

FIRST REGULAR SESSION
HOUSE COMMITTEE SUBSTITUTE FOR
HOUSE BILL NO. 613
96TH GENERAL ASSEMBLY

1472L.21C

D. ADAM CRUMBLISS, Chief Clerk

AN ACT

To repeal sections 393.1020, 393.1025, 393.1030, 393.1040, and 393.1045, RSMo, and to enact in lieu thereof eleven new sections relating to the renewable energy act.

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

Section A. Sections 393.1020, 393.1025, 393.1030, 393.1040, and 393.1045, RSMo, are
2 repealed and eleven new sections enacted in lieu thereof, to be known as sections 393.1400,
3 393.1405, 393.1410, 393.1415, 393.1420, 393.1425, 393.1430, 393.1435, 393.1440, 393.1443,
4 and 393.1445, to read as follows:

**393.1400. Sections 393.1400 to 393.1445 shall be known as the "Renewable Energy
2 Act".**

393.1405. As used in sections 393.1400 to 393.1445, the following terms mean:

- 2 (1) "Commission", the public service commission;
- 3 (2) "Delivered energy", the energy from a renewable energy resource that is owned
4 by an electrical corporation or that an electrical corporation has contracted to purchase
5 for use in providing electrical service to Missouri customers;
- 6 (3) "Department", the department of natural resources;
- 7 (4) "Electric utility", any electrical corporation as defined by section 386.020;
- 8 (5) "Levelized cost of energy", the present value of annual costs of a renewable
9 resource generator over the economic life divided by the present value of the annual output
10 of a renewable resource generator over the economic life using the utility's discount rate,
11 including all costs of transmission or distribution to get the energy into the utility's
12 Missouri service territory;
- 13 (6) "Megawatts", the gross nameplate rating of an electrical generator producing
14 electrical energy equal to one thousand kilowatts;

EXPLANATION — Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted from the law. Matter in **bold-face** type in the above bill is proposed language.

15 (7) "Missouri revenues", the electric utility's revenues from retail customers in
16 Missouri as reported on its audited financial statements for calendar year 2010;

17 (8) "Net-metered customers", customers of an electric utility that install, own, and
18 operate up to one hundred kilowatts of their own electrical generation at their property,
19 that have executed all agreements required by the electric utility for connection of their
20 electrical generation to the electric utility's system, and that are in compliance with the
21 terms of all such agreements;

22 (9) "New renewable generation", electrical generation from a renewable energy
23 resource that became fully operational and used for service after November 4, 2008;

24 (10) "Renewable energy credit" or "REC", a trackable certificate of proof that one
25 megawatt-hour of electricity has been generated from one or more renewable energy
26 resources;

27 (11) "Renewable energy resources", the electricity derived from any of the
28 following types of renewable energy resources or technologies:

29 (a) Wind;

30 (b) Solar thermal sources or solar photovoltaic cells and panels;

31 (c) Dedicated crops grown for energy production-herbaceous and woody crops that
32 are harvested specifically for energy production in a sustainable manner;

33 (d) Cellulosic agricultural residues, which is organic matter remaining after the
34 harvesting and processing of agricultural crops, which shall include:

35 a. Field residues, which are organic materials left on agricultural lands after the
36 crops have been harvested, such as stalks, stubble, leaves, and seed pods; and

37 b. Process residues, which are organic materials left after the crops have been
38 processed into a usable resource, such as husks, seeds, and roots;

39 (e) Plant residues, which are residues of plants that would be converted into energy,
40 that otherwise would be waste material;

41 (f) Clean and untreated wood, which are nonhazardous wood that has not been
42 chemically treated with chemical preservatives which include the following:

43 a. Eligible clean and untreated wood, but is not necessarily limited to, the following
44 sources:

45 (i) Forest-related resources, such as precommercial thinnings waste, slash (tree
46 tops, branches, bark, or other residue left on the ground after logging or other forestry
47 operations), brush, shrubs, stumps, lumber ends, trimmings, yard waste, dead and downed
48 forest products, and small diameter forest thinnings (twelve inches in diameter or less);

49 (ii) Nonchemically treated wood and paper manufacturing waste, such as bark,
50 trim slabs, scrap, shavings, sawdust, sander dust, and pulverized scraps;

- 51 (iii) Vegetation waste, such as landscape waste or right-of-way trimmings;
- 52 (iv) Wood chips, pellets, or briquettes derived from nontoxic and unadulterated
- 53 wood wastes or woody energy crops;
- 54 (v) Municipal solid waste, construction, and demolition waste, urban wood waste,
- 55 and other similar sources, only if wood wastes are segregated from other solid wastes or
- 56 inorganic wastes; and
- 57 (vi) Other miscellaneous waste, such as waste pellets, pallets, crates, scrap wood,
- 58 tree debris left after a natural catastrophe, and recycled paper fibers that are no longer
- 59 suitable for recycled paper production;
- 60 b. Ineligible clean and untreated wood, but is not necessarily limited to, the
- 61 following sources:
- 62 (i) Post-consumer wastepaper;
- 63 (ii) Wood from old growth forests (one hundred fifty years old or older); and
- 64 (iii) Unsegregated solid waste;
- 65 (g) Methane from landfills or from wastewater treatment. As used in this
- 66 paragraph, "wastewater treatment" is defined as physical, chemical, biological, and
- 67 mechanical procedures applied to an industrial or municipal discharge or to any other
- 68 sources of contaminated water to remove, reduce, or neutralize contaminants;
- 69 (h) Hydropower, not including pumped storage, that does not require a new
- 70 diversion or impoundment of water and that each generator has a nameplate rating of ten
- 71 megawatts or less. If an improvement to an existing hydropower facility does not require
- 72 a new diversion or impoundment of water and incrementally increases the nameplate
- 73 rating of each generator, up to ten megawatts per generator, the improvement qualifies as
- 74 an eligible renewable energy resource;
- 75 (i) Thermal depolymerization or pyrolysis for converting waste materials to energy;
- 76 (j) Fuel cells using hydrogen produced by renewable energy resources defined in
- 77 this subdivision. RECs based on generating electricity in fuel cells from hydrogen derived
- 78 from an eligible energy resource are eligible for compliance purposes only to the extent that
- 79 the energy used to generate the hydrogen did not create RECs;
- 80 (k) Anaerobic digestion of farm animal waste; or
- 81 (l) Other sources of energy, not including nuclear, that become available after
- 82 November 4, 2008, and are certified as eligible renewable energy resources as defined by
- 83 the department in consultation with the commission;
- 84 (12) "Renewable energy standard" or "RES", the requirements established by
- 85 sections 393.1400 to 393.1445.

2 **393.1410. 1. Electric utilities shall own new renewable generation providing**
3 **delivered energy, or shall purchase delivered energy from new renewable generation, or**
4 **a combination thereof, totaling no less than the following nameplate amounts by the**
5 **following dates:**

6 **(1) For an electric utility with total retail Missouri revenues as of December 31,**
7 **2010, of \$2.3 billion dollars or more:**

8 **(a) By December 31, 2013: one hundred ten megawatts;**

9 **(b) By December 31, 2015: two hundred ten megawatts;**

10 **(c) By December 31, 2018: three hundred ten megawatts;**

11 **(d) By December 31, 2020: four hundred ten megawatts;**

12 **(2) For an electric utility with total retail Missouri revenues as of December 31,**
13 **2010, of at least \$730 million dollars but no more than \$2.29 billion dollars:**

14 **(a) By December 31, 2013: seventy megawatts;**

15 **(b) By December 31, 2015: one hundred seventy megawatts;**

16 **(c) By December 31, 2020: one hundred ninety-five megawatts;**

17 **(3) For an electric utility with total retail Missouri revenues as of December 31,**
18 **2010, of at least \$708 million dollars but no more than \$2.29 billion dollars:**

19 **(a) By December 31, 2015: twenty megawatts;**

20 **(b) By December 31, 2018: one hundred twenty megawatts;**

21 **(c) By December 31, 2020: one hundred forty-five megawatts.**

22 **2. Notwithstanding subsection 1 of this section, if the levelized cost of energy from**
23 **the new renewable generation prescribed by subsection 1 of this section exceeds seventy**
24 **dollars per megawatt-hour adjusted annually for inflation according to the consumer price**
25 **index, then the megawatts of new renewable generation prescribed by subsection 1 of this**
26 **section shall be reduced by five percent for every dollar by which the levelized cost of**
27 **energy exceeds seventy dollars per megawatt-hour adjusted annually for inflation**
28 **according to the consumer price index.**

29 **3. Notwithstanding any provision of law to the contrary, at no time shall an electric**
30 **utility's billings to any account of any customer, including its affiliates and subsidiaries,**
31 **meeting either of the following criteria be more than one percent higher than the billings**
32 **would have been without the renewable energy mandates set forth in sections 393.1400 to**
33 **393.1445, where such impact is measured in accordance with subsection 5 of this section:**

34 **(1) The customer has one or more accounts within the service territory of the**
35 **electrical corporation that has a demand of five thousand kilowatts or more; or**

(2) The customer operates an interstate pipeline pumping station, regardless of size.

36 **4. In addition, the annual net cost to any retail customer, as measured in**
37 **accordance with subsection 5 of this section, of a utility's compliance with the renewable**
38 **mandates shall not exceed one hundred thousand dollars per year.**

39 **5. For the purpose of applying subsection 4 of this section, the annual net cost to**
40 **any retail customer, of a utility's compliance with the renewable mandates shall be**
41 **determined by computing that customer's share of an electric utility's annual net costs to**
42 **comply with the renewable mandates as follows and limiting that share to one hundred**
43 **thousand dollars per year:**

44 **(1) The following costs shall be added:**

45 **(a) Annual costs associated with owning, operating, and maintaining renewable**
46 **energy resources used for compliance with sections 393.1400 to 393.1445;**

47 **(b) Annual costs of purchased RECs;**

48 **(c) Annual cost of solar rebates;**

49 **(d) Annual renewable energy purchases utilized for compliance with sections**
50 **393.1400 to 393.1445;**

51 **(e) Annual administrative and general costs related to compliance with sections**
52 **393.1400 to 393.1445; and**

53 **(f) Additional operating costs incurred to integrate a renewable energy resource**
54 **due to its intermittent operating characteristics;**

55 **(2) The annual value of any renewable energy purchased or produced by the**
56 **electric utility's renewable energy resources used for compliance with sections 393.1400 to**
57 **393.1445 shall be subtracted from the sum of paragraphs (a) to (f) of subdivision (1) of this**
58 **subsection.**

59

60 **Furthermore, for the purpose of applying subsection 3 of this section, the increased cost**
61 **to the class defined therein shall be determined by taking its share of an electric utility's**
62 **cost of compliance with the renewable mandates determined as follows and limiting it to**
63 **one percent:**

64 **(3) The following costs shall be added:**

65 **(a) Annual costs associated with owning, operating, and maintaining renewable**
66 **energy resources used for compliance with sections 393.1400 to 393.1445;**

67 **(b) Annual costs of purchased RECs;**

68 **(c) Annual cost of solar rebates;**

69 **(d) Annual renewable energy purchases utilized for compliance with sections**
70 **393.1400 to 393.1445;**

71 (e) Annual administrative and general costs related to compliance with sections
72 393.1400 to 393.1445; and

73 (f) Additional operating costs incurred to integrate a renewable energy resource
74 due to its intermittent operating characteristics;

75 (4) The annual value of any renewable energy purchased or produced by the
76 electric utility's renewable energy resources used for compliance with sections 393.1400 to
77 393.1445 shall be subtracted from the sum of paragraphs (a) to (f) of subdivision (3) of this
78 subsection.

79 6. The annual value of any renewable energy purchased or produced by the electric
80 utility's renewable energy resources used for compliance with sections 393.1400 to 393.1445
81 shall for each hour of the annual period be calculated by multiplying the energy produced
82 from such resources in that hour by the actual wholesale price of energy in the electric
83 utility's service territory as reflected by the regional transmission organization's real-time
84 hourly energy market prices within which the electric utility operates for that hour and
85 totaling those products for the entire annual period.

86 7. An electric utility shall pay penalties of two thousand dollars per day for failure
87 to meet the RES. Any such monetary fine shall be distributed to the public schools under
88 section 7, article IX of the Constitution of Missouri. An electric utility shall be excused
89 from this subsection if it proves to the commission that failure was due to events beyond
90 its reasonable control that could not have been reasonably mitigated.

91 8. The exclusive title and ownership of all RECs associated with the new renewable
92 generation owned by an electric utility, or to which an electric utility has rights, associated
93 with the generation referenced in this section shall be vested in the electric utility.

94 9. In the event the United States Congress enacts by statute and/or rule any
95 provision or regulatory scheme that establishes requirements for electric utilities to
96 generate or purchase electricity generated from renewable or clean energy resources that
97 is stricter than the provisions of this section, such federal requirements shall supercede and
98 take precedence over the requirements as set forth in this section and shall accordingly be
99 deemed to preempt the provisions of this section and any portfolio requirement rules
100 prescribed by the commission under subsection 1 of this section.

101 10. Notwithstanding any other provisions of law, each electric utility shall also
102 make a good faith effort to generate or purchase renewable energy delivered to Missouri
103 in an amount sufficient to equal or exceed the following goals, measured as a percentage
104 of each electric utility's retail electric sales:

105 (1) No less than two percent for calendar years 2011 to 2013;

106 (2) No less than five percent for calendar years 2014 to 2017;

- 107 **(3) No less than ten percent for calendar years 2018 to 2020;**
108 **(4) No less than fifteen percent for each calendar year thereafter.**

109

110 **At least two percent of each goal shall be derived from solar energy.**

111 **11. (1) No renewable energy generator using woody biomass as fuel shall be**
112 **certified unless it converts the energy content of the wood or wood residue into electrical**
113 **energy with an efficiency of at least thirty percent.**

114 **(2) Any harvesting of woody biomass shall comply with the Missouri department**
115 **of conservation's Missouri woody biomass harvesting best management practices manual,**
116 **as it may be updated from time-to-time or replaced.**

117 **(3) Harvest of woody biomass shall be conducted according to a harvest plan**
118 **prepared as part of a forest management plan by a forester certified by the Society of**
119 **American Foresters (SAF). All timber harvesters shall be certified by the Missouri master**
120 **logger certification program of the Missouri Forest Products Association or a comparable**
121 **program.**

122 **(4) Compliance with subdivisions (2) and (3) of this subsection shall be verified by**
123 **third-party, SAF-certified foresters at the harvest site using a specified sampling intensity**
124 **and under standards prescribed by the Missouri department of conservation.**

393.1415. 1. An electric utility shall provide financial incentives, up to the following
2 **amounts, as follows:**

3 **(1) An electric utility with Missouri revenues of \$2.3 billion dollars or more shall,**
4 **subject to the per-customer limits specified in subsection 3 of this section:**

5 **(a) Provide up to a maximum of thirteen million dollars annually in each of**
6 **calendar years 2012 and 2013 to its customers that install up to one hundred kilowatts of**
7 **solar generation that becomes fully operational on or after January 1, 2012, and on or**
8 **before December 31, 2013;**

9 **(b) Provide up to a maximum of seven million dollars annually in each of calendar**
10 **years 2014, 2015, 2016, and 2017 to its net-metered customers that install up to one**
11 **hundred kilowatts of solar generation that becomes fully operational on or after January 1,**
12 **2014, and on or before December 31, 2017;**

13 **(c) Provide up to a maximum of two million dollars annually in each of calendar**
14 **years 2018, 2019, and 2020 to its net-metered customers that install up to one hundred**
15 **kilowatts of solar generation that becomes fully operational on or after January 1, 2018,**
16 **and on or before December 31, 2020;**

17 (2) An electric utility with Missouri revenues of at least \$730 million dollars but no
18 more than \$2.29 billion dollars shall, subject to the per-customer limits specified in
19 subsection 3 of this section:

20 (a) Provide up to a maximum of two and one-half million dollars annually in each
21 of calendar years 2012 and 2013 to its customers that install up to one hundred kilowatts
22 of solar generation that becomes fully operational on or after January 1, 2012, and on or
23 before December 31, 2013;

24 (b) Provide up to a maximum of two and one-quarter million dollars annually in
25 each of calendar years 2014, 2015, 2016, and 2017 to its net-metered customers that install
26 up to one hundred kilowatts of solar generation that becomes fully operational on or after
27 January 1, 2014, and on or before December 31, 2017;

28 (c) Provide up to a maximum of one and one-half million dollars annually in each
29 of calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one
30 hundred kilowatts of solar generation that becomes fully operational on or after January 1,
31 2018, and on or before December 31, 2020;

32 (3) An electric utility with Missouri revenues of at least \$708 million dollars but no
33 more than \$2.29 billion dollars shall, subject to the per-customer limits specified in
34 subsection 3 of this section:

35 (a) Provide up to a maximum of two and one-half million dollars annually in each
36 of calendar years 2012 and 2013 to its customers that install up to one hundred kilowatts
37 of solar generation that becomes fully operational on or after January 1, 2012, and on or
38 before December 31, 2013;

39 (b) Provide up to a maximum of two and one-quarter million dollars annually in
40 each of calendar years 2014, 2015, 2016, and 2017 to its net-metered customers that install
41 up to one hundred kilowatts of solar generation that becomes fully operational on or after
42 January 1, 2014, and on or before December 31, 2017;

43 (c) Provide up to a maximum of one and one-half million dollars annually in each
44 of calendar years 2018, 2019, and 2020 to its customers that install up to one hundred
45 kilowatts of solar generation that becomes fully operational on or after January 1, 2018,
46 and on or before December 31, 2020;

47 (4) An electric utility with Missouri revenues of at least \$350 million dollars but no
48 more than \$649 million dollars shall, subject to the per-customer limits specified in
49 subsection 3 of this section:

50 (a) Provide up to a maximum of one and one-half million dollars annually in each
51 of calendar years 2012 and 2013 to its net-metered customers that install up to one hundred

52 kilowatts of solar generation that becomes fully operational on or after January 1, 2012,
53 and on or before December 31, 2013;

54 (b) Provide up to a maximum of one million dollars annually in each of calendar
55 years 2014, 2015, 2016, and 2017 to its net-metered customers that install up to one
56 hundred kilowatts of solar generation that becomes fully operational on or after January 1,
57 2014, and on or before December 31, 2017;

58 (c) Provide up to a maximum of five hundred thousand dollars annually in each of
59 calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one
60 hundred kilowatts of solar generation that becomes fully operational on or after January 1,
61 2018, and on or before December 31, 2020.

62 2. The financial incentive amounts prescribed by subsection 1 of this section shall
63 be expensed by the electric utility in the year in which they are paid.

64 3. A net-metered customer shall be eligible for up to a maximum financial incentive
65 investment of three dollars per watt for the first twenty-five kilowatts of solar generation
66 installed, two dollars per watt for up to an additional twenty-five kilowatts of solar
67 generation installed for a maximum incentive not to exceed fifty kilowatts.
68 Notwithstanding the foregoing provisions of this subsection, no customer shall receive a
69 total financial incentive payment that exceeds sixty percent of the total installed cost of the
70 customer's solar generation in years 2012 to 2013, fifty percent in years 2014 to 2017, forty
71 percent in years 2018 to 2020, and no financial incentive payments shall be made until the
72 customer has provided documentation approved by the electric utility establishing the total
73 installed cost. To further ensure that all such installations provide the optimal electrical
74 output, the commission shall establish terms and conditions so that such installations meet
75 the requirements using established industry standards and practice.

76 4. An electric utility has no obligation to provide any additional financial incentive
77 investments in a calendar year once the annual amount for that calendar year and any
78 excess amount not otherwise provided to net-metered customers in any prior year as
79 specified in subsection 1 of this section is exhausted. Financial incentive investment
80 amounts not exhausted in a prior calendar year shall carry over to subsequent calendar
81 years.

82 5. By accepting the terms and conditions established by the electric utility for
83 eligibility and in conjunction with all net-metering requirements, financial incentives
84 provided by subsection 3 of this section:

85 (1) For all systems, the net-metering customer agrees that the electric utility
86 providing the financial incentive shall have and possess all right, title, and interest in and
87 to all RECs generated up to a maximum of fifty kilowatts by the solar generation for which

88 financial incentives were paid for a period of ten years after the solar generation became
89 fully operational; provided, that thereafter, any such RECs shall belong to the net-
90 metering customer owning the generation; and

91 (2) The net-metering customer installing a system of ten kilowatts or more agrees
92 to install, at the customer's expense, a separate utility meter to measure the output from
93 the customer's system.

94 6. Each electric utility shall make available to its retail customers a standard rebate
95 offer of at least two dollars per installed watt for new or expanded solar electric systems
96 sited on customers' premises, up to a maximum of twenty-five kilowatts per system, that
97 become operational after 2009, and prior to January 1, 2012. The provisions of this
98 subsection shall not apply to any electric utility with Missouri revenues of at least three
99 hundred fifty million dollars but no more than six hundred forty-nine million dollars.

393.1420. 1. In addition to the requirements of subsection 1 of section 393.1415, an
2 electric utility with revenues of \$2.3 billion dollars or more shall provide up to a maximum
3 of five hundred thousand dollars annually in each of calendar years 2012, 2013, and 2014
4 to its net-metered customers that install nonsolar renewable energy resources of up to one
5 hundred kilowatts that become fully operational within each respective calendar year.

6 2. The financial incentive amounts prescribed by subsection 1 of this section shall
7 be expensed by the electric utility in the year in which they are paid.

8 3. A net-metered customer shall be eligible for up to a maximum financial incentive
9 of one dollar per watt for nonsolar renewable energy resources installed in 2012, 2013, or
10 2014 not to exceed one hundred kilowatts. Notwithstanding the foregoing provisions of this
11 subsection, no customer shall receive a total financial incentive payment that exceeds forty
12 percent of the total installed cost of the customer's new renewable generation, and no
13 financial incentive payments shall be made until the customer has provided documentation
14 approved by the electric utility establishing the total installed cost.

15 4. An electric utility has no obligation to provide any additional financial incentive
16 investments in a calendar year once the annual amount for that calendar year and any
17 excess amount not otherwise provided to net-metered customers in any prior year as
18 specified in subsection 3 of this section is exhausted. Financial incentive amounts not
19 exhausted in a prior calendar year shall carry over to subsequent calendar years.

20 5. By accepting the financial incentives provided by this section the net-metering
21 customer installing a system of ten kilowatts or more agrees to install, at the customer's
22 expense, a separate meter to measure the output from the customer's system.

393.1425. As used in sections 393.1425 to 393.1435, the following words and phrases
2 mean:

- 3 (1) "Accumulation period", a six-month period preceding a filing to establish or
4 change the RES during which the RES expenses used in the filing are accumulated for
5 recovery through the RES tariff;
- 6 (2) "RES capital costs", the depreciation expense and property taxes of the electric
7 utility that are associated with the electric utility's capital investments in renewable energy
8 resources that provide delivered energy, including capital investments made in compliance
9 with section 393.1410 and capital investments made to comply with renewable energy
10 standards in effect prior to the effective date of sections 393.1400 to 393.1445;
- 11 (3) "RES costs", the sum of:
- 12 (a) RES expenses;
- 13 (b) RES capital costs; and
- 14 (c) RES return applicable to a filing to establish or change an RES rate;
- 15 (4) "RES expenses", the sum of:
- 16 (a) The electric utility's accumulation period costs of obtaining delivered energy
17 from renewable energy resources under contracts entered into on or after January 1, 2012,
18 and the financial incentives paid and expensed by the electric utility during the
19 accumulation period under sections 393.1415 and 393.1420; and
- 20 (b) The electric utility's unrecovered costs incurred on or after November 4, 2008,
21 through the end of the accumulation period relating to its compliance with renewable
22 energy standards in effect prior to the effective date of sections 393.1400 to 393.1445,
23 including, but not limited to, its administrative costs, which include but are not limited to
24 the cost to register, retire, or close out any account RECs with the North American
25 Renewable Registry; the costs of solar rebates; the costs of solar RECs, whether acquired
26 through a contract with the electric utility's customers or from third parties to meet the
27 solar requirements of the renewable energy standard; and any other costs incurred by the
28 electric utility to meet the requirements of the Renewable Energy Standard. Any RES
29 expenses that were previously included in the electric utility's rates shall be excluded;
- 30 (5) "RES return", the electric utility's weighted average cost of capital multiplied
31 by the undepreciated balance, as adjusted for prior periods, if any, accumulated
32 depreciation amounts, on the electric utility's books as of the end of the accumulation
33 period for the electric utility's investment in renewable energy resources that provide
34 delivered energy, including capital investments made in compliance with section 393.1410
35 and capital investments made to comply with renewable energy standards in effect prior
36 to the effective date of sections 393.1400 to 393.1445. The income taxes related to the RES
37 return shall be included;

38 (6) "RES revenues", revenues produced through a RES exclusive of revenues from
39 all other rates and charges.

**393.1430. 1. Notwithstanding any provisions of this chapter and chapter 386 to the
2 contrary, beginning August 28, 2011, an electric utility may file a petition and proposed
3 tariffs with the commission to establish or change RES tariffs that will allow for the
4 adjustment of the electric utility's rates and charges to provide for full recovery of RES
5 costs, including full recovery of any RES costs in excess of the rate impact caps in section
6 393.1410. A RES and any future changes thereto shall be calculated and implemented in
7 accordance with the provisions of sections 393.1425 to 393.1435. RES revenues shall be
8 subject to refund based upon a finding and order of the commission to the extent provided
9 in subsections 5 and 8 of section 393.1435.**

10 **2. The commission shall not approve a RES tariff for any electric utility that has
11 not had a general rate proceeding decided or dismissed by issuance of a commission order
12 within the past five years, unless the electric utility has filed for or is the subject of a new
13 general rate proceeding.**

14 **3. In no event shall an electric utility collect a RES tariff for a period exceeding five
15 years unless the electric utility has filed for or is the subject of a new general rate
16 proceeding; provided that the RES may be collected until the effective date of new rate
17 schedules established as a result of the new general rate proceeding, or until the subject
18 general rate proceeding is otherwise decided or dismissed by issuance of a commission
19 order without new rates being established.**

**393.1435. 1. (1) At the time that an electric utility files a petition with the
2 commission seeking to establish or change a RES, it shall submit proposed RES tariffs and
3 its supporting documentation regarding the calculation of the proposed RES with the
4 petition, and shall serve the office of the public counsel with a copy of its petition, its
5 proposed rate schedules, and its supporting documentation.**

6 **(2) Upon the filing of a petition and any associated tariffs, seeking to establish or
7 change a RES tariff, the commission shall publish notice of the filing.**

8 **2. (1) When a petition, along with any associated proposed tariffs, is filed under
9 the provisions of sections 393.1425 to 393.1435, the staff of the commission shall conduct
10 an examination of the proposed RES.**

11 **(2) The staff of the commission may audit the information of the electric utility to
12 confirm that the underlying costs are in accordance with the provisions of sections
13 393.1425 to 393.1435, and to confirm proper calculation of the proposed surcharge, and
14 may submit a report regarding its examination to the commission not later than sixty days
15 after the petition is filed. No other revenue requirement or ratemaking issues may be**

16 examined in consideration of the petition or associated proposed RES filed under the
17 provisions of sections 393.1425 to 393.1435.

18 (3) The commission may hold a hearing on the petition and any proposed RES and
19 shall issue an order to become effective not later than one hundred twenty days after the
20 petition is filed.

21 (4) If the commission finds that a petition complies with the requirements of
22 sections 393.1425 to 393.1435, the commission shall enter an order authorizing the electric
23 utility to impose a RES that is sufficient to recover appropriate pretax revenue, as
24 determined by the commission under the provisions of sections 393.1425 to 393.1435.

25 3. An electric utility may effectuate a change in its RES under the provisions of this
26 section no more often than two times every twelve months.

27 4. In determining the appropriate pretax revenue, the commission shall consider
28 only the following factors:

29 (1) The current state, federal, and local income tax or excise rates;

30 (2) The electric utility's actual regulatory capital structure as determined during
31 the most recent general rate proceeding of the electric utility;

32 (3) The actual cost rates for the electric utility's debt and preferred stock as
33 determined during the most recent general rate proceeding of the electric utility;

34 (4) The electric utility's cost of common equity as determined during the most
35 recent general rate proceeding of the electric utility;

36 (5) The current property tax rate or rates applicable to the investments in
37 renewable energy resources;

38 (6) The current depreciation rates applicable to the investments in renewable
39 energy resources; and

40 (7) In the event information under subdivisions (2), (3), and (4) of this subsection
41 are unavailable and the commission is not provided with such information as an
42 agreed-upon basis, the commission shall refer to the testimony submitted during the most
43 recent general rate proceeding of the electric utility and use, in lieu of any such unavailable
44 information, the recommended capital structure, recommended cost rates for debt and
45 preferred stock, and recommended cost of common equity that would produce the average
46 weighted cost of capital based upon the various recommendations contained in such
47 testimony.

48 5. (1) The monthly RES may be calculated based on a reasonable estimate of billing
49 units in the period in which the charge will be in effect, which shall be conclusively
50 established by dividing the appropriate pretax revenues by the customer numbers reported
51 by the electric utility in the annual report it most recently filed with the commission under

52 subdivision (6) of section 393.140, and then further dividing this quotient by twelve;
53 provided, however, that the monthly RES may vary according to customer class and may
54 be calculated based on customer numbers as determined during the most recent general
55 rate proceeding of the electric utility so long as the monthly RES for each customer class
56 maintains a proportional relationship equivalent to the proportional relationship of the
57 monthly customer charge for each customer class.

58 (2) At the end of each twelve-month calendar period the RES is in effect, the
59 electric utility shall reconcile the differences between the revenues resulting from
60 application of the RES and the appropriate pretax revenues as found by the commission
61 for that period and shall submit the reconciliation and a proposed RES rate adjustment
62 to the commission for approval to recover or refund the difference, as appropriate, through
63 adjustments to the RES.

64 6. (1) An electric utility that has implemented a RES under the provisions of
65 sections 393.1425 to 393.1435 shall file revised tariffs to reset the RES rate to zero when
66 new base rates and charges become effective for the electric utility following a commission
67 order establishing customer rates in a general rate proceeding that incorporates in the
68 utility's base rates subject to subsections 8 and 9 of this section eligible costs previously
69 reflected in a RES.

70 (2) Upon the inclusion in an electric utility's base rates subject to subsections 8 and
71 9 of this section of eligible costs previously reflected in a RES, the electric utility shall
72 immediately thereafter reconcile any previously unreconciled RES revenues as necessary
73 to ensure that revenues resulting from application of the RES match as closely as possible
74 the appropriate pretax revenues as found by the commission for that period.

75 7. An electric utility's filing of a petition or change to a RES under the provisions
76 of sections 393.1425 to 393.1435 shall not be considered a request for a general increase in
77 the electric utility's base rates and charges.

78 8. Commission approval of a petition and any associated rate schedules to establish
79 or change a RES under the provisions of sections 393.1425 to 393.1435 shall in no way be
80 binding upon the commission in determining the ratemaking treatment to be applied to
81 eligible RES costs during a subsequent general rate proceeding when the commission may
82 undertake to review the prudence of such costs. In the event the commission disallows,
83 during a subsequent general rate proceeding, recovery of any RES costs previously
84 included in a RES, the electric utility shall offset its RES in the future as necessary to
85 recognize and account for any such overcollections.

86 **9. Nothing in this section shall be construed as limiting the authority of the**
87 **commission to review and consider RES costs along with other costs during any general**
88 **rate proceeding of any electric utility.**

89 **10. Nothing contained in sections 393.1425 to 393.1435 shall be construed to impair**
90 **in any way the authority of the commission to review the reasonableness of the rates or**
91 **charges of an electric utility, including review of the prudence of incurring RES costs,**
92 **under the provisions of section 386.390.**

93 **11. Notwithstanding the terms of any fuel adjustment clause tariff approved for an**
94 **electric utility under section 386.266, the cost of power purchased from a renewable energy**
95 **resource shall constitute a RES expense as defined in subsection 2 of section 393.1425, and**
96 **shall not constitute purchased power expense under any such fuel adjustment clause tariff.**

97 **12. The commission shall have the authority to promulgate rules for the**
98 **implementation of sections 393.1425 to 393.1435, but only to the extent such rules are**
99 **consistent with, and do not delay the implementation of, the provisions of sections 393.1425**
100 **to 393.1435. Any rule or portion of a rule, as that term is defined in section 536.010, that**
101 **is created under the authority delegated in this section shall become effective only if it**
102 **complies with and is subject to all of the provisions of chapter 536 and, if applicable,**
103 **section 536.028. This section and chapter 536 are nonseverable and if any of the powers**
104 **vested with the general assembly under chapter 536 to review, to delay the effective date,**
105 **or to disapprove and annul a rule are subsequently held unconstitutional, then the grant**
106 **of rulemaking authority and any rule proposed or adopted after August 28, 2011, shall be**
107 **invalid and void.**

393.1440. 1. Beginning October 1, 2011, for calendar year 2012, and by June
2 **thirtieth of each succeeding calendar year, an electric utility shall provide a written**
3 **compliance plan to the commission documenting the electric utility's plans for meeting the**
4 **requirements of sections 393.1405 to 393.1420 for at least the following three calendar**
5 **years. The compliance plan shall include the electric utility's plans regarding the types of**
6 **renewable energy resources the electric utility intends to build or acquire, and the time**
7 **frames associated therewith.**

8 **2. Beginning April 15, 2013, for calendar year 2012, and by April fifteenth of each**
9 **succeeding calendar year, an electric utility shall provide a compliance report to the**
10 **commission documenting the electric utility's progress in meeting the requirements of**
11 **sections 393.1405 to 393.1420 for the preceding calendar year.**

393.1443. Notwithstanding the Missouri Public Service Commissions Agreement
2 **and Order number EO-2005-0329, a utility shall recover its costs in accordance with**

3 sections 393.1025 to 393.1027, and the Missouri Public Service Commission shall allow for
4 such recovery under sections 393.1025 to 393.1027.

2 **393.1445. For purposes of compliance with the requirements of sections 393.1405**
3 **to 393.1420, electric utilities owned by the same holding company and operated commonly**
4 **may reallocate the commitments between the electric utilities at its discretion such that the**
5 **overall commitment is maintained.**

2 [393.1020. Sections 393.1025 and 393.1030 shall be known as the
3 "Renewable Energy Standard".]

2 [393.1025. As used in sections 393.1020 to 393.1030, the following
3 terms mean:

3 (1) "Commission", the public service commission;
4 (2) "Department", the department of natural resources;
5 (3) "Electric utility", any electrical corporation as defined by section
6 386.020;

7 (4) "Renewable energy credit" or "REC", a tradeable certificate of proof
8 that one megawatt-hour of electricity has been generated from renewable energy
9 sources; and

10 (5) "Renewable energy resources", electric energy produced from wind,
11 solar thermal sources, photovoltaic cells and panels, dedicated crops grown for
12 energy production, cellulosic agricultural residues, plant residues, methane from
13 landfills, from agricultural operations, or from wastewater treatment, thermal
14 depolymerization or pyrolysis for converting waste material to energy, clean and
15 untreated wood such as pallets, hydropower (not including pumped storage) that
16 does not require a new diversion or impoundment of water and that has a
17 nameplate rating of ten megawatts or less, fuel cells using hydrogen produced by
18 one of the above-named renewable energy sources, and other sources of energy
19 not including nuclear that become available after November 4, 2008, and are
20 certified as renewable by rule by the department.]

21 [393.1030. 1. The commission shall, in consultation with the
2 department, prescribe by rule a portfolio requirement for all electric utilities to
3 generate or purchase electricity generated from renewable energy resources.
4 Such portfolio requirement shall provide that electricity from renewable energy
5 resources shall constitute the following portions of each electric utility's sales:

6 (1) No less than two percent for calendar years 2011 through 2013;
7 (2) No less than five percent for calendar years 2014 through 2017;
8 (3) No less than ten percent for calendar years 2018 through 2020; and
9 (4) No less than fifteen percent in each calendar year beginning in 2021.

10 At least two percent of each portfolio requirement shall be derived from solar
11 energy. The portfolio requirements shall apply to all power sold to Missouri
12 consumers whether such power is self-generated or purchased from another

13 source in or outside of this state. A utility may comply with the standard in
14 whole or in part by purchasing RECs. Each kilowatt-hour of eligible energy
15 generated in Missouri shall count as 1.25 kilowatt-hours for purposes of
16 compliance.

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

27 (1) A maximum average retail rate increase of one percent determined
28 by estimating and comparing the electric utility's cost of compliance with
29 least-cost renewable generation and the cost of continuing to generate or purchase
30 electricity from entirely nonrenewable sources, taking into proper account future
31 environmental regulatory risk including the risk of greenhouse gas regulation;

32 (2) Penalties of at least twice the average market value of renewable
33 energy credits for the compliance period for failure to meet the targets of
34 subsection 1. An electric utility will be excused if it proves to the commission
35 that failure was due to events beyond its reasonable control that could not have
36 been reasonably mitigated, or that the maximum average retail rate increase has
37 been reached. Penalties shall not be recovered from customers. Amounts
38 forfeited under this section shall be remitted to the department to purchase
39 renewable energy credits needed for compliance. Any excess forfeited revenues
40 shall be used by the department's energy center solely for renewable energy and
41 energy efficiency projects;

42 (3) Provisions for an annual report to be filed by each electric utility in
43 a format sufficient to document its progress in meeting the targets;

44 (4) Provision for recovery outside the context of a regular rate case of
45 prudently incurred costs and the pass-through of benefits to customers of any
46 savings achieved by an electrical corporation in meeting the requirements of this
47 section.

48 3. Each electric utility shall make available to its retail customers a
49 standard rebate offer of at least two dollars per installed watt for new or expanded
50 solar electric systems sited on customers' premises, up to a maximum of
51 twenty-five kilowatts per system, that become operational after 2009.

52 4. The department shall, in consultation with the commission, establish
53 by rule a certification process for electricity generated from renewable resources
54 and used to fulfill the requirements of subsection 1 of this section. Certification
55 criteria for renewable energy generation shall be determined by factors that

56 include fuel type, technology, and the environmental impacts of the generating
57 facility. Renewable energy facilities shall not cause undue adverse air, water, or
58 land use impacts, including impacts associated with the gathering of generation
59 feedstocks. If any amount of fossil fuel is used with renewable energy resources,
60 only the portion of electrical output attributable to renewable energy resources
61 shall be used to fulfill the portfolio requirements.

62 5. In carrying out the provisions of this section, the commission and the
63 department shall include methane generated from the anaerobic digestion of farm
64 animal waste and thermal depolymerization or pyrolysis for converting waste
65 material to energy as renewable energy resources for purposes of this section.]
66

2 [393.1040. In addition to the renewable energy objectives set forth in
3 sections 393.1025, 393.1030, and 393.1035, it is also the policy of this state to
4 encourage electrical corporations to develop and administer energy efficiency
5 initiatives that reduce the annual growth in energy consumption and the need to
6 build additional electric generation capacity.]

2 [393.1045. Any renewable mandate required by law shall not raise the
3 retail rates charged to the customers of electric retail suppliers by an average of
4 more than one percent in any year, and all the costs associated with any such
5 renewable mandate shall be recoverable in the retail rates charged by the electric
6 supplier. Solar rebates shall be included in the one percent rate cap provided for
in this section.]