an evidentiary hearing.

1. In determining which incremental RES compliance cost components to include in a RESRAM, the commission shall consider the extent to which the cost is related to RES compliance, and in addition shall consider, but is not limited to only considering, the magnitude of the costs and the ability of the utility to manage the costs.

2. The commission may, in its discretion, determine what portion of prudently incurred RES compliance costs may be recovered in a RESRAM and what portion shall be recovered in base rates.

3. Any party to the rate proceeding may oppose the establishment, continuation or modification of a RESRAM and/or may propose alternative RESRAMs for the commission's consideration including but not limited to modifications to the electric utility's RESRAM.

4. The RESRAM shall be based on known and measurable RES compliance costs that have been incurred by the electric utility. These compliance costs shall be determined by comparison with a baseline established utilizing information from the utility's last general rate case with true-up of RES-related costs and benefits.

5. If a RESRAM is approved, the commission shall determine the base RES compliance revenue requirement.

6. RES compliance costs shall only be recovered through a RESRAM and shall not be considered for cost recovery through an environmental cost recovery mechanism or fuel adjustment clause or interim energy charge.

7. An electric utility shall include in its initial notice to customers regarding the RESRAM rate proceeding, a commission approved description of how the costs or benefits passed through the proposed RESRAM requested shall be applied to monthly bills.

8. The electric utility shall meet the filing requirements in 4 CSR 240-3.YYY in conjunction with an application to establish, continue, or modify a RESRAM.

(B) Applications to Discontinue a RESRAM. The commission shall allow or require the rate schedules that define and implement a RESRAM to be discontinued and withdrawn only after providing the opportunity for a full hearing outside or in a general rate proceeding.

1. Any party to the rate proceeding may oppose the discontinuation of a RESRAM on the grounds that the electric utility is currently experiencing, or in the near term, is likely to experience declining costs or on any other grounds showing that discontinuation would result in a detriment to the public interest. If the commission is seeking to discontinue the RESRAM under these circumstances, the commission shall not permit the RESRAM to be discontinued, and shall order its continuation or modification.

2. The electric utility shall include in its initial notice to customers regarding the rate proceeding, a commission approved description of why it believes the RESRAM should be discontinued.

3. Paragraphs (A)3. through (A)8. of this section shall apply to any proposal for discontinuation.

4. The electric utility shall meet the filing requirements in 4 CSR 240-3.YYY in conjunction with an application to discontinue a RESRAM.

#### **Alternative A**

(C) Establishment of a RESRAM outside of a general rate proceeding. If an electric utility files an application and rate schedules to establish a RESRAM outside of a general rate proceeding, the staff shall examine and analyze the information filed in accordance with 4 CSR 240-3.YYY and additional information obtained through discovery, if any, to determine if the proposed RESRAM is in accordance with provisions of this rule and sections 393.1030 and 393.1045, RSMo. The commission shall establish a procedural schedule providing for an evidentiary hearing and commission report and order regarding the electric utility's filing no later than one hundred twenty (120) days after the electric utility's filing of its application and rate schedules. The staff shall submit a report regarding its examination and analysis to the commission not later than seventy-five (75) days after the electric utility files its application and rate schedules to establish a RESRAM. An individual or entity granted intervention by the commission may file comments not later than seventy-five (75) days after the electric utility files its application and rate schedules to establish a RESRAM. The electric utility shall have no less



than fifteen (15) days from the filing of the staff's report and any intervenor's comments to file a reply. The commission shall have no less than thirty (30) days from the filing of the electric utility's reply to hold a hearing and issue a report and order approving the electric utility's rate schedules subject to or not subject to conditions, rejecting the electric utility's rate schedules, or rejecting the electric utility's rate schedules and authorizing the electric utility to file substitute rate schedules subject to or not subject to conditions.

**Alternative B**

Delete entire subsection and renumber following subsections accordingly.

(D) Periodic Adjustments of a RESRAM. If an electric utility files proposed rate schedules to adjust its RESRAM rates between general rate proceedings, the staff shall examine and analyze the information filed in accordance with 4 CSR 240-3.YYY and additional information obtained through discovery, if any, to determine if the proposed adjustment to the RESRAM is in accordance with provisions of this rule, sections 393.1030 and 393.1045, RSMo, and the RESRAM established in the utility's most recent rate proceeding. The staff shall submit a recommendation regarding its examination and analysis to the commission not later than sixty (60) days after the electric utility files its tariff schedules to adjust its RESRAM rates. If the RESRAM rate adjustment is in accordance with the provisions of this rule, sections 393.1030 and 393.1045, RSMo, and the RESRAM established in the most recent rate proceeding, the commission shall either issue rate adjustment order approving the tariff schedules and the RESRAM rate adjustments within seventy-five (75) days of the electric utility's filing or, if no such order is issued, the tariff schedules and the RESRAM rate adjustments shall take effect seventy-five (75) days after the tariff schedules were filed. If the RESRAM rate adjustment is not in accordance with the provisions of this rule, sections 393.1030 and 393.1045, RSMo, or the RESRAM established in the most recent rate proceeding, the commission shall reject the proposed rate schedules within seventy-five (75) days of the electric utility's filing and may instead order implementation of an appropriate rate schedule(s).

1. The periodic adjustments shall be limited to the expense items and the capital projects that are used to

determine the RES compliance revenue requirement in the previous rate proceeding and those investments or expenses necessary to comply with the utility's RES compliance plan for the period the RESRAM is in effect.

2. The periodic adjustment shall reflect a comprehensive measurement of both increases and decreases to the RES revenue requirement established in the prior rate proceeding plus the additional RES compliance costs incurred since the prior rate proceeding.

3. Any periodic adjustment made to RESRAM rate schedules shall not generate an amount of general revenue that exceeds the limitations of section (5) of this rule.

A. The electric utility shall be permitted to collect any applicable gross receipts tax, sales tax, or other similar pass-through taxes and fees and such taxes and fees shall not be counted against the limitations of section (5) of this rule.

B. Any RES compliance costs, to the extent addressed by the RESRAM, not recovered as a result of the limitations of section (5) of this rule may be deferred, at a carrying cost each month equal to the utility's net of tax cost of capital, for recovery in the utility's next rate proceeding subject to the limitations of section (5) of this rule.

4. An electric utility with a RESRAM shall file adjustments to its RESRAM with the timing and number of such additional filings to be determined in the rate proceeding establishing the RESRAM.

5. The electric utility must be current on its submission of its Surveillance Monitoring Reports as required in subsection (G) of this section and its monthly reporting requirements as required by 4 CSR 240-3.YYY in order for the commission to process the electric utility's requested RESRAM adjustment increasing or decreasing rates.

6. If the staff, Office of Public Counsel (OPC) or other party who receives the information that the electric utility is required to submit in 4 CSR 240-3.YYY and as ordered by the commission in a previous proceeding, believes that the information required to be submitted pursuant to 4 CSR 240-3.YYY and the commission order establishing the RESRAM has not been submitted in compliance with that rule, it shall notify the electric utility within ten (10) days of the electric utility's filing of an application or tariff schedules to adjust the RESRAM rates and identify the information required. The electric utility shall supply the information identified by the party, or shall notify the party that it believes the information provided was in compliance with the requirements of 4 CSR 240-3.YYY, within ten (10) days of the request. If the

electric utility does not timely supply the information, the party asserting the failure to provide the required information must timely file a motion to compel with the commission. While the commission is considering the motion to compel, the processing time line for the adjustment to increase RESRAM rates shall be suspended. For good cause shown the commission may further suspend this timeline. Any delay in providing sufficient information in compliance with 4 CSR 240-3.YYY in a request to decrease RESRAM rates shall not alter the processing time line.

(E) Prudence Reviews Respecting a RESRAM. A prudence review of the costs subject to the RESRAM shall be conducted no less frequently than at intervals established in the rate proceeding in which the RESRAM is established.

1. All amounts ordered refunded by the commission shall include interest at the electric utility's short-term borrowing rate. The interest shall be calculated on a monthly basis for each month the RESRAM rate is in effect, equal to the weighted average interest rate paid by the electric utility on short-term debt for that calendar month. This rate shall then be applied to a simple average of the same month's beginning and ending cumulative RESRAM over-collection or under-collection balance. Each month's accumulated interest shall be included in the RESRAM over-collection or under-collection balances on an on-going basis.

2. The staff shall submit a recommendation regarding its examination and analysis to the commission not later than one hundred eighty (180) days after the staff initiates its prudence audit. The staff shall file notice within ten (10) days of starting its prudence audit. The commission shall issue an order not later than two hundred ten (210) days after the staff commences its prudence audit if no party to the proceeding in which the prudence audit is occurring files, within one hundred ninety (190) days of the staff's commencement of its prudence audit, a request for a hearing.

A. If the staff, OPC or other party auditing the RESRAM believes that insufficient information has been supplied to make a recommendation regarding the prudence of the electric utility's RESRAM, it may utilize discovery to obtain the information it seeks. If the electric utility does not timely supply the information, the party asserting the failure to provide the required information shall timely file a motion to compel with the commission. While the commission is considering the motion to compel the processing time line shall be suspended. If the commission then issues an order requiring the information to be provided, the time necessary for the information to be provided shall further extend the processing

time line. For good cause shown the commission may further suspend this time line.

B. If the time line is extended due to an electric utility's failure to timely provide sufficient responses to discovery and a refund is due to the customers, the electric utility shall refund all imprudently incurred costs plus interest at the electric utility's short-term borrowing rate. The interest shall be calculated on a monthly basis in the same manner as described in paragraph (6)(E)1. of this rule.

(F) Disclosure on Customers' Bills. Any amounts charged under a RESRAM approved by the commission shall be separately disclosed on each customer's bill. Proposed language regarding this disclosure shall be submitted to the commission for the commission's approval.

(G) Submission of Surveillance Monitoring Reports. Each electric utility with an approved RESRAM shall submit to staff, OPC and parties approved by the commission a Surveillance Monitoring Report in the form and having the content provided for by 4 CSR 240-3.YYY.

1. The Surveillance Monitoring Report shall be submitted within fifteen (15) days of the electric utility's next scheduled United States Securities and Exchange Commission (SEC) 10-Q or 10-K filing with the initial submission within fifteen (15) days of the electric utility's next scheduled SEC 10-Q or 10-K filing following the effective date of the commission order establishing the RESRAM.

2. If the electric utility also has an approved fuel rate adjustment mechanism or environmental cost recovery mechanism (ECRM), the electric utility shall submit a single Surveillance Monitoring Report for the RESRAM, ECRM, the fuel rate adjustment mechanism, or any combination of the three. The electric utility shall designate on the single Surveillance Monitoring Report whether the submission is for RESRAM, ECRM, fuel rate adjustment mechanism or any combination of the three.

3. Upon a finding that a utility has knowingly or recklessly provided materially false or inaccurate information to the commission regarding the surveillance data prescribed in 4 CSR 240-3.YYY, after notice and an opportunity for a hearing, the commission may suspend a RESRAM or order other appropriate remedies as provided by law.

(H) Pre-Existing Adjustment Mechanisms, Tariffs and Regulatory Plans. The provisions of this rule shall not affect:

1. Any adjustment mechanism, rate schedule, tariff, incentive plan, or other ratemaking mechanism that was approved by the commission and in effect prior to the effective date of this rule; and

2. Any experimental regulatory plan that was approved by the commission and in effect prior to the effective date of this rule.

(7) Annual Compliance Report and RES Compliance Plan. Each electric utility shall file an annual RES compliance report no later than April 15 to report on the status of the utility's compliance with the renewable energy standard and the electric utility's compliance plan as described in this section for the most recently completed calendar year. Each electric utility shall file an annual RES compliance plan with the commission. The plan shall be filed by April 15 of each year.

(A) Annual Compliance Report

1. The annual RES compliance report shall provide the following information for the most recently completed calendar year for the electric utility:

A. Total retail electric sales for the utility, as defined by this rule;

B. Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers' meters;

C. Total retail electric sales supplied by renewable energy resources, section 393.1025(5), RSMo, including the source of the energy;

D. The number of RECs and S-RECs created by electrical energy produced by renewable energy resources owned by the electric utility. For the electrical energy produced by these utility-owned renewable energy resources, the value of the energy created. For the RECs and S-RECs, a calculated REC or S-REC value for each source and each category of REC;

E. The number of RECs acquired, sold, transferred, or retired by the utility during the calendar year;

F. The source of all RECs acquired during the calendar year;

G. The identification, by source and serial number, of any RECs that have been carried forward to a future calendar year;

H. An explanation of how any gains or losses from sale or purchase of RECs for the calendar year have been accounted for in any rate adjustment mechanism that was in effect for the electric utility;

I. For acquisition of electrical energy and/or RECs from a renewable energy resource that is not owned by the electric utility, the following information for each resource that has a rated capacity of ten (10) kW or greater:

(I) Name, address, and owner of the facility;

(II) An affidavit from the owner of the facility certifying that the energy was derived from an eligible renewable energy technology and that the renewable attributes of the energy have not been used to meet the requirements of any other local or state mandate;

(III) The renewable energy technology utilized at the facility;

(IV) The dates and amounts of all payments from the electric utility to the owner of the facility; and

(V) All meter readings used for calculation of the payments referenced in subparagraph D. of this paragraph.

J. The total number of customers that applied and received a solar rebate in accordance with section (4) of this rule.

K. The total number of customers that were denied a solar rebate and the reason(s) for denial.

L. The amount of funds expended by the electric utility for solar rebates, including the price and terms of future S-REC contracts associated with the facilities that qualified for the solar rebates.

M. An affidavit documenting the electric utility's compliance with the RES compliance plan as described in this section during the calendar year. This affidavit will include a description of the amount of over or under compliance costs that shall be adjusted in the electric utility's next compliance plan

N. If compliance was not achieved, an explanation why the electric utility failed to meet the RES.

2. On the same date that the electric utility files its annual RES compliance report, the utility shall post an electronic copy of its annual RES compliance report, excluding highly confidential or proprietary material, on its website to facilitate public access and review.

3. On the same date that the electric utility files its annual RES compliance report, the utility shall provide the commission with separate electronic copies of its annual RES compliance report including and excluding highly confidential and proprietary material. The commission shall place the redacted electronic copies of each electric utility's annual RES compliance reports on the commission's website in order to facilitate public viewing, as appropriate.

### **Alternative A**

(B) RES Compliance Plan

1. The plan shall cover the current year and the immediately following two (2) calendar years. The RES compliance plan shall include, at a minimum:

A. A specific description of the electric utility's planned actions to comply with the RES;

B. A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;

C. The projected total retail electric sales for each year;

D. Any differences, as a result of RES compliance, from the utility's preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;

E. A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with the RES; and

F. A detailed explanation of the calculation of the RES retail impact limit calculated in accordance with section (5) of this rule. This explanation should include the pertinent information for planning interval which is included in the RES compliance plan.

G. Verification that the source of RECs purchased by the utility to meet RES requirements did not cause undue adverse air, water or land use impacts pursuant to subsection 393.1030.4. RSMo, and Department rule.

(C) Upon receipt of the electric utility's annual RES compliance report and RES compliance plan, the commission shall establish a docket for the purpose of receiving the report and plan. The commission shall issue a general notice of the filing.

(D) The staff of the commission shall examine each electric utility's annual RES compliance report and RES compliance plan and file a report of its review with the commission within forty-five (45) days of the filing of the RES compliance report and RES compliance plan with the commission. The staff's report shall identify any deficiencies in the electric utility's compliance with the RES.

(E) The office of the public counsel and any interested persons or entities may file comments based on their review of the electric utility's annual RES compliance report within forty-five (45) days of the electric utility's filing of its compliance report with the commission.

(F) The commission shall issue an order which establishes a procedural schedule, if necessary.



**Alternative B**

## (B) RES Compliance Plan

1. The plan shall cover the current year and the immediately following two (2) calendar years. The RES compliance plan shall include, at a minimum:

A. A specific description of the electric utility's planned actions to comply with the RES;

(I) The utility shall estimate the cost for the least cost resource plan required to meet the compliance requirements specified in Section 2 of these rules.

(II) Rate Impact Test - the company shall show that the net present value cost of the three-year plan plus the actual cost for the previous two years is less than the net present value of the three year maximum allowable rate impact plus the maximum allowable rate impact for the two previous years as calculated in section (5) of this rule.

(III) For the first year of compliance, the utility shall provide a five year plan and use the net present value of five years of future maximum allowable rate impacts for this test.

(IV) For the second year of compliance with this rule, the utility shall provide a four year plan and calculate the five year target using the four years of the plan forecast and the previous year's calculated maximum allowable rate impact.

B. A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;

C. The projected total retail electric sales for each year;

D. Any differences, as a result of RES compliance, from the utility's preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;

E. A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with the RES; and

F. A detailed explanation of the calculation of the RES retail impact limit calculated in accordance with section (5) of this rule. This explanation should include the pertinent information for the planning interval which is included in the RES compliance plan.

G. Verification that the source of RECs purchased by the utility to meet RES requirements did not cause undue adverse air, water or land use impacts pursuant to subsection



393.1030.4. RSMo, and Department rule.

(C) Upon receipt of the electric utility's annual RES compliance report and RES compliance plan, the commission shall establish a docket for the purpose of receiving the report and plan. The commission shall issue a general notice of the filing.

(D) The staff of the commission shall examine each electric utility's annual RES compliance report and RES compliance plan and file a report of its review with the commission within forty-five (45) days of the filing of the RES compliance report and RES compliance plan with the commission. The staff's report shall identify any deficiencies in the electric utility's compliance with the RES.

(E) The office of the public counsel and any interested persons or entities may file comments based on their review of the electric utility's annual RES compliance report within forty-five (45) days of the electric utility's filing of its compliance report with the commission.

(F) The commission shall issue an order which establishes a procedural schedule, if necessary.

(8) Penalties. An electric utility shall be subject to penalties of at least twice the average market value of RECs or S-RECs for the calendar year for failure to meet the targets of section 393.1030.1, RSMo and section 2 of this rule.

(A) An electric utility shall 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 to the extent that the maximum average retail rate impact increase would be exceeded.

(B) Penalty payments shall be remitted to the department. These payments shall be utilized by the department for the following purposes:

1. Purchase RECs or S-RECs in sufficient quantity to offset the shortfall of the utility to meet the RES requirements; and

2. Payments in excess of those required in paragraph 1 of this subsection shall be utilized to provide funding for renewable energy and energy efficiency projects. These projects shall be selected by the department's energy center in consultation with the staff.

(C) Penalty amounts shall be calculated by determining the electric utility's shortfall relative to RES total requirements and RES solar energy requirements for the calendar year. The penalty amount shall be based on twice the average market value during the calendar year for RECs or S-RECs in sufficient quantity to make up the utility's shortfall for RES total

requirements or RES solar energy requirements. The average market value for RECs or S-RECs for the calendar year shall be based on RECs and S-RECs utilized for compliance with this rule and determined by the staff. The office of public counsel and any interested persons or entities may file comments based on their review of staff's determination of REC and S-REC value. The commission shall issue an order which establishes a procedural schedule, if necessary.

(D) Any electric utility that is subject to penalties as prescribed by this section shall not seek recovery of the penalties through section (6) of this rule or any other rate-making activity.

**Alternative A**

(9) Solar Energy Exemptions. Pursuant to 393.1050, RSMo, and this rule electric utilities may be exempt from certain requirements of the RES.

(A) Any electric utility which, by January 20, 2009, achieved an amount of renewable energy resource aggregate nameplate capacity equal to or greater than fifteen percent (15%) of the electric utility's total owned fossil-fired generating capacity, shall be exempt from the following requirements of this rule, as follows:

1. The requirement to provide a solar rebate to the electric utility's retail customers in accordance with section 393.1030, RSMo and section (4) of this rule; and

2. The requirement to provide a certain percentage of its total retail electric sales from solar energy in accordance with section 393.1030, RSMo and section (2) of this rule.

**Alternative B**

Delete this entire section, renumber other sections accordingly, and remove any references to this section from other sections.

(10) Nothing in this rule shall preclude a complaint case from being filed, as provided by law, on the grounds that an electric utility is earning more than a fair return on equity, nor shall an electric utility be permitted to use the existence of its RESRAM as a defense to a complaint case based upon an allegation that it is earning more than a fair return on equity.

(11) Waivers and Variances. Upon written application, and after notice and an opportunity for hearing, the commission may waive

or grant a variance from a provision of this rule for good cause shown.

(A) The granting of a variance to one (1) electric utility which waives or otherwise affects the required compliance with a provision of this rule does not constitute a waiver respecting, or otherwise affect, the required compliance of any other electric utility.

(B) The commission may not waive or grant a variance from this rule in total.

(C) The commission may not waive or grant a variance from any section of this rule that implements the specific requirements of sections 393.1025, 303.1030, 393.1040, 393.1045 or 393.1050, RSMo.

*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.*