HOU	JSE	AMENDMENT NO	
	Off	fered by	
		of	
AMEND Hous	e Committee Substitut	te for Senate Bill No. 48, Pag	je 16,
Section 39	3.1003, Line 25, by i	inserting after all of said li	ne
the follow	ing:		
" <u>393.</u>	1400. Sections 393.1	1400 to 393.1445 shall be know	ın as
the "Renew	able Energy Act".		
393.1	405. As used in sect	tions 393.1400 to 393.1445, th	<u>ıe</u>
following	terms mean:		
(1)	"Commission", the pub	olic service commission;	
(2)	"Delivered energy", t	che energy from a renewable en	ergy
resource t	hat is owned by an el	lectrical corporation or that	an
electrical	corporation has cont	tracted to purchase for Missou	<u>ıri</u>
customers;			
(3)	"Department", the dep	partment of natural resources;	_
(4)	"Electric utility", a	any electrical corporation as	
defined by	section 386.020;		
(5)	"Levelized cost of en	nergy", the present value of a	ınnual
costs of a	renewable resource o	generator over the economic li	fe
divided by	the present value of	f the annual output of a renew	able
resource g	enerator over the ecc	onomic life using the utility'	S
<u>discount r</u>	ate, including all co	osts of transmission or	
distributi	on to get the energy	into the utility's Missouri	
service te	rritory;		
(6)	"Megawatts", the gros	ss nameplate rating of an	
		electrical energy equal to on	<u>ıe</u>
thousand k	ilowatts;		
(7)	"Missouri revenues",	the electric utility's revenu	<u>les</u>
from retai	l customers in Missou	uri as reported on its audited	<u>l</u>
	statements for calend		
•		es", customers of an electric	
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- 1 utility that install, own, and operate up to one hundred
- 2 kilowatts of their own electrical generation at their property,
- 3 that have executed all agreements required by the electric
- 4 utility for connection of their electrical generation to the
- 5 <u>electric utility's system, and that are in compliance with the</u>
- 6 terms of all such agreements;
  - (9) "New renewable generation", electrical generation from a renewable energy resource that became fully operational and used for service after November 4, 2008;
  - (10) "Professional forester", any individual who holds a bachelor of science degree in forestry from a society of American Foresters accredited college or university with a minimum of two years of professional management experience;
    - (11) "Renewable energy credit" or "REC", a trackable certificate of proof that one megawatt-hour of electricity has been generated from one or more renewable energy resources;
- 17 (12) "Renewable energy resources", the electricity derived 18 from any of the following types of renewable energy resources or 19 technologies:
- 20 (a) Wind;

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- (b) Solar thermal sources or solar photovoltaic cells and panels;
  - (c) Dedicated crops grown for energy production-herbaceous and woody crops that are harvested specifically for energy production in a sustainable manner;
  - (d) Cellulosic agricultural residues, which is organic matter remaining after the harvesting and processing of agricultural crops, which shall include:
  - a. Field residues, which are organic materials left on agricultural lands after the crops have been harvested, such as stalks, stubble, leaves, and seed pods; and
  - b. Process residues, which are organic materials left after the crops have been processed into a usable resource, such as husks, seeds, and roots;
- 35 (e) Plant residues, which are residues of plants that would be converted into energy, that otherwise would be waste material;
  - (f) Clean and untreated wood, which are nonhazardous wood

- 1 that has not been chemically treated with chemical preservatives
  2 which include the following:
- 3 a. Eliqible clean and untreated wood, but is not necessarily limited to, the following sources:
- (i) Forest-related resources, such as precommercial
  thinnings waste, slash (tree tops, branches, bark, or other
  residue left on the ground after logging or other forestry
  operations), brush, shrubs, stumps, lumber ends, trimmings, yard
  waste, dead and downed forest products, and small diameter forest
- thinnings (twelve inches in diameter or less);

  (ii) Nonchemically treated wood and paper manufacturing

  waste, such as bark, trim slabs, scrap, shavings, sawdust, sander

  dust, and pulverized scraps;
- (iv) Wood chips, pellets, briquettes, wood wastes, or woody
  energy crops;
- 18 (v) Municipal solid waste, construction, and demolition
  19 waste, urban wood waste, and other similar sources, only if wood
  20 wastes are segregated from other solid wastes or inorganic
  21 wastes; and
  - (vi) Other miscellaneous waste, such as waste pellets, pallets, crates, scrap wood, tree debris left after a natural catastrophe, and recycled paper fibers that are no longer suitable for recycled paper production;
  - b. Ineligible clean and untreated wood, but is not necessarily limited to, the following sources:
- 28 (i) Post-consumer wastepaper;
- 29 (ii) Wood from old growth forests (one hundred fifty years old or older); and
- 31 (iii) Unsegregated solid waste;
- 32 (q) Methane from landfills or from wastewater treatment.
- 33 As used in this paragraph, "wastewater treatment" is defined as
- 34 physical, chemical, biological, and mechanical procedures applied
- 35 to an industrial or municipal discharge or to any other sources
- 36 of contaminated water to remove, reduce, or neutralize
- 37 contaminants;

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(h) Hydropower, not including pumped storage, that does not require a new diversion or impoundment of water and that each generator has a nameplate rating of ten megawatts or less. If an improvement to an existing hydropower facility does not require a new diversion or impoundment of water and incrementally increases the nameplate rating of each generator, up to ten megawatts per generator, the improvement qualifies as an eligible renewable energy resource;

- (i) Thermal depolymerization or pyrolysis for converting waste materials to energy;
- resources defined in this subdivision. RECs based on generating electricity in fuel cells from hydrogen derived from an eligible energy resource are eligible for compliance purposes only to the extent that the energy used to generate the hydrogen did not create RECs;
  - (k) Anaerobic digestion of farm animal waste; or
- (1) Other sources of energy, not including nuclear, that become available after November 4, 2008, and are certified as eligible renewable energy resources as defined by the department in consultation with the commission;
- (13) "Renewable energy standard" or "RES", the requirements established by sections 393.1400 to 393.1445;
- (14) "The annual value of any renewable energy purchased or produced by the electric utility", the annual value of any renewable energy purchased or produced by the electric utility's renewable energy resources used for compliance with sections 393.1400 to 393.1445 shall for each hour of the annual period be calculated by multiplying the energy produced from such resources in that hour by the actual wholesale price of energy in the electric utility's service territory as reflected by the regional transmission organization's real time hourly energy market prices within which the electric utility operates for that hour and totaling those products for the entire annual period. However, no such calculation or reduction shall be applied to dollars spent by utilities in meeting the requirement of sections 393.1415 and 393.1420.

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          393.1410. 1. Electric utilities shall own new renewable
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     generation providing delivered energy, or shall purchase
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     delivered energy from new renewable generation, or a combination
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     thereof, totaling no less than the following nameplate amounts by
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     the following dates:
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      (1) For an electric utility with total retail Missouri
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     revenues as of December 31, 2010, of $2.3 billion dollars or
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     more:
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      (a) By December 31, 2013: one hundred ten megawatts;
      (b) By December 31, 2015: two hundred ten megawatts;
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      (c) By December 31, 2018: three hundred ten megawatts;
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         (d) By December 31, 2020: four hundred ten megawatts;
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          (2) For an electric utility with total retail Missouri
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     revenues as of December 31, 2010, of at least $730 million
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     dollars but no more than $2.29 billion dollars:
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      (a) By December 31, 2013: seventy megawatts;
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          (b) By December 31, 2015: one hundred seventy megawatts;
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         (c) By December 31, 2020: one hundred ninety-five
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     megawatts;
         (3) For an electric utility with total retail Missouri
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     revenues as of December 31, 2010, of at least $708 million
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     dollars but no more than $780 million dollars:
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      (a) By December 31, 2015: twenty megawatts;
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         (b) By December 31, 2018: one hundred twenty megawatts;
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         (c) By December 31, 2020: one hundred forty-five
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     megawatts;
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       (4) An electric utility with total retail Missouri revenues
     as of December 31, 2010, of less than seven hundred eight million
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     dollars that owns renewable generation providing delivered
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     energy, or purchases delivered energy from renewable generation,
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     or a combination thereof, totaling at least one hundred forty-
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     five megawatts by December 31, 2011, shall not be required to
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     provide additional renewable generation or purchase additional
     delivered energy to comply with this section.
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          2. Notwithstanding subsection 1 of this section, if the
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     levelized cost of energy from the new renewable generation
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     prescribed by subsection 1 of this section exceeds seventy
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dollars per megawatt-hour adjusted annually for inflation according to the consumer price index, for each of the separate time periods in subsection 1 of this section, then the megawatts of new renewable generation prescribed for that time period by subsection 1 of this section shall be reduced by five percent for every dollar by which the levelized cost of energy exceeds seventy dollars per megawatt-hour adjusted annually for inflation according to the consumer price index.

- 3. Notwithstanding any provision of law to the contrary, the following limitations on rate impact shall apply:
- (1) Notwithstanding any provision of the law to the contrary, the annual net cost during any calendar year to any billing account that experienced a billing demand of five thousand kilowatts or more during the preceding calendar year, and to any interstate pipeline pumping station regardless of size, shall not be more than one percent higher than the cost would have been without the renewable energy mandates set forth in sections 393.1400 to 393.1445, where such impact is measured in accordance with subsection 5 of this section;
- any other billing account of an entity qualifying under subdivision (1) of this subsection where that account consumed five million kilowatt-hours or more during the preceding calendar year, and also to any billing account consuming more than five million kilowatt-hours per year that belongs to a parent, subsidiary, or affiliate of the entity responsible for paying the billings for the account qualifying in subdivision (1) of this subsection;
- (3) To qualify for the limitation in subdivision (2) of this subsection, the entity responsible for the billing account shall establish the existence of the required corporate relationship to the satisfaction of the electric utility.
- 4. In addition, the net cost during any calendar year to any billing account as measured in accordance with subsection 5 of this section, of a utility's compliance with the renewable mandate shall not exceed one hundred thousand dollars.
  - 5. For the purpose of applying subsection 4 of this

section, the annual net cost to any retail customer, of a 1 2 utility's compliance with the renewable mandates shall be 3 determined on an annual basis by computing that customer's share 4 of an electric utility's annual net costs to comply with the 5 renewable mandates as follows and limiting that share to one 6 hundred thousand dollars per year: (1) The following costs shall be added: 7 8 (a) Annual costs associated with owning, operating, and 9 maintaining renewable energy resources used for compliance with sections 393.1400 to 393.1445; 10 11 (b) Annual costs of purchased RECs; 12 (c) Annual cost of solar rebates; 13 (d) Annual renewable energy purchases utilized for 14 compliance with sections 393.1400 to 393.1445; (e) Annual administrative and general costs related to 15 16 compliance with sections 393.1400 to 393.1445; and 17 (f) Additional operating costs incurred to integrate a 18 renewable energy resource due to its intermittent operating 19 characteristics; 20 (2) The annual value of any renewable energy purchased or 21 produced by the electric utility's renewable energy resources 22 used for compliance with sections 393.1400 to 393.1445 (excluding 23 sections 393.1415 and 393.1420) shall be subtracted from the sum 24 of paragraphs (a) to (f) of subdivision (1) of this subsection. 25 Furthermore, for the purpose of applying subsection 3 of this 26 27 section, the increased cost to the class defined therein shall be 28 determined on an annual basis by taking its share of an electric 29 utility's cost of compliance with the renewable mandates 30 determined as follows and limiting it to one percent: 31 (3) The following costs shall be added: 32 (a) Annual costs associated with owning, operating, and 33 maintaining renewable energy resources used for compliance with 34 sections 393.1400 to 393.1445; 35 (b) Annual costs of purchased RECs; 36 (c) Annual cost of solar rebates;

(d) Annual renewable energy purchases utilized for

compliance with sections 393.1400 to 393.1445;

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- (e) Annual administrative and general costs related to compliance with sections 393.1400 to 393.1445; and
- (f) Additional operating costs incurred to integrate a renewable energy resource due to its intermittent operating characteristics;
- (4) The annual value of any renewable energy purchased or produced by the electric utility's renewable energy resources used for compliance with sections 393.1400 to 393.1445 (excluding sections 393.1415 and 393.1420) shall be subtracted from the sum of paragraphs (a) to (f) of subdivision (3) of this subsection.
- 6. An electric utility shall pay penalties of two thousand dollars per day for failure to meet the nameplate amounts specified in subsection 1 of this section. Any such monetary fine shall be distributed to the public schools under section 7, article IX of the Constitution of Missouri. An electric utility shall be excused from this subsection if it proves to the commission that failure was due to events beyond its reasonable control that could not have been reasonably mitigated.
- 7. The exclusive title and ownership of all RECs associated with the new renewable generation owned by an electric utility, or to which an electric utility has rights, associated with the generation referenced in this section shall be vested in the electric utility.
- 8. In the event the federal government enacts by statute and/or rule any provision or regulatory scheme that establishes requirements for electric utilities to generate or purchase electricity generated from renewable or clean energy resources that is stricter than the provisions of this section, such federal requirements shall supercede and take precedence over the requirements as set forth in this section and shall accordingly be deemed to preempt the provisions of this section and any portfolio requirement rules prescribed by the commission under subsection 1 of this section.
- 9. For purposes of subsection 3 of this section, the electric utility shall make a good faith effort to adjust its billings to comply with the rate impact limitations in

subsections 3 and 4 of this section. Within ninety days of the end of each calendar year, the electric utility shall calculate the actual rate impact and reimburse any excess collection by means of a bill credit, which credit is subject to subsection 1 of section 393.1430.

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- 10. Any new renewable generation within the state of Missouri shall be given a ten percent credit for purposes of compliance with sections 393.1400 to 393.1445.
- 11. (1) No renewable energy generator using woody biomass in Missouri as fuel shall be certified unless it converts the energy content of the wood or wood residue into electrical energy with an efficiency of at least thirty percent.
- (2) Any harvesting of woody biomass in Missouri shall comply with the Missouri department of conservation's Missouri woody biomass in Missouri harvesting best management practices manual, as it may be updated from time-to-time or replaced.
- (3) Harvest of woody biomass in Missouri shall be conducted to a site specific harvest plan prepared as part of a forest management plan for long-term forest sustainability developed by a professional forester.
- (4) Compliance with subdivisions (2) and (3) of this subsection shall be verified by third-party, professional foresters at the harvest site using a specified sampling intensity and under standards prescribed by the Missouri department of conservation.
- 393.1415. 1. An electric utility shall provide financial incentives, of the following amounts, as follows:
- (1) An electric utility with Missouri revenues of \$2.3 billion dollars or more shall, subject to the per-customer limits specified in subsection 3 of this section, provide:
- (a) Thirteen million dollars annually in each of calendar years 2012 and 2013 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2012, and on or before December 31, 2013;
- 36 (b) Seven million dollars annually in each of calendar 37 years 2014, 2015, 2016, and 2017 to its net-metered customers

1 that install up to one hundred kilowatts of solar generation that
2 becomes fully operational on or after January 1, 2014, and on or
3 before December 31, 2017;

- (c) Two million dollars annually in each of calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2018, and on or before December 31, 2020;
- (2) An electric utility with Missouri revenues of at least \$730 million dollars but no more than \$2.29 billion dollars shall, subject to the per-customer limits specified in subsection 3 of this section, provide:
- (a) Two and one-half million dollars annually in each of calendar years 2012 and 2013 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2012, and on or before December 31, 2013;
- (b) Two and one-quarter million dollars annually in each of calendar years 2014, 2015, 2016, and 2017 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2014, and on or before December 31, 2017;
- (c) One and one-half million dollars annually in each of calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2018, and on or before December 31, 2020;
- (3) An electric utility with Missouri revenues of at least \$708 million dollars but no more than \$780 million dollars shall, subject to the per-customer limits specified in subsection 3 of this section, provide:
- (a) Two and one-half million dollars annually in each of calendar years 2012 and 2013 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2012, and on or before December 31, 2013;
  - (b) Two and one-quarter million dollars annually in each of

calendar years 2014, 2015, 2016, and 2017 to its net-metered
customers that install up to one hundred kilowatts of solar
generation that becomes fully operational on or after January 1,
2014, and on or before December 31, 2017;

- (c) One and one-half million dollars annually in each of calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2018, and on or before December 31, 2020;
- (4) An electric utility with Missouri revenues of at least \$350 million dollars but no more than \$649 million dollars shall, subject to the per-customer limits specified in subsection 3 of this section, provide:
- (a) One and one-half million dollars annually in each of calendar years 2012 and 2013 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2012, and on or before December 31, 2013;
- (b) One million dollars annually in each of calendar years 2014, 2015, 2016, and 2017 to its net- metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2014, and on or before December 31, 2017;
- (c) Five hundred thousand dollars annually in each of calendar years 2018, 2019, and 2020 to its net-metered customers that install up to one hundred kilowatts of solar generation that becomes fully operational on or after January 1, 2018, and on or before December 31, 2020.
- 2. The financial incentive amounts prescribed by subsection 1 of this section shall at the discretion of the utility be treated as part of the electric utility's net capital investments in renewable energy resources for purposes of determining the appropriate RES rate under sections 393.1425 to 393.1443...
- 3. A net-metered customer shall be eligible for a financial incentive investment of three dollars per watt for the first twenty-five kilowatts of solar generation installed, and two dollars per watt for the next additional twenty-five kilowatts of

solar generation installed for a maximum incentive not to exceed fifty kilowatts. Notwithstanding the foregoing provisions of this subsection, no customer shall receive a total financial incentive payment that exceeds sixty percent of the total installed cost of the customer's solar generation in years 2012 to 2013, fifty percent in years 2014 to 2017, forty percent in years 2018 to 2020, and no financial incentive payments shall be made until the customer has provided documentation approved by the electric utility establishing the total installed cost. To further ensure that all <u>such installations provide the optimal</u> electrical output, the commission shall establish terms and conditions so that such installations meet the requirements using established industry standards and practices.

- 4. An electric utility has no obligation to provide any additional financial incentive investments in a calendar year once the annual amount for that calendar year and any excess amount not otherwise provided to net-metered customers in any prior year as specified in subsection 1 of this section is exhausted. Financial incentive investment amounts not exhausted in a prior calendar year shall carry over to subsequent calendar years but no amounts shall be carried forward beyond December 31, 2021.
- 5. By accepting the terms and conditions established by the electric utility for eligibility and in conjunction with all netmetering requirements, financial incentives provided by subsection 3 of this section:
- (1) For all systems, the net-metering customer agrees that the electric utility providing the financial incentive shall have and possess all right, title, and interest in and to all RECs generated up to a maximum of fifty kilowatts by the solar generation for which financial incentives were paid for a period of ten years after the solar generation became fully operational; provided, that thereafter, any such RECs shall belong to the net-metering customer owning the generation; and
- (2) The net-metering customer installing a system of ten kilowatts or more agrees to install, at the customer's expense, a separate utility meter to measure the output from the customer's

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6. Each electric utility shall make available to its retail customers a standard rebate offer of at least three dollars per installed watt for new or expanded solar electric systems sited on customers' premises, up to a maximum of twenty-five kilowatts per system, that become operational after August 28, 2011, and prior to January 1, 2012. All such amounts paid by an electric utility to a customer under this subsection shall be applied against the annual amount of financial incentive investments for calendar year 2012 as specified in subsection 1 of this section. 393.1420. 1. In addition to the requirements of subsection 1 of section 393.1415, an electric utility with revenues of \$2.3 billion dollars or more shall provide up to a maximum of five hundred thousand dollars annually in each of calendar years 2012, 2013, and 2014 to its net-metered customers that install nonsolar renewable energy resources of up to one hundred kilowatts that become fully operational within each respective calendar year. 2. The financial incentive amounts prescribed by subsection 1 of this section shall be expensed by the electric utility in

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

the year in which they are paid.

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

- no amounts shall be carried forward beyond December 31, 2015. 1
- 2 5. By accepting the financial incentives provided by this
- 3 section the net-metering customer installing a system of ten
- 4 kilowatts or more agrees to install, at the customer's expense, a
- 5 separate meter to measure the output from the customer's system.
- 6 393.1425. 1. As used in sections 393.1410 and 393.1425 to 7 393.1435, the following words and phrases mean:
  - (1) "Accumulation period", a period no greater than twelve months preceding a filing to establish or change the RES during which the RES expenses used in the filing are accumulated for recovery through the RES tariff;
  - (2) "RES capital costs", the depreciation expense and property taxes of the electric utility that are associated with the electric utility's capital investments in renewable energy resources that provide delivered energy, including capital investments made in compliance with section 393.1410 and capital investments made to comply with renewable energy standards in effect prior to the effective date of sections 393.1400 to 393.1445;
  - (3) "RES costs", the sum of:
- 21 (a) RES expenses;

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- (b) RES capital costs; and
- (c) RES return applicable to a filing to establish or change an RES rate, less;
- (d) The annual value of any renewable energy purchased or produced by the electric utility;
- (4) RES cost recovery mechanism" or "RCRM", the mechanism approved by the commission to allow an electric utility to recover all costs of compliance with the RES;
  - (5) "RES expenses", the sum of:
- The electric utility's accumulation period costs of (a) 32 obtaining delivered energy from renewable energy resources under 33 contracts entered into on or after January 1, 2011, and the 34 financial incentives paid and expensed by the electric utility
- 35 during the accumulation period under sections 393.1415 and
- 36 393.1420; and
- 37 The electric utility's unrecovered costs incurred on or

- after November 4, 2008, through the end of the accumulation period relating to its compliance with renewable energy standards in effect prior to the effective date of sections 393.1400 to 393.1445, including, but not limited to, its administrative costs, which include but are not limited to the cost to register, retire, or close out any account RECs with the North American Renewable Registry; the costs of solar rebates; the costs of solar RECs, whether acquired through a contract with the electric utility's customers or from third parties to meet the solar requirements of the RES; and any other costs incurred by the electric utility to meet the requirements of the RES. Any RES expenses that were previously included in the electric utility's rates shall be excluded;
  - (6) "RES rate", a rate approved by the commission for recovery of RES costs;

- (7) "RES return", the electric utility's weighted average cost of capital multiplied by: the electric utility's net capital investments in renewable energy resources that provide delivered energy, including capital investments made to comply with renewable energy standards in effect prior to the effective date of sections 393.1400 to 393.1445, on the electric utility's books as of the end of the accumulation period. The income taxes related to the RES return shall be included;
- (8) "RES revenues", revenues produced through a RES rate exclusive of revenues from all other rates and charges.
- 2. All RES costs incurred under paragraph (a) or (b) of subdivision (5) of subsection 1 of this section, regardless of contract term, shall be recovered in the electric utility's RES rate. That is, where the electric utility enters into contracts under subsection 1 of section 393.1410 that extend beyond the indicated dates, then all RES costs as defined in this section shall be included in the RES rate.
- 393.1430. 1. Notwithstanding any provisions of this chapter and chapter 386 to the contrary, beginning August 28, 2011, an electric utility may file a petition and proposed tariffs with the commission to establish a RCRM or to change a RES rate that will allow for the adjustment of the electric

utility's rates and charges to provide for full recovery of RES costs, including full recovery of any RES costs in excess of the rate impact caps in section 393.1410. A RES rate and any future changes thereto shall be calculated and implemented in accordance with the provisions of sections 393.1425 to 393.1435. RES revenues shall be subject to refund based upon a finding and order of the commission to the extent provided in subsections 5 and 8 of section 393.1435.

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- 2. The commission shall not approve a RCRM or a RES rate for any electric utility that has not had a general rate proceeding decided or dismissed by issuance of a commission order within the past five years, unless the electric utility has filed for or is the subject of a new general rate proceeding.
- 3. In no event shall an electric utility collect a RES rate or continue to use an approved RCRM for a period exceeding five years unless the electric utility has filed for or is the subject of a new general rate proceeding where the terms of the RCRM are reviewed by the commission; provided that a RES rate that is approved in accordance with section 393.1435 may be collected until the effective date of new rate schedules established as a result of the new general rate proceeding, or until the subject general rate proceeding is otherwise decided or dismissed by issuance of a commission order without new rates being established.
- 393.1435. 1. (1) At the time that an electric utility files a petition with the commission seeking to establish or change a RES rate, it shall submit proposed tariffs and its supporting documentation regarding the calculation of the proposed RES with the petition, and shall serve the office of the public counsel with a copy of its petition, its proposed RES rate tariff, and its supporting documentation.
- (2) Upon the filing of a petition and any associated tariffs, seeking to establish or change a RES rate, the commission shall publish notice of the filing.
- 35 <u>2. (1) When a petition, along with any associated proposed</u>
  36 <u>tariffs, is filed under the provisions of sections 393.1425 to</u>
  37 <u>393.1435, the staff of the commission shall conduct an</u>

examination of the proposed RES rate.

(2) The staff of the commission may audit the information of the electric utility to confirm that the underlying RES costs are in accordance with the provisions of sections 393.1425 to 393.1435, and to confirm proper calculation of the proposed RES rate, and may submit a report regarding its examination to the commission not later than sixty days after the petition is filed. No other revenue requirement or rate making issues may be examined in consideration of the petition or associated proposed RES rate filed under the provisions of sections 393.1425 to 393.1435.

- (3) The commission may hold a hearing on the petition and any proposed RES rate and shall issue an order to become effective not later than one hundred twenty days after the petition is filed.
- (4) If the commission finds that a petition complies with the requirements of sections 393.1425 to 393.1435, the commission shall enter an order authorizing the electric utility to impose a RES rate that is sufficient to recover appropriate pretax revenue, as determined by the commission under the provisions of sections 393.1425 to 393.1435.
- 3. An electric utility may effectuate a change in its RES under the provisions of this section no more often than two times every twelve months.
- 4. In determining the appropriate RES rate, the commission shall consider only the following factors:
- (1) The current state, federal, and local income tax or excise rates;
- (2) The electric utility's actual regulatory capital structure as determined during the most recent general rate proceeding of the electric utility;
- (3) The actual cost rates for the electric utility's debt and preferred stock as determined during the most recent general rate proceeding of the electric utility;
- 35 (4) The electric utility's cost of common equity as
  36 determined during the most recent general rate proceeding of the
  37 electric utility;

- (5) The current property tax rate or rates applicable to the investments in renewable energy resources;
- (6) The current depreciation rates applicable to the investments in renewable energy resources; and

- (7) In the event information under subdivisions (2), (3), and (4) of this subsection are unavailable and the commission is not provided with such information as an agreed-upon basis, the commission shall refer to the testimony submitted during the most recent general rate proceeding of the electric utility and use, in lieu of any such unavailable information, the recommended capital structure, recommended cost rates for debt and preferred stock, and recommended cost of common equity that would produce the average weighted cost of capital based upon the various recommendations contained in such testimony.
- 5. (1) The monthly RES rate may be calculated based on a reasonable estimate of billing units in the period in which the charge will be in effect, which shall be conclusively established by dividing the appropriate RES revenues by the customer numbers reported by the electric utility in the annual report it most recently filed with the commission under subdivision (6) of section 393.140, and then further dividing this quotient by twelve; provided, however, that the monthly RES may vary according to customer class and may be calculated based on customer numbers as determined during the most recent general rate proceeding of the electric utility so long as the monthly RES revenue for each customer class maintains a proportional relationship equivalent to the proportional relationship of the monthly customer charge revenue for each customer class.
- (2) At the end of each twelve-month calendar period the RCRM is in effect, the electric utility shall reconcile the differences between the RES revenues resulting from application of the RES rate and the appropriate RES revenues as found by the commission for that period and shall submit the reconciliation and a proposed RES rate adjustment to the commission for approval to recover or refund the difference, as appropriate, through adjustments to the RES.
  - 6. (1) An electric utility that has implemented a RCRM

under the provisions of sections 393.1425 to 393.1435 shall file revised tariffs to reset the RES rate to zero when new base rates and charges become effective for the electric utility following a commission order establishing customer rates in a general rate proceeding that incorporates in the utility's base rates subject to subsections 8 and 9 of this section eligible costs previously reflected in a RES rate.

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- (2) Upon the inclusion in an electric utility's base rates subject to subsections 8 and 9 of this section of eligible costs previously reflected in a RES rate, the electric utility shall immediately thereafter reconcile any previously unreconciled RES revenues as necessary to ensure that revenues resulting from application of the RES rate match as closely as possible the appropriate RES revenues as found by the commission for that period.
- 7. An electric utility's filing of a petition or change to a RES rate under the provisions of sections 393.1425 to 393.1435 shall not be considered a request for a general increase in the electric utility's base rates and charges.
- 8. Commission approval of a petition and any associated rate schedules to establish or change a RES rate under the provisions of sections 393.1425 to 393.1435 shall in no way be binding upon the commission in determining the rate making treatment to be applied to eliqible RES costs during a subsequent general rate proceeding when the commission may undertake to review the prudence of such costs. In the event the commission disallows, during a subsequent general rate proceeding, recovery of any RES costs previously included in a RES rate, the electric utility shall change its RES rate in the future as necessary to recognize and account for any such over collections.
- 9. Nothing in this section shall be construed as limiting the authority of the commission to review and consider RES costs along with other costs during any general rate proceeding of any electric utility.
- 10. Nothing contained in sections 393.1425 to 393.1435 shall be construed to impair in any way the authority of the commission to review the reasonableness of the rates or charges

of an electric utility, including review of the prudence of incurring RES costs, under the provisions of section 386.390.

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- 11. Notwithstanding the terms of any fuel adjustment clause tariff approved for an electric utility under section 386.266, the cost of power purchased from a renewable energy resource shall constitute a RES expense as defined in subsection 2 of section 393.1425, and shall not constitute purchased power expense under any such fuel adjustment clause tariff.
- 12. The commission shall have the authority to promulgate rules for the implementation of sections 393.1425 to 393.1435, but only to the extent such rules are consistent with, and do not delay the implementation of, the provisions of sections 393.1425 to 393.1435. Any rule or portion of a rule, as that term is defined in section 536.010, that is created under the authority delegated in this section shall become effective only if it complies with and is subject to all of the provisions of chapter 536 and, if applicable, section 536.028. This section and chapter 536 are nonseverable and if any of the powers vested with the general assembly under chapter 536 to review, to delay the effective date, or to disapprove and annul a rule are subsequently held unconstitutional, then the grant of rulemaking authority and any rule proposed or adopted after August 28, 2011, shall be invalid and void.
- 13. Alternatively, an electric utility may recover RES compliance costs without use of the RES cost recovery mechanism, through rates established in a general rate proceeding. In the interim between general rate proceedings, the electric utility may defer the costs in a regulatory asset account, and monthly calculate a carrying charge on the balance in that regulatory asset account equal to its short-term cost of borrowing. All questions pertaining to rate recovery of the RES compliance costs in a subsequent general rate proceeding will be reserved to that proceeding, including the prudence of the costs for which rate recovery is sought and the period of time over which any costs allowed rate recovery will be amortized. Any rate recovery granted to RES compliance costs under this subsection shall be fully subject to the retail rate impact requirements of the RES.

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

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- 2. Beginning April 15, 2013, for calendar year 2012, and by April fifteenth of each succeeding calendar year, an electric utility shall provide a compliance report to the commission documenting the electric utility's progress in meeting the requirements of sections 393.1405 to 393.1420 for the preceding calendar year.
- 393.1443. Notwithstanding the Missouri Public Service
  Commissions Agreement and Order number EO-2005-0329, a utility
  shall recover its costs in accordance with sections 393.1400 to
  393.1440, and the Missouri Public Service Commission shall allow
  for such recovery under sections 393.1400 to 393.1440.
- 393.1445. For purposes of compliance with the requirements of sections 393.1405 to 393.1420, electric utilities owned by the same holding company and operated commonly may reallocate the commitments between the electric utilities at its discretion such that the overall commitment is maintained."; and

Further amend said bill, Page 19, Section 414.570, Line 36, by inserting after all of said line the following:

- "620.2300. 1. As used in this section, the following terms shall mean:
- (1) "Department", the Missouri department of economic development;
- (2) "Biomass facility", a biomass renewable energy facility or biomass fuel production facility that will not be a major source for air quality permitting purposes;
  - (3) "Commission", the Missouri public service commission;
- (4) "County average wage", the average wages in each county as determined by the department for the most recently completed

full calendar year. However, if the computed county average wage is above the statewide average wage, the statewide average wage shall be deemed the county average wage for such county for the purpose of determining eligibility. The department shall publish the county average wage for each county at least annually. Notwithstanding the provisions of this subdivision to the contrary, for any project that is relocating employees from a Missouri county with a higher county average wage, the company shall obtain the endorsement of the governing body of the community from which jobs are being relocated or the county average wage for their project shall be the county average wage for the county from which the employees are being relocated;

- (5) "Full-time employee", an employee of the project facility that is scheduled to work an average of at least thirty-five hours per week for a twelve-month period, and one for which the employer offers health insurance and pays at least fifty percent of such insurance premiums;
- (6) "Major source", the same meaning as is provided under 40 CFR 70.2;
  - (7) "New job", the number of full-time employees located at the project facility that exceeds the project facility base employment less any decrease in the number of full-time employees at related facilities below the related facility base employment.

    An employee that spends less than fifty percent of the employee's work time at the project facility is still considered to be located at a facility if the employee receives his or her directions and control from that facility, is on the facility's payroll, one hundred percent of the employee's income from such employment is Missouri income, and the employee is paid at or above the state average wage;
- (8) "Park", an area consisting of a parcel or tract of land, or any combination of parcels or contiguous land that meet all of the following requirements:
  - (a) The area consists of at least fifty contiguous acres;
- (b) The property within the area is subject to remediation under a clean up program supervised by the Missouri department of natural resources or United States Environmental Protection

## Agency;

- (c) The area contains a manufacturing facility that is closed, undergoing closure, idle, underutilized, or curtailed and that at one time employed at least two hundred employees;
- (d) The development plan for the area includes a biomass facility; and
  - (e) Property located within the area will be used for the development of renewable energy and the demonstration of industrial on-site energy generation;
  - (9) "Project", a cleanfields renewable energy demonstration project located within a park that will result in the creation of at least fifty new jobs and the retention of at least fifty existing jobs;
  - (10) "Project application", an application submitted to the department, by an owner of all or a portion of a park, on a form provided by the department, requesting benefits provided under this section;
  - (11) "Project facility", a biomass facility at which the new jobs will be located. A project facility may include separate buildings that are located within fifty miles of each other or within the same county such that their purpose and operations are interrelated;
  - (12) "Project facility base employment", the greater of the number of full-time employees located at the project facility on the date of the project application or for the twelve-month period prior to the date of the project application, the average number of full-time employees located at the project facility.

    In the event the project facility has not been in operation for a full twelve-month period, the average number of full-time employees for the number of months the project facility has been in operation prior to the date of the project application.
  - 2. The owner of a park seeking to establish a project shall submit a project application to the department for certification of such project. The department shall review all project applications received under this section and, in consultation with the department of natural resources, verify satisfaction of the requirements of this section. If the department approves a

project application, the department shall forward such application and approval to the commission.

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- 3. Notwithstanding provisions of section 393.1030 to the contrary, upon receipt of an application and approval from the department, the commission shall assign twice credit to any electric power, renewable energy, renewable energy credits, or any successor credit generated from:
- (1) Renewable energy resources purchased from the biomass facility located in the park by an electric power supplier;
- (2) Electric power generated off-site by utilizing biomass fuel sold by the biomass facility located at the park; or
- (3) Electric power generated off-site by renewable energy resources utilizing storage equipment manufactured at the park that increases the quantity of electricity delivered to the electric power supplier."; and

Further amend said bill, Page 19, Section 660.122, Line 21, by inserting after all of said line the following:

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

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

- (1) "Commission", the public service commission;
- (2) "Department", the department of natural
  resources;
- (3) "Electric utility", any electrical corporation as defined by section 386.020;
- (4) "Renewable energy credit" or "REC", a tradeable certificate of proof that one megawatt-hour of electricity has been generated from renewable energy sources; and
- (5) "Renewable energy resources", electric energy produced from wind, solar thermal sources, photovoltaic cells and panels, dedicated crops grown for energy production, cellulosic agricultural residues, plant residues, methane from landfills, from agricultural operations, or from wastewater treatment, thermal depolymerization or pyrolysis for converting waste material to energy, clean and untreated wood such as pallets, hydropower (not including pumped storage) that does not require a new diversion or impoundment of water and that has a nameplate rating of ten megawatts or less, fuel cells using hydrogen produced by one of

the above-named renewable energy sources, and other sources of energy not including nuclear that become available after November 4, 2008, and are certified as renewable by rule by the department.]

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- [393.1030. 1. The commission shall, in consultation with the department, prescribe by rule a portfolio requirement for all electric utilities to generate or purchase electricity generated from renewable energy resources. Such portfolio requirement shall provide that electricity from renewable energy resources shall constitute the following portions of each electric utility's sales:
- (1) No less than two percent for calendar years 2011 through 2013;
- (2) No less than five percent for calendar years 2014 through 2017;
- (3) No less than ten percent for calendar years 2018 through 2020; and
- (4) No less than fifteen percent in each calendar year beginning in 2021. At least two percent of each portfolio requirement shall be derived from solar energy. The portfolio requirements shall apply to all power sold to Missouri consumers whether such power is self-generated or purchased from another source in or outside of this state. A utility may comply with the standard in whole or in part by purchasing RECs. Each kilowatt-hour of eligible energy generated in Missouri shall count as 1.25 kilowatt-hours for purposes of compliance.
- The commission, in consultation with the department and within one year of November 4, 2008, shall select a program for tracking and verifying the trading of renewable energy credits. An unused credit may exist for up to three years from the date of its creation. A credit may be used only once to comply with sections 393.1020 to 393.1030 and may not also be used to satisfy any similar nonfederal requirement. An electric utility may not use a credit derived from a green pricing program. Certificates from net-metered sources shall initially be owned by the customer-generator. The commission, except where the department is specified, shall make whatever rules are necessary to enforce the renewable energy standard. Such rules shall include:
- (1) A maximum average retail rate increase of one percent determined by estimating and comparing the electric utility's cost of compliance with least-cost

renewable generation and the cost of continuing to generate or purchase electricity from entirely nonrenewable sources, taking into proper account future environmental regulatory risk including the risk of greenhouse gas regulation;

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- (2) Penalties of at least twice the average market value of renewable energy credits for the compliance period for failure to meet the targets of subsection 1. An electric utility will be excused if it proves to the commission that failure was due to events beyond its reasonable control that could not have been reasonably mitigated, or that the maximum average retail rate increase has been reached. Penalties shall not be recovered from customers. Amounts forfeited under this section shall be remitted to the department to purchase renewable energy credits needed for compliance. Any excess forfeited revenues shall be used by the department's energy center solely for renewable energy and energy efficiency projects;
- (3) Provisions for an annual report to be filed by each electric utility in a format sufficient to document its progress in meeting the targets;
- (4) Provision for recovery outside the context of a regular rate case of prudently incurred costs and the pass-through of benefits to customers of any savings achieved by an electrical corporation in meeting the requirements of this section.
- 3. Each electric utility shall make available to its retail customers a standard rebate offer of at least two dollars per installed watt for new or expanded solar electric systems sited on customers' premises, up to a maximum of twenty-five kilowatts per system, that become operational after 2009.
- 4. The department shall, in consultation with the commission, establish by rule a certification process for electricity generated from renewable resources and used to fulfill the requirements of subsection 1 of this section. Certification criteria for renewable energy generation shall be determined by factors that include fuel type, technology, and the environmental impacts of the generating facility. Renewable energy facilities shall not cause undue adverse air, water, or land use impacts, including impacts associated with the gathering of generation feedstocks. If any amount of fossil fuel is used with renewable energy resources, only the portion of electrical output attributable to renewable energy resources shall be used to fulfill the portfolio requirements.

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

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

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

[393.1050. Notwithstanding any other provision of law, any electrical corporation as defined by subdivision 15 of section 386.020 which, by January 20, 2009, achieves an amount of eligible renewable energy technology nameplate capacity equal to or greater than fifteen percent of such corporation's total owned fossil-fired generating capacity, shall be exempt thereafter from a requirement to pay any installation subsidy, fee, or rebate to its customers that install their own solar electric energy system and shall be exempt from meeting any mandated solar renewable energy standard requirements. Any disputes or denial of exemptions under this section may be reviewable by the circuit court of Cole County as prescribed by law.]"; and

Further amend said bill, Page 20, Section B, Line 3 by inserting after the word "decisions" the following: "and the need to ensure the creation of jobs through the utilization of alternative energy sources"; and

Further amend said bill, Page 20, Section B, Line 4, by inserting after the number "386.540" the following: "and the

enactment of section 620.2300"; and

Further amend said bill, Page 20, Section B, Line 7, by

inserting after the number "386.540" the following: "and the

enactment of section 620.2300"; and

Further amend said title, enacting clause and intersectional

references accordingly.