



MISSOURI RENEWABLE ENERGY STANDARD SUMMARY

A. **SUMMARY:** Missouri's renewable energy standard (RES), adopted via ballot initiative (Proposition C) on November 4, 2008, requires all investor-owned utilities in the state to provide at least 15 percent of their electricity using renewable energy sources by the year 2021. The standard also includes a solar energy set-aside requirement of 0.3 percent by 2021. RES implementation and rulemaking falls under the jurisdiction of the Missouri Public Service Commission (PSC). Renewable energy credits may be used for compliance, and the PSC must select a REC tracking and trading entity to administer the program. The PSC has the authority to levy penalties for non-compliance. A cost cap of 1 percent of retail rates is applied to the annual requirements. In addition, Proposition C requires investor-owned utilities to offer customers a standard rebate of \$2.00 per watt (up to 25 kilowatts) for solar electric systems.

B. AUTHORIZING LEGISLATION/REGULATION

1. **Part of Broader Energy Package?** No. Missouri's RES was adopted as a stand alone ballot initiative.

2. **Legislative/Regulatory Intent:** None specified.

3. **Applicable Legislation/Regulation:**

11/08 – [Proposition C](#) (Clean Energy Initiative), Amendment to Chapter 393 of the Revised Statutes of Missouri, Relating to Renewable Energy

4. **Date Enacted:** 11/4/08

5. **Date Effective:** 11/4/08

C. RULEMAKING

1. **Implementing/rulemaking Authority:** Missouri Public Service Commission (PSC).

2. **Rulemaking Completed to Date:** None

D. TARGETS AND TIMETABLES

1. **Brief Overview:** The RES begins in 2011 by requiring that 2 percent of the retail electricity supply for investor-owned utilities (IOUs) comes from renewable energy sources. The target continues to grow in multi-year increments to 15 percent by 2021. In addition, the RES includes a solar set-aside requirement (not additive to the renewable energy target) that requires at least two percent of each annual requirement be met through solar energy (equal to 0.3 percent of total electric sales by 2021).

2. Schedule:

Compliance Year	Non-solar Renewable Energy Requirement	Solar Energy Requirement	Total Renewable Energy Requirement
2011	1.96%	0.04%	2.0%
2012	1.96%	0.04%	2.0%
2013	1.96%	0.04%	2.0%
2014	4.90%	0.10%	5.0%
2015	4.90%	0.10%	5.0%
2016	4.90%	0.10%	5.0%
2017	4.90%	0.10%	5.0%
2018	9.80%	0.20%	10.0%
2019	9.80%	0.20%	10.0%
2020	9.80%	0.20%	10.0%
2021 & thereafter	14.7%	0.30%	15.0%

3. Treatment of Existing Capacity: Existing renewable energy resources are eligible to meet the renewable energy requirements.

4. Sunset Clause: None. The annual requirements for 2021 continue each year thereafter.

E. DEFINITION OF ELIGIBLE RESOURCES AND TECHNOLOGIES

1. Eligible Resources: Renewable energy resource is defined as electric energy produced from:

- Wind
- Solar thermal sources
- Solar photovoltaic cells and panels
- Dedicated crops grown for energy production, cellulosic agricultural residues, plant residues, clean and untreated wood such as pallets
- Methane from landfills or from wastewater treatment
- Hydropower (not including pumped storage) that does not require a new diversion or impoundment of water and that has a nameplate rating of 10 megawatts or less
- Fuel cells using hydrogen produced by one of the above-named renewable energy sources
- If any amount of fossil fuel is used with renewable energy resources, only the portion of electrical output attributable to renewable energy resources shall be used to fulfill the portfolio requirements.
- Other sources of energy (not including nuclear) that become available and are certified as renewable by rule by the Missouri Department of Natural Resources would be eligible to meet the annual requirements.

Renewable energy facilities shall not cause undue adverse air, water, or land use impacts, including impacts associated with the gathering of generation feedstocks.

- 2. Specific Incentives:** Generation from solar energy resource is given a separate set-aside requirement, which ramps up to 0.3 percent by 2021. In addition, a solar rebate program is required by investor-owned utilities, providing customers an incentive of \$2.00 per watt (up to 25 kilowatts) for installing solar equipment. A multiplier of 1.25 is also awarded for each kWh of renewable energy that is generated in state.
- 3. Exclusions:** Nuclear power is explicitly excluded from being eligible to meet the RES.
- 4. Treatment of Self Generation:** Self generation is eligible under the RES.
- 5. Rules governing Location of Generating Facilities:** There are no restrictions placed on the location of renewable energy facilities, or the delivery of their power. However, a credit multiplier of 1.25 is awarded for each kWh of renewable energy that is generated in-state.
- 6. Eligibility of Green Pricing Programs:** An electric utility may not use a credit derived from a green pricing program.

F. COVERED UTILITIES

- 1. Covered utilities:** The RES applies to IOUs, as defined by section 386.020 of the Revised Statutes of Missouri. This includes Kansas City Power & Light, Aquila, Empire, and AmerenUE. Electric cooperatives and municipal utilities are exempt.
- 1. Share of State Sales/capacity/Delivered Power Covered:** Approximately 69 percent of the state's total electric sales are covered by the RES requirements.
- 2. Apportionment of obligation among utilities:** The annual requirements are applied separately to each IOU.
- 3. Exemptions by customer class:** None

G. COST PROVISIONS

- 1. Cost Cap for retailers:** The RES is subject to a maximum average retail rate increase of one percent determined by estimating and comparing the electric utility's cost of compliance with least-cost renewable generation and the cost of continuing to generate or purchase electricity from entirely nonrenewable sources, taking into proper account future environmental regulatory risk including the risk of greenhouse gas regulation.
- 2. Cost Cap for Consumers:** None specified

3. **Cost Recovery Mechanisms:** The PSC must develop rules that include a provision for recovery outside the context of a regular rate case of prudently incurred costs and the pass-through of benefits to customers of any savings achieved by an electrical corporation in meeting the annual requirements.
4. **Supply Contract Requirements:** There are no explicit supply contract requirements stated in the RES legislation.
5. **Special Funds:** Any excess forfeited revenues collected as a result of the penalty mechanism are remitted to the Missouri Department of Natural Resources to purchase renewable energy credits needed for compliance. Any remaining funds shall be used by the department's energy center solely for renewable energy and energy efficiency projects.

H. COMPLIANCE AND ENFORCEMENT

1. **Certification, tracking, and trading mechanism[s]:** Compliance with the renewable energy requirements can be achieved in whole or in part through the use of tradable renewable energy credits (REC). The PSC is responsible for selecting a REC tracking and verification system (presumably the Midwest Renewable Energy Tracking System).

One REC equals one megawatt-hour of electricity derived from renewable energy resources. A REC may only be used once to for compliance and may not also be used to satisfy any similar non-federal requirement.

Thought not specified in the legislation for large-scale renewable energy facilities, the language does state that certificates from net-metered sources shall initially be owned by the customer-generator.

2. **Flexibility Mechanisms:** Banked Compliance – Unused RECs may exist for up to three years from the date of its creation.
3. **Penalties, Procedures, Powers, and Sanctions:** The PSC must develop rules that include non-compliance penalties of at least twice the average market value of RECs for the compliance period. Penalties shall not be recovered from customers.
4. **Treatment of emission allowance or reduction credits:** None specified
5. **Escape Clauses:** An electric utility would be excused from penalties if it proves to the Public Service Commission that failure to comply with the annual requirements was due to events beyond its reasonable control that could not have been reasonably mitigated, or that the maximum average retail rate increase has been reached.

I. ADMINISTRATION

- 1. Administering Entities, Duties, Powers, and Contact Information:** The Missouri Public Service Commission is responsible for developing regulations, and administering and enforcing the RES. The Missouri Department of Natural Resources is responsible for identifying and certifying as eligible resources any new renewable energy sources, as well as administering any funds collected through non-compliance penalties. Contact information is:

Missouri Public Service Commission
Governor Office Building
200 Madison Street (PO Box 360)
Jefferson City, MO 65102-0360
Phone: (573) 751-3234
Website: <http://www.psc.mo.gov/>

Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone: (800) 361-4827
Website: <http://www.dnr.mo.gov/>

- 2. Source and Amount of Administrative Funding:** Not specified

J. REPORTING REQUIREMENTS

- 1. Reporting Requirement for Retailers:** The PSC is required to develop rules that include provisions for an annual report to be filed by each electric utility in a format sufficient to document its progress in meeting the targets.
- 2. Reporting Requirements for Administrating Entities:** None specified.
- 3. Cost Information:** No actual cost data is available as the RES does not begin until 2011. However, The Missouri Coalition for the Environment released a report (prepared by Martin Cohen) on the potential costs and benefits of the RES in October 2008. The report is entitled, [Missouri Clean Energy Initiative, Consumer Cost Savings Analysis](#).