

SENATE
STATE OF MINNESOTA
EIGHTY-EIGHTH LEGISLATURE

S.F. No. 901

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DATE	D-PG	OFFICIAL STATUS
02/28/2013	453	Introduction and first reading Referred to Environment and Energy
04/02/2013	1465a	Comm report: To pass as amended and re-refer to Finance
05/07/2013	3364a	Comm report: To pass as amended
	3396	Second reading
05/09/2013	3460	HF substituted on General Orders HF956

A bill for an act

1.1 relating to energy; promoting renewable energy; regulating the distributed
1.2 generation of electric energy; establishing a requirement for utilities to generate
1.3 solar energy; providing various incentives for the production of solar energy;
1.4 requiring several studies related to electric energy; regulating utility cost
1.5 recovery for certain transmission, emission reduction, and gas infrastructure
1.6 investments; providing state energy policies; appropriating money; amending
1.7 Minnesota Statutes 2012, sections 16C.144, subdivision 2; 216B.02, subdivision
1.8 4; 216B.16, subdivision 7b; 216B.1635; 216B.164, subdivisions 2, 3, 4, 6, by
1.9 adding subdivisions; 216B.1692, subdivisions 1, 8, by adding a subdivision;
1.10 216B.1695, subdivision 5, by adding a subdivision; 216B.2401; 216B.241,
1.11 subdivisions 1, 1e, by adding a subdivision; 216B.2422, subdivision 4; 216C.05;
1.12 216C.435, subdivision 8, by adding a subdivision; 216C.436, subdivisions
1.13 2, 7, 8; 429.101, subdivision 2; Laws 2005, chapter 97, article 10, section 3;
1.14 proposing coding for new law in Minnesota Statutes, chapters 3; 116C; 216B;
1.15 216C; repealing Minnesota Statutes 2012, section 216B.1637.

1.16
1.17 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

ARTICLE 1

STATE ENERGY POLICY

1.18
1.19
1.20 Section 1. **[3.8852] PLANNING STRATEGY FOR SUSTAINABLE ENERGY**
1.21 **FUTURE.**

1.22 (a) The Legislative Energy Commission, in consultation with the commissioner
1.23 of commerce, shall develop a framework for the state of Minnesota to transition to a
1.24 renewable energy economy that ends Minnesota's contribution to greenhouse gases from
1.25 burning fossil fuels within the next few decades. The framework and strategy should aim
1.26 to make Minnesota the first state in the nation to use only renewable energy.

1.27 (b) In developing the framework for this transition, the commission must consult
1.28 with stakeholders, including, but not limited to, representatives from cooperative,

2.1 municipal, and investor-owned utilities, natural resources and environmental advocacy
2.2 groups, labor and industry, and technical and scientific experts to examine the challenges
2.3 and opportunities involved to develop a strategy and timeline to protect the environment
2.4 and create jobs. The timeline must establish goals and strategies to reach the state's
2.5 renewable energy standards and prepare for the steps beyond reaching those standards. The
2.6 Department of Commerce, Division of Energy Resources shall provide technical support.

2.7 (c) The commission and its stakeholders must consider the following in creating
2.8 the framework:

2.9 (1) the economic and environmental costs of continued reliance on fossil fuels;

2.10 (2) the creation of jobs and industry in the state that result from moving ahead of
2.11 other states in transitioning to a sustainable energy economy;

2.12 (3) the appropriate energy efficiency and renewable energy investments in
2.13 Minnesota to reduce the economic losses to the Minnesota economy from importation
2.14 of fossil fuels; and

2.15 (4) the new technologies for energy efficiency, storage, transmission, and renewable
2.16 generation needed to reliably meet the demand for energy.

2.17 (d) The framework shall be modified as needed to take advantage of new
2.18 technological developments to facilitate ending fossil fuel use in power generation,
2.19 heating and cooling, industry, and transportation.

2.20 (e) The commission shall report to the legislative committees and divisions with
2.21 jurisdiction over energy policy by January 15, 2014, and annually thereafter, on progress
2.22 towards achieving the framework goals.

2.23 **Sec. 2. SCOPING FOR RENEWABLE ENERGY STUDY.**

2.24 The commissioner of commerce, in consultation with the Legislative Energy
2.25 Commission, shall develop the scope for a Minnesota energy future study on how
2.26 Minnesota can achieve a sustainable energy system that does not rely on the burning
2.27 of fossil fuels.

2.28 The study must include energy use in the electrical, transportation, thermal and
2.29 industrial sectors of the state economy. The study shall evaluate options for different
2.30 mixes of renewable energy, efficiency, energy storage, and new technologies that can
2.31 best transform each sector of energy use to become fully sustainable and no longer rely
2.32 on fossil fuels in a cost-effective manner.

2.33 The study must analyze both costs and benefits. The study must include at least the
2.34 following considerations: system reliability, utility rates, energy prices, jobs, economic
2.35 development, public health, and environmental quality. Calculation of costs and benefits

3.1 must be based on full cost, life-cycle accounting methods that include the benefits of
 3.2 avoided externalities. The study must be designed to develop appropriate timelines and
 3.3 accommodate modifications that will occur as new technologies and efficiencies develop.

3.4 In developing the scope, the commissioner shall engage stakeholders concerning
 3.5 the study's parameters and assumptions. The commissioner must report the results of
 3.6 the scoping process to the Legislative Energy Commission by January 1, 2014. The
 3.7 commissioner may assess up to \$100,000 under Minnesota Statutes, section 216B.62, to
 3.8 scope and develop this energy study proposal.

3.9 **EFFECTIVE DATE.** This section is effective the day following final enactment.

3.10 **ARTICLE 2**

3.11 **DISTRIBUTED GENERATION; SOLAR STANDARD**

3.12 Section 1. Minnesota Statutes 2012, section 216B.02, subdivision 4, is amended to read:

3.13 Subd. 4. **Public utility.** "Public utility" means persons, corporations, or other legal
 3.14 entities, their lessees, trustees, and receivers, now or hereafter operating, maintaining,
 3.15 or controlling in this state equipment or facilities for furnishing at retail natural,
 3.16 manufactured, or mixed gas or electric service to or for the public or engaged in the
 3.17 production and retail sale thereof but does not include (1) a municipality or a cooperative
 3.18 electric association, organized under the provisions of chapter 308A, producing or
 3.19 furnishing natural, manufactured, or mixed gas or electric service; (2) a retail seller of
 3.20 compressed natural gas used as a vehicular fuel which purchases the gas from a public
 3.21 utility; or (3) a retail seller of electricity used to recharge a battery that powers an electric
 3.22 vehicle, as defined in section 169.011, subdivision 26a, and that is not otherwise a public
 3.23 utility under this chapter. Except as otherwise provided, the provisions of this chapter shall
 3.24 not be applicable to any sale of natural, manufactured, or mixed gas or electricity by a
 3.25 public utility to another public utility for resale. In addition, the provisions of this chapter
 3.26 shall not apply to a public utility whose total natural gas business consists of supplying
 3.27 natural, manufactured, or mixed gas to not more than 650 customers within a city pursuant
 3.28 to a franchise granted by the city, provided a resolution of the city council requesting
 3.29 exemption from regulation is filed with the commission. The city council may rescind
 3.30 the resolution requesting exemption at any time, and, upon the filing of the rescinding
 3.31 resolution with the commission, the provisions of this chapter shall apply to the public
 3.32 utility. No person shall be deemed to be a public utility if it furnishes its services only to
 3.33 tenants or cooperative or condominium owners in buildings owned, leased, or operated
 3.34 by such person. No person shall be deemed to be a public utility if it furnishes service

4.1 to occupants of a manufactured home or trailer park owned, leased, or operated by such
4.2 person. No person shall be deemed to be a public utility if it produces or furnishes service
4.3 to less than 25 persons. No persons shall be deemed to be a public utility solely as a result
4.4 of financing or ownership of distributed generation equipment located on a customer's
4.5 property, provided all of the output of the generating equipment is delivered or sold to the
4.6 utility that serves the customers.

4.7 Sec. 2. Minnesota Statutes 2012, section 216B.164, subdivision 2, is amended to read:

4.8 Subd. 2. **Applicability.** This section as well as any rules promulgated by the
4.9 commission to implement this section or the Public Utility Regulatory Policies Act
4.10 of 1978, Public Law 95-617, Statutes at Large, volume 92, page 3117, and the Federal
4.11 Energy Regulatory Commission regulations thereunder, Code of Federal Regulations,
4.12 title 18, part 292, shall, unless otherwise provided in this section, apply to all Minnesota
4.13 electric utilities, including cooperative electric associations and municipal electric utilities.

4.14 Sec. 3. Minnesota Statutes 2012, section 216B.164, is amended by adding a
4.15 subdivision to read:

4.16 Subd. 2a. **Definitions.** (a) For the purposes of this section, the following terms
4.17 have the meanings given them:

4.18 (b) "Aggregated meter" means a meter located on the premises of a customer's
4.19 owned or leased property that is contiguous with property containing the customer's
4.20 designated meter.

4.21 (c) "Capacity" means the number of megawatts AC (alternating current) at the point
4.22 of interconnection between a distributed generation facility and a utility's electric system.

4.23 (d) "Cogeneration" means a combined process whereby electrical and useful thermal
4.24 energy are produced simultaneously.

4.25 (e) "Contiguous property" means property owned or leased by the customer sharing
4.26 a common border, without regard to interruptions in contiguity caused by easements,
4.27 public thoroughfares, transportation rights-of-way, or utility rights-of-way.

4.28 (f) "Customer" means the person who is named on the utility electric bill for the
4.29 premises.

4.30 (g) "Designated meter" means a meter that is physically attached to the customer's
4.31 facility that the customer-generator designates as the first meter to which net metered
4.32 credits are to be applied as the primary meter for billing purposes when the customer is
4.33 serviced by more than one meter.

4.34 (h) "Distributed generation" means a facility that:

- 5.1 (1) has a capacity of ten megawatts or less;
5.2 (2) is interconnected with a utility's distribution system, over which the commission
5.3 has jurisdiction; and
5.4 (3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel,
5.5 and may include waste heat, cogeneration, or fuel cell technology.
5.6 (i) "High-efficiency, distributed generation" means a distributed energy facility that
5.7 has a minimum efficiency of 40 percent, as calculated under section 272.0211.
5.8 (j) "Net metered facility" means an electric generation facility with the purpose of
5.9 offsetting energy use through the use of renewable energy or high-efficiency distributed
5.10 generation sources.
5.11 (k) "Renewable energy" has the meaning given in section 216B.2411, subdivision 2.

5.12 Sec. 4. Minnesota Statutes 2012, section 216B.164, subdivision 3, is amended to read:

5.13 Subd. 3. **Purchases; small facilities.** (a) This paragraph applies to cooperative
5.14 electric associations and municipal utilities. For a qualifying facility having less than
5.15 40-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility
5.16 according to the applicable rate schedule for sales to that class of customer. In the case
5.17 of net input into the utility system by a qualifying facility having less than 40-kilowatt
5.18 capacity, compensation to the customer shall be at a per kilowatt-hour rate determined
5.19 under paragraph ~~(b)~~ or (c) or (d).

5.20 (b) This paragraph applies to public utilities. For a qualifying facility having less
5.21 than 1,000-kilowatt capacity, the customer shall be billed for the net energy supplied by
5.22 the utility according to the applicable rate schedule for sales to that class of customer. In
5.23 the case of net input into the utility system by a qualifying facility having: (1) more than
5.24 40-kilowatt but less than 1,000-kilowatt capacity, compensation to the customer shall be
5.25 at a per kilowatt-hour rate determined under paragraph (c); or (2) less than 40-kilowatt
5.26 capacity, compensation to the customer shall be at a per-kilowatt rate determined under
5.27 paragraph (d). Compensation for net input into the utility system shall be applied as a
5.28 credit to the customer's energy bill, carried forward and applied to subsequent energy bills
5.29 for a period of up to 12 months. If any credit remains after a calendar year, the value of the
5.30 remaining credit must be paid to the customer within 15 days of the next billing date.

5.31 (c) In setting rates, the commission shall consider the fixed distribution costs to the
5.32 utility not otherwise accounted for in the basic monthly charge and shall ensure that the
5.33 costs charged to the qualifying facility are not discriminatory in relation to the costs
5.34 charged to other customers of the utility. The commission shall set the rates for net
5.35 input into the utility system based on avoided costs as defined in the Code of Federal

6.1 Regulations, title 18, section 292.101, paragraph (b)(6), the factors listed in Code of
6.2 Federal Regulations, title 18, section 292.304, and all other relevant factors.

6.3 ~~(e)~~ (d) Notwithstanding any provision in this chapter to the contrary, a qualifying
6.4 facility that began generating electricity before January 1, 2015, having less than
6.5 40-kilowatt capacity may elect that the compensation for net input by the qualifying
6.6 facility into the utility system shall be at the average retail utility energy rate. "Average
6.7 retail utility energy rate" is defined as the average of the retail energy rates, exclusive of
6.8 special rates based on income, age, or energy conservation, according to the applicable
6.9 rate schedule of the utility for sales to that class of customer.

6.10 ~~(d)~~ (e) If the qualifying facility or net metered facility is interconnected with a
6.11 nongenerating utility which has a sole source contract with a municipal power agency or a
6.12 generation and transmission utility, the nongenerating utility may elect to treat its purchase
6.13 of any net input under this subdivision as being made on behalf of its supplier and shall
6.14 be reimbursed by its supplier for any additional costs incurred in making the purchase.
6.15 Qualifying facilities or net metered facilities having less than 40-kilowatt 1,000-kilowatt
6.16 capacity if interconnected to a public utility, or 40-kilowatt capacity if interconnected to a
6.17 cooperative electric association or municipal utility may, at the customer's option, elect to
6.18 be governed by the provisions of subdivision 4.

6.19 Sec. 5. Minnesota Statutes 2012, section 216B.164, subdivision 4, is amended to read:

6.20 Subd. 4. **Purchases; wheeling; costs.** (a) Except as otherwise provided in paragraph
6.21 (c), this subdivision shall apply to all qualifying facilities having 40-kilowatt capacity or
6.22 more as well as qualifying facilities as defined in subdivision 3 and net metered systems
6.23 under subdivision 4a, if interconnected to a cooperative electric association or municipal
6.24 utility, or 1,000-kilowatt capacity or more if interconnected to a public utility, which elect
6.25 to be governed by its provisions.

6.26 (b) The utility to which the qualifying facility is interconnected shall purchase all
6.27 energy and capacity made available by the qualifying facility. The qualifying facility shall
6.28 be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as
6.29 set by the commission, or as determined through competitive bidding approved by the
6.30 commission. The full avoided capacity and energy costs to be paid a qualifying facility
6.31 that generates electric power by means of a renewable energy source are the utility's least
6.32 cost renewable energy facility or the bid of a competing supplier of a least cost renewable
6.33 energy facility, whichever is lower, unless the commission's resource plan order, under
6.34 section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet
6.35 the identified capacity need is not in the public interest.

7.1 (c) For all qualifying facilities having 30-kilowatt capacity or more, the utility
7.2 shall, at the qualifying facility's or the utility's request, provide wheeling or exchange
7.3 agreements wherever practicable to sell the qualifying facility's output to any other
7.4 Minnesota utility having generation expansion anticipated or planned for the ensuing ten
7.5 years. The commission shall establish the methods and procedures to insure that except
7.6 for reasonable wheeling charges and line losses, the qualifying facility receives the full
7.7 avoided energy and capacity costs of the utility ultimately receiving the output.

7.8 (d) The commission shall set rates for electricity generated by renewable energy.

7.9 Sec. 6. Minnesota Statutes 2012, section 216B.164, is amended by adding a
7.10 subdivision to read:

7.11 Subd. 4a. **Net metered facility.** Except for customers receiving a value of solar rate
7.12 under subdivision 10, a customer with a net metered facility having less than 1,000-kilowatt
7.13 capacity if interconnected to a public utility or 40-kilowatt capacity if interconnected to a
7.14 cooperative electric association or municipal utility may elect to be compensated for the
7.15 customer's net input into the utility system in the form of a kilowatt-hour credit on the
7.16 customer's energy bill carried forward and applied to subsequent energy bills. Any net
7.17 input supplied by the customer into the utility system that exceeds energy supplied to the
7.18 customer by the utility during a calendar year must be compensated at the utility's avoided
7.19 cost rate under subdivision 3, paragraph (c), or subdivision 4, paragraph (b), as applicable.

7.20 Sec. 7. Minnesota Statutes 2012, section 216B.164, is amended by adding a
7.21 subdivision to read:

7.22 Subd. 4b. **Aggregation of meters.** (a) For the purpose of measuring electricity
7.23 under subdivisions 3 and 4a, a public utility must aggregate for billing purposes a
7.24 customer's designated meter with one or more aggregated meters if a customer requests
7.25 that it do so. To qualify for aggregation under this subdivision, a meter must be owned by
7.26 the customer requesting the aggregation, must be located on contiguous property owned
7.27 by the customer requesting the aggregation, and the total of all aggregated meters must be
7.28 subject to the size limitation in this section.

7.29 (b) A public utility must comply with a request by a customer-generator to aggregate
7.30 additional meters within 90 days. The specific meters must be identified at the time of the
7.31 request. In the event that more than one meter is identified, the customer must designate
7.32 the rank order for the aggregated meters to which the net metered credits are to be applied.
7.33 At least 60 days prior to the beginning of the next annual billing period, a customer may
7.34 amend the rank order of the aggregated meters, subject to this subdivision.

8.1 (c) The aggregation of meters applies only to charges that use kilowatt-hours as the
8.2 billing determinant. All other charges applicable to each meter account shall be billed to
8.3 the customer.

8.4 (d) A public utility will first apply the kilowatt-hour credit to the charges for the
8.5 designated meter and then to the charges for the aggregated meters in the rank order
8.6 specified by the customer. If the net metered facility supplies more electricity to the
8.7 public utility than the energy usage recorded by the customer-generator's designated and
8.8 aggregated meters during a monthly billing period, the public utility shall apply credits to
8.9 the customer's next monthly bill for the excess kilowatt-hours.

8.10 (e) With the commission's prior approval, a public utility may charge the
8.11 customer-generator requesting to aggregate meters a reasonable fee to cover the
8.12 administrative costs incurred in implementing the costs of this subdivision, pursuant to
8.13 a tariff approved by the commission for a public utility.

8.14 Sec. 8. Minnesota Statutes 2012, section 216B.164, is amended by adding a
8.15 subdivision to read:

8.16 Subd. 4c. **Limiting cumulative generation prohibited.** The commission is
8.17 prohibited from limiting the cumulative generation of net metered facilities under
8.18 subdivision 4a and qualifying facilities under subdivision 3 to less than five percent of
8.19 a public utility's average annual retail electricity sales over the previous three calendar
8.20 years. Prior to interconnecting a net metered facility that would result in cumulative net
8.21 metered facility generation in excess of its limit of five percent, a public utility's obligation
8.22 to offer net metering to a new customer-generator may be limited by the commission if
8.23 it determines doing so is in the public interest. The commission may limit net metering
8.24 obligations under this subdivision only after providing notice and opportunity for public
8.25 comment. When determining whether limiting net metering obligations under this
8.26 subdivision is in the public interest, the commission shall consider:

8.27 (1) the environmental and other public policy benefits of net metered systems;

8.28 (2) the impact of net metered systems on the electricity costs for customers without
8.29 net metered systems;

8.30 (3) the effects of net metering on the reliability of the electric system;

8.31 (4) technical advances or technical concerns; and

8.32 (5) other statutory obligations imposed on the commission or a utility.

8.33 The commission may limit net metering obligations under clauses (2) to (4) only if it
8.34 finds implementation would cause significant rate impact, require significant measures
8.35 to address reliability, or raise significant technical issues.

9.1 Sec. 9. Minnesota Statutes 2012, section 216B.164, is amended by adding a
9.2 subdivision to read:

9.3 Subd. 4d. **Individual system capacity limits.** Public utilities that provide retail
9.4 electric service may require customers participating in net metering and net billing to limit
9.5 the total generation capacity of individual distributed generation systems by either:

9.6 (1) for wind generation systems, limiting the total generation system capacity kilowatt
9.7 alternating current to 120 percent of the customer's on-site maximum electric demand; or

9.8 (2) for solar photovoltaic and other distributed generation limiting the total
9.9 generation system annual energy production kilowatt hours alternating current to 120
9.10 percent of the customer's on-site annual electric energy consumption.

9.11 Limits under clauses (1) and (2) must be based on standard 15-minute intervals,
9.12 measured during the previous 12 calendar months, or on a reasonable estimate of the
9.13 average monthly maximum demand or average annual consumption if the customer has
9.14 either:

9.15 (i) less than 12 calendar months of actual electric usage; or

9.16 (ii) no demand metering available.

9.17 Sec. 10. Minnesota Statutes 2012, section 216B.164, subdivision 6, is amended to read:

9.18 **Subd. 6. Rules and uniform contract.** (a) The commission shall promulgate rules
9.19 to implement the provisions of this section. The commission shall also establish a uniform
9.20 statewide form of contract for use between utilities and a net metered or qualifying
9.21 facility having less than 40-kilowatt 1,000-kilowatt capacity if interconnected to a public
9.22 utility or 40-kilowatt capacity if interconnected to a cooperative electric association or
9.23 municipal utility.

9.24 (b) The commission shall require the qualifying facility to provide the utility with
9.25 reasonable access to the premises and equipment of the qualifying facility if the particular
9.26 configuration of the qualifying facility precludes disconnection or testing of the qualifying
9.27 facility from the utility side of the interconnection with the utility remaining responsible
9.28 for its personnel.

9.29 (c) The uniform statewide form of contract shall be applied to all new and existing
9.30 interconnections established between a utility and a net metered or qualifying facility
9.31 having less than 40-kilowatt capacity, except that existing contracts may remain in force
9.32 until written notice of election that the uniform statewide contract form applies is given by
9.33 either party to the other, with the notice being of the shortest time period permitted under
9.34 the existing contract for termination of the existing contract by either party, but not less
9.35 than ten nor longer than 30 days terminated by mutual agreement between both parties.

10.1 (d) A public utility may not apply a standby charge to a net metered facility.

10.2 Sec. 11. Minnesota Statutes 2012, section 216B.164, is amended by adding a
10.3 subdivision to read:

10.4 Subd. 10. **Alternative tariff; compensation for resource value.** (a) A public utility
10.5 may apply for commission approval, or a cooperative electric association or municipal
10.6 electric utility may apply for approval from its governing body, for an alternative
10.7 tariff that compensates customers through a bill credit mechanism for the value to the
10.8 utility, its customers, and society for operating distributed solar photovoltaic resources
10.9 interconnected to the utility system and operated by customers primarily for meeting their
10.10 own energy needs. Alternative tariffs approved by the governing body of a cooperative
10.11 electric association or municipal utility must be filed with the commission.

10.12 (b) If approved, the alternative tariff shall apply to customers' interconnections
10.13 occurring after the date of approval. The alternative tariff is in lieu of the small facility
10.14 rate or net metering for distributed solar resources under subdivisions 3 and 4a.

10.15 (c) The commission or governing body shall after notice and opportunity for public
10.16 comment approve the alternative tariff provided the utility or association has demonstrated
10.17 the alternative tariff:

10.18 (1) appropriately applies a methodology substantially similar to the methodology
10.19 established by the department under this subdivision;

10.20 (2) includes a mechanism to allow recovery of the cost to serve customers operating
10.21 distributed solar systems;

10.22 (3) charges the customer for all electricity consumed by the customer at the
10.23 applicable rate schedule for sales to that class of customer;

10.24 (4) credits the customer for all electricity generated by the solar photovoltaic device
10.25 at the value-based credit rate established under this subdivision;

10.26 (5) applies the charges and credits in clauses (3) and (4) to a monthly bill that
10.27 includes a provision so that the unused portion of the credit in any month or billing period
10.28 shall be carried forward and credited against all charges. In the event that the customer
10.29 has a positive balance after the 12-month cycle ending on the last day in February, that
10.30 balance will be eliminated and the credit cycle will restart the following billing period
10.31 beginning on March 1;

10.32 (6) complies with the size limits specified in subdivision 4a;

10.33 (7) complies with the interconnection requirements under section 216B.1611; and

10.34 (8) is not subject to standby or network charges.

11.1 (d) A utility must provide to the customer the meter and any other equipment needed
 11.2 to provide service under the alternative tariff.

11.3 (e) The department must establish the distributed solar value methodology in
 11.4 paragraph (c), clause (1), no later than January 31, 2014. The methodology may not be
 11.5 used unless approved by the commission. The department must submit the methodology
 11.6 to the commission for approval. The commission must approve, modify with the consent
 11.7 of the department, or disapprove the methodology within 60 days of its submission.
 11.8 When developing the distributed solar value methodology, the department shall consult
 11.9 stakeholders with experience and expertise in power systems, solar energy, and electric
 11.10 utility ratemaking regarding the proposed methodology, underlying assumptions, and
 11.11 preliminary data.

11.12 (f) The distributed solar value methodology established by the department must,
 11.13 at a minimum, account for the value of energy and its delivery, generation capacity,
 11.14 transmission capacity, transmission and distribution line losses, and environmental
 11.15 value. The department may, based on known and measurable evidence of the cost or
 11.16 benefit of solar operation to the utility, incorporate other values into the methodology,
 11.17 including credit for locally manufactured or assembled energy systems, systems installed
 11.18 at high-value locations on the distribution grid, or other factors.

11.19 (g) The credit for distributed solar value applied to alternative tariffs approved
 11.20 under this section shall represent the present value of the future revenue streams of the
 11.21 value components identified in paragraph (f).

11.22 (h) The utility shall recalculate the alternative tariff on an annual cycle, and shall file
 11.23 the recalculated alternative tariff with the commission or governing body for approval.

11.24 (i) Renewable energy credits for solar energy credited under this subdivision belong
 11.25 to the electric utility providing the credit.

11.26 **Sec. 12. [216B.1641] COMMUNITY SOLAR GARDEN.**

11.27 (a) The public utility subject to section 116C.779 shall file by September 30, 2013, a
 11.28 plan with the commission to operate a community solar garden program. Other public
 11.29 utilities may file an application at their election. The community solar garden program must
 11.30 be designed to offset the energy use of not less than five subscribers in each community
 11.31 solar garden program of which no single subscriber has more than a 40 percent interest.
 11.32 The owner of the community solar garden may be a public utility or any other entity or
 11.33 organization that contracts to sell the output from the community solar garden to the utility.

11.34 (b) A solar garden must have a nameplate capacity of no more than one megawatt.
 11.35 Each subscription shall be sized to represent at least one kilowatt of the community

12.1 solar garden's generating capacity and to supply, when combined with other distributed
 12.2 generation resources serving the premises, no more than 120 percent of the average annual
 12.3 consumption of electricity by each subscriber at the premises to which the subscription is
 12.4 attributed.

12.5 (c) The solar generation facility must be located in the service territory of the public
 12.6 utility filing the plan. Subscribers must be retail customers of the public utility located in
 12.7 the same county or a county contiguous to where the facility is located.

12.8 (d) The public utility must purchase from the community solar garden all energy
 12.9 generated by the solar garden. The purchase shall be at the value of solar rate as calculated
 12.10 under section 216B.164, subdivision 10.

12.11 (e) The commission may approve, disapprove, or modify a plan based on, among
 12.12 other things, the following factors:

12.13 (1) that the plan reasonably allows for the creation of solar gardens;

12.14 (2) that the plan establishes a mechanism that allows the utility to recoup
 12.15 interconnection costs for each community solar garden;

12.16 (3) that the plan is nondiscriminatory among customers; and

12.17 (4) that the plan is consistent with the public interest.

12.18 **Sec. 13. [216B.2427] SOLAR ELECTRICITY STANDARD.**

12.19 Subdivision 1. **Definitions.** (a) For the purposes of this section, the terms defined in
 12.20 this subdivision have the meanings given them.

12.21 (b) "Public utility" has the meaning given in section 216B.02, subdivision 4.

12.22 (c) "Total retail electric sales" has the meaning given in section 216B.1691,
 12.23 subdivision 1, paragraph (c).

12.24 Subd. 2. **Solar electricity standard.** (a) A public utility must generate or procure
 12.25 solar electric generation capacity for its retail customers in Minnesota or the retail
 12.26 customers of a distribution utility to which the public utility provides wholesale electric
 12.27 service. At a minimum, one percent of the public utility's total retail electric sales to retail
 12.28 customers in Minnesota must be generated by solar energy by the end of the year 2025.

12.29 (b) For the purposes of calculating the total retail electric sales under this section of
 12.30 a public utility, there shall be excluded retail electric sales to customers that are:

12.31 (1) a mineral extraction or mineral processing facility or a paper mill that meets the
 12.32 definition of a "large customer facility" under section 216B.241, subdivision 1, paragraph
 12.33 (i); or

12.34 (2) an iron ore mining operation using over ten megawatts connected load and
 12.35 producing iron concentrate.

13.1 Those customers may not have included in the rates charged to them by the public utility
13.2 any costs of satisfying the solar standard specified by this section.

13.3 (c) A public utility may not use energy used to satisfy the solar energy standard
13.4 under this section to satisfy its standard obligation under section 216B.1691, nor may
13.5 energy used to satisfy the standard under section 216B.1691 be used to satisfy the standard
13.6 under this section.

13.7 Subd. 3. **Use of integrated resource planning process.** Except if inconsistent with
13.8 this section, the commission may modify or delay implementation of a standard obligation
13.9 in the same manner as in section 26B.1691, subdivision 2b, as a part of an integrated
13.10 resource planning proceeding under section 216B.2422, or in other proceedings before the
13.11 commission. The order to delay or modify shall not be considered advisory with respect
13.12 to any public utility. This subdivision shall not be construed to limit the commission's
13.13 authority to modify or delay implementation of a standard obligation in other proceedings
13.14 before it.

13.15 Subd. 4. **Utility plans filed with commission.** Each public utility shall report
13.16 to the commission on its plans, activities, and progress demonstrating the efforts made
13.17 towards complying with this section. The report shall be included in its filings under
13.18 section 216B.2422 or in a separate report submitted to the commission every two years,
13.19 whichever is more frequent. In its resource plan or separate report, each public utility shall
13.20 provide a description of:

13.21 (1) the status of the utility's solar energy mix relative to the standards;

13.22 (2) efforts taken to meet the standards;

13.23 (3) any obstacles encountered or anticipated in meeting the standards;

13.24 (4) potential solutions to the identified obstacles; and

13.25 (5) an estimation of the rate impact related to measures taken by the public utility
13.26 necessary to comply with this section. The rate impact estimate must be for wholesale
13.27 rates and, if the public utility makes retail sales, an estimate shall also be completed
13.28 for the impact on the public utility's retail rates. An estimation of rate impacts must
13.29 also account for acquisition of energy capacity, distribution, and transmission upgrades
13.30 avoided as a result of the standards.

13.31 Subd. 5. **Renewable energy credits.** In lieu of generating or procuring energy
13.32 directly to satisfy the solar electricity standard of this section, a public utility may use
13.33 renewable energy credits that originate from a solar electricity generator to satisfy the
13.34 standard. In doing so, a public utility must follow protocols established by the commission
13.35 under section 216B.1691, subdivision 4 for registering, tracking, and retiring credits.

14.1 Subd. 6. **Compliance; penalties.** (a) The commission must regularly investigate
 14.2 whether a public utility is in compliance with its standard obligation under subdivision 2.

14.3 (b) If the commission finds noncompliance, it may order the public utility to
 14.4 construct solar energy facilities, purchase solar energy, purchase renewable energy credits
 14.5 generated by solar energy, or engage in other activities to achieve compliance. If a public
 14.6 utility fails to comply with an order under this subdivision, the commission may impose a
 14.7 financial penalty on the public utility in an amount not to exceed the estimated cost of the
 14.8 public utility to achieve compliance. The penalty may not exceed the lesser of the cost
 14.9 of constructing facilities or purchasing renewable energy credits necessary for the public
 14.10 utility to achieve compliance. The commission must deposit financial penalties imposed
 14.11 under this subdivision in the energy and conservation account established in the special
 14.12 revenue fund under section 216B.241, subdivision 2a.

14.13 (c) Nothing in this subdivision shall be construed to limit any other authority the
 14.14 commission possesses to enforce this section.

14.15 Sec. 14. **STUDY; SOLAR ENERGY AND COOPERATIVE ELECTRIC**
 14.16 **ASSOCIATIONS AND MUNICIPAL UTILITIES.**

14.17 The Legislative Energy Commission must convene a group, including
 14.18 representatives from cooperative electric associations and municipal utilities, to discuss
 14.19 the role of solar energy as a generation resource for associations and municipal utilities.
 14.20 The discussions should be broadly focused on all issues related to solar as a generation
 14.21 resource including, without limitation:

14.22 (1) the comparative cost and value of solar and other generation resources;

14.23 (2) the need for new generation resources and timing of that need;

14.24 (3) the ownership, siting, sizing, pricing, and interconnection of solar generation; and

14.25 (4) the integration of solar generation with conservation and other generation

14.26 resources.

14.27 The group must be convened by July 1, 2013, and must report the results of the discussion
 14.28 to the commission by February 1, 2014.

14.29 **EFFECTIVE DATE.** This section is effective the day following final enactment.

14.30 **ARTICLE 3**

14.31 **MADE IN MINNESOTA**

14.32 **Section 1. [216C.411] DEFINITIONS.**

15.1 For the purposes of sections 216C.411 to 216C.415, the following terms have the
 15.2 meanings given.

15.3 (a) "Made in Minnesota" means the manufacture in this state of solar photovoltaic
 15.4 modules:

15.5 (1) at a manufacturing facility located in Minnesota that is registered and authorized
 15.6 to manufacture and apply the UL 1703 certification mark to solar photovoltaic modules by
 15.7 Underwriters Laboratory (UL), CSA International, Intertek, or an equivalent UL-approved
 15.8 independent certification agency;

15.9 (2) that bear UL 1703 certification marks from UL, CSA International, Intertek, or
 15.10 an equivalent UL-approved independent certification agency, which must be physically
 15.11 applied to the modules at a manufacturing facility described in clause (1); and

15.12 (3) that are manufactured in Minnesota:

15.13 (i) by manufacturing processes that must include tabbing, stringing, and lamination;

15.14 or

15.15 (ii) by interconnecting low-voltage direct current photovoltaic elements that produce
 15.16 the final useful photovoltaic output of the modules.

15.17 A solar photovoltaic module that is manufactured by attaching microinverters, direct
 15.18 current optimizers, or other power electronics to a laminate or solar photovoltaic
 15.19 module that has received UL 1703 certification marks outside Minnesota from UL, CSA
 15.20 International, Intertek, or an equivalent UL-approved independent certification agency is
 15.21 not "Made in Minnesota" under this paragraph.

15.22 (b) "Solar photovoltaic module" has the meaning given in section 116C.7791,
 15.23 subdivision 1, paragraph (e).

15.24 **EFFECTIVE DATE.** This section is effective the day following final enactment.

15.25 **Sec. 2. [216C.412] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION**
 15.26 **INCENTIVE ACCOUNT.**

15.27 **Subdivision 1. Account established; account management.** A "Made in
 15.28 Minnesota" solar energy production incentive account is established as a separate account
 15.29 in the special revenue fund in the state treasury. Earnings, such as interest, dividends,
 15.30 and any other earnings arising from account assets, must be credited to the account.
 15.31 Funds remaining in the account at the end of a fiscal year do not cancel to the general
 15.32 fund but remain in the account. There is annually appropriated from the account to the
 15.33 commissioner of commerce money sufficient to make the incentive payments under
 15.34 section 216C.415 and to administer sections 216C.412 to 216C.415.

16.1 Subd. 2. **Payments from public utilities.** (a) Beginning January 1, 2014, and
16.2 each January 1 thereafter, through 2023, for a total of ten years, each electric public
16.3 utility subject to section 216B.241 must annually pay to the commissioner of commerce
16.4 five percent of the minimum amount it is required to spend on energy conservation
16.5 improvements under section 216B.241, subdivision 1a. Payments made under this
16.6 paragraph count towards satisfying expenditure obligations of a public utility under section
16.7 216B.241, subdivision 1a. The commissioner shall, upon receipt of the funds, deposit them
16.8 in the account established in subdivision 1. A public utility subject to this paragraph must
16.9 be credited energy-savings for the purpose of satisfying its energy savings requirement
16.10 under section 216B.241, subdivision 1c, based on its payment to the commissioner.

16.11 (b) Notwithstanding section 116C.779, subdivision 1, paragraph (g), beginning
16.12 January 1, 2014, and continuing through January 1, 2023, for a total of ten years, the utility
16.13 that manages the account under section 116C.779 must annually pay from that account to
16.14 the commissioner an amount that, when added to the total amount paid to the commissioner
16.15 of commerce under paragraph (a), totals \$15,000,000 annually. The commissioner shall,
16.16 upon receipt of the payment, deposit it in the account established in subdivision 1.

16.17 **EFFECTIVE DATE.** This section is effective the day following final enactment.

16.18 Sec. 3. **[216C.413] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION**
16.19 **INCENTIVE; QUALIFICATION.**

16.20 Subdivision 1. **Application.** A manufacturer of solar photovoltaic modules seeking
16.21 to qualify those modules as eligible to receive the "Made in Minnesota" solar energy
16.22 production incentive must submit an application to the commissioner of commerce on a
16.23 form prescribed by the commissioner. The application must contain:

16.24 (1) a technical description of the solar photovoltaic module and the processes used
16.25 to manufacture it, excluding proprietary details;

16.26 (2) documentation that the solar photovoltaic module meets all the required
16.27 applicable parts of the "Made in Minnesota" definition in section 216C.411, including
16.28 evidence of the UL 1703 right to mark for all solar photovoltaic modules seeking to
16.29 qualify as "Made in Minnesota";

16.30 (3) any additional nonproprietary information requested by the commissioner
16.31 of commerce; and

16.32 (4) certification signed by the chief executive officer of the manufacturing company
16.33 attesting to the truthfulness of the contents of the application and supporting materials
16.34 under penalty of perjury.

17.1 Subd. 2. **Certification.** If the commissioner determines that a manufacturer's solar
 17.2 photovoltaic module meets the definition of "Made in Minnesota" in section 216C.411, the
 17.3 commissioner shall issue the manufacturer a "Made in Minnesota" certificate containing
 17.4 the name and model numbers of the certified solar photovoltaic modules and the date of
 17.5 certification. The commissioner must issue or deny the issuance of a certificate within 90
 17.6 days of receipt of a completed application. A copy of the certificate must be provided to
 17.7 each purchaser of the solar photovoltaic module.

17.8 Subd. 3. **Revocation of certification.** The commissioner may revoke a certification
 17.9 of a module as "Made in Minnesota" if the commissioner finds that the module no longer
 17.10 meets the requirements to be certified. The revocation does not affect incentive payments
 17.11 awarded prior to the revocation.

17.12 **EFFECTIVE DATE.** This section is effective the day following final enactment.

17.13 Sec. 4. **[216C.414] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION**
 17.14 **INCENTIVE.**

17.15 Subdivision 1. **Setting incentive.** Within 90 days of a module being certified as
 17.16 "Made in Minnesota" the commissioner of commerce shall set a solar energy production
 17.17 incentive amount for that solar photovoltaic module for the purpose of the incentive
 17.18 payment under section 216C.415. The incentive is a performance-based financial
 17.19 incentive expressed as a per kilowatt-hour amount. The amount shall be used for incentive
 17.20 applications approved in the year to which the incentive amount is applicable for the
 17.21 ten-year duration of the incentive payments. An incentive amount must be calculated for
 17.22 each module for each calendar year, through 2023.

17.23 Subd. 2. **Criteria for determining incentive amount.** (a) The commissioner shall
 17.24 set the incentive payment amount by determining the average amount of incentive payment
 17.25 required to allow an average owner of installed solar photovoltaic modules a reasonable
 17.26 return on their investment. In setting the incentive amount the commissioner shall consider:

17.27 (1) an estimate of the installed cost per kilowatt-direct current, based on the cost data
 17.28 supplied by the manufacturer in the application submitted under section 216C.413, and an
 17.29 estimate of the average installation cost based on a representative sample of Minnesota
 17.30 solar photovoltaic installed projects;

17.31 (2) the average insolation rate in Minnesota;

17.32 (3) an estimate of the decline in the generation efficiency of the solar photovoltaic
 17.33 modules over time;

17.34 (4) the rate paid by utilities to owners of solar photovoltaic modules under section
 17.35 216B.164 or other law;

18.1 (5) applicable federal tax incentives for installing solar photovoltaic modules; and
 18.2 (6) the estimated levelized cost per kilowatt-hour generated.

18.3 (b) The commissioner shall annually, for incentive applications received in a year,
 18.4 revise each incentive amount based on the factors in paragraph (a), clauses (1) to (6),
 18.5 general market conditions, and the availability of other incentives. In no case shall the
 18.6 "Made in Minnesota" incentive amount result in the "Made in Minnesota" incentives paid
 18.7 exceeding 40 percent, net of average applicable taxes on the ten-year incentive payments,
 18.8 of the average historic installation cost per kilowatt. The commissioner may exceed the 40
 18.9 percent cap if the commissioner determines it is necessary to fully expend funds available
 18.10 for incentive payments in a particular year.

18.11 Subd. 3. **Metering of production.** A utility or association must, at the expense of a
 18.12 customer, provide a meter to measure the production of a solar photovoltaic module
 18.13 system that is approved to receive incentive payments. The utility or association must
 18.14 furnish the commissioner with information sufficient for the commissioner to determine
 18.15 the incentive payment. The information must be provided on a calendar year basis by no
 18.16 later than March 1. The commissioner shall provide an association or utility with forms to
 18.17 use to provide the production information. A customer must attest to the accuracy of the
 18.18 production information.

18.19 Subd. 4. **Payment due date.** Payments must be made no later than July 1 following
 18.20 the year of production.

18.21 Subd. 5. **Renewable energy credits.** Renewable energy credits associated with
 18.22 energy provided to a utility or association for which an incentive payment is made belong
 18.23 to the utility or association.

18.24 Sec. 5. **[216C.415] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION**
 18.25 **INCENTIVE; PAYMENT.**

18.26 Subdivision 1. **Incentive payment.** Incentive payments may be made under this
 18.27 section only to an owner of grid-connected solar photovoltaic modules with a total
 18.28 nameplate capacity below 40 kilowatts direct current who:

18.29 (1) has submitted to the commissioner, on a form established by the commissioner,
 18.30 an application to receive the incentive that has been approved by the commissioner;

18.31 (2) has received a "Made in Minnesota" certificate under section 216C.413 for
 18.32 the module; and

18.33 (3) has installed on residential or commercial property solar photovoltaic modules
 18.34 that are generating electricity and has received a "Made in Minnesota" certificate under
 18.35 section 216C.413.

19.1 Subd. 2. **Application process.** Applications for an incentive payment must be
19.2 received by the commissioner between January 1 and February 28. The commissioner
19.3 shall by a random method approve the number of applications the commissioner
19.4 reasonably determines will exhaust the funds available for payment for the ten-year period
19.5 of incentive payments. Applications for residential and commercial installations shall be
19.6 separately randomly approved.

19.7 Subd. 3. **Commissioner approval of incentive application.** The commissioner
19.8 must approve an application for an incentive for an owner to be eligible for incentive
19.9 payments. The commissioner must not approve an application in a calendar year if the
19.10 commissioner determines there will not be sufficient funding available to pay an incentive
19.11 to the applicant for any portion of the ten-year duration of payment. The commissioner
19.12 shall annually establish a cap on the cumulative capacity for a program year based on
19.13 funds available and historic average installation costs. Receipt of an incentive is not
19.14 an entitlement and payment need only be made from available funds in the "Made in
19.15 Minnesota" solar production incentive account.

19.16 Subd. 4. **Eligibility window; payment duration.** (a) Payments may be made under
19.17 this section only for electricity generated from new solar photovoltaic module installations
19.18 that are commissioned between January 1, 2014, and December 31, 2023.

19.19 (b) The payment eligibility window of the incentive begins and runs consecutively
19.20 from the date the solar system is commissioned.

19.21 (c) An owner of solar photovoltaic modules may receive payments under this
19.22 section for a particular module for a period of ten years provided that sufficient funds are
19.23 available in the account.

19.24 (d) No payment may be made under this section for electricity generated after
19.25 December 31, 2033.

19.26 (e) An owner of solar photovoltaic modules may not first begin to receive payments
19.27 under this section after December 31, 2024.

19.28 Subd. 5. **Allocation of payments.** (a) If there are sufficient applications,
19.29 approximately 50 percent of the incentive payment shall be for owners of eligible solar
19.30 photovoltaic modules installed on residential property, and approximately 50 percent shall
19.31 be for owners of eligible solar photovoltaic modules installed on commercial property.

19.32 (b) The commissioner shall endeavor to distribute incentives paid under this section
19.33 to owners of solar photovoltaic modules installed in a manner so that the amount of
19.34 payments received in an area of the state reasonably approximates the amount of payments
19.35 made by a utility serving that area.

19.36 (c) For purposes of this subdivision:

20.1 (1) "residential property" means residential real estate that is occupied and used as a
 20.2 homestead by its owner or by a renter and includes "multifamily housing development"
 20.3 as defined in section 462C.02, subdivision 5, except that residential property on which
 20.4 solar photovoltaic modules (i) whose capacity exceeds 10 kilowatts is installed; or (ii)
 20.5 connected to a utility's distribution system and whose electricity is purchased by several
 20.6 residents, each of whom own a share of the electricity generated, shall be deemed
 20.7 commercial property; and

20.8 (2) "commercial property" means real property on which is located a business,
 20.9 government, or nonprofit establishment.

20.10 Subd. 6. **Limitation.** An owner receiving an incentive payment under this section
 20.11 may not receive a rebate under section 116C.7791 for the same solar photovoltaic modules.

20.12 **EFFECTIVE DATE.** This section is effective the day following final enactment.

20.13 Sec. 6. **VALUE OF ON-SITE ENERGY STORAGE STUDY.**

20.14 (a) The commissioner of commerce shall contract with an independent consultant
 20.15 selected through a request for proposal process to produce a report analyzing the potential
 20.16 costs and benefits of installing utility-managed energy storage modules in residential and
 20.17 commercial buildings in this state. The study must:

20.18 (1) estimate the potential value of on-site energy storage modules as a
 20.19 load-management tool to reduce costs for individual customers and for the utility,
 20.20 including, but not limited to, reductions in energy, particularly peaking and capacity costs;

20.21 (2) examine the interaction of energy storage modules with on-site solar photovoltaic
 20.22 modules; and

20.23 (3) analyze existing barriers to the installation of on-site energy storage modules
 20.24 by utilities, and examine strategies and design potential economic incentives, including
 20.25 using utility funds expended under Minnesota Statutes, section 216B.241, to overcome
 20.26 those barriers.

20.27 By January 1, 2014, the commissioner of commerce shall submit the study to the chairs
 20.28 and ranking minority members of the legislative committees with jurisdiction over energy
 20.29 policy and finance.

20.30 (b) The commissioner of commerce shall assess an amount, not to exceed \$100,000,
 20.31 under Minnesota Statutes, section 216B.241, subdivision 1e, for the purpose of completing
 20.32 the study described in this section.

20.33 **EFFECTIVE DATE.** This section is effective the day following final enactment.

22.1 determined by the Midwest Independent Transmission System Operator to benefit the
 22.2 utility, ~~as provided for under a federally approved tariff~~ or integrated transmission system.

22.3 (b) Upon filing by a public utility or utilities providing transmission service, the
 22.4 commission may approve, reject, or modify, after notice and comment, a tariff that:

22.5 (1) allows the utility to recover on a timely basis the costs net of revenues of
 22.6 facilities approved under section 216B.243 or certified or deemed to be certified under
 22.7 section 216B.2425 or exempt from the requirements of section 216B.243;

22.8 (2) allows the utility to recover charges incurred by a utility under a federally
 22.9 approved tariff that accrue from other transmission owners' regionally planned
 22.10 transmission projects that have been determined by the Midwest Independent Transmission
 22.11 System Operator to benefit the utility, as provided for under a federally approved tariff
 22.12 or integrated transmission system. These charges must be reduced or offset by revenues
 22.13 received by the utility and by amounts the utility charges to other regional transmission
 22.14 owners, to the extent those revenues and charges have not been otherwise offset;

22.15 (3) allows the utility to recover on a timely basis the costs net of revenues of facilities
 22.16 approved by the regulatory commission of the state in which the new transmission
 22.17 facilities are to be constructed and determined by the Midwest Independent Transmission
 22.18 System Operator to benefit the utility or integrated transmission system;

22.19 (4) allows a return on investment at the level approved in the utility's last general
 22.20 rate case, unless a different return is found to be consistent with the public interest;

22.21 ~~(4)~~ (5) provides a current return on construction work in progress, provided that
 22.22 recovery from Minnesota retail customers for the allowance for funds used during
 22.23 construction is not sought through any other mechanism;

22.24 ~~(5)~~ (6) allows for recovery of other expenses if shown to promote a least-cost project
 22.25 option or is otherwise in the public interest;

22.26 ~~(6)~~ (7) allocates project costs appropriately between wholesale and retail customers;

22.27 ~~(7)~~ (8) provides a mechanism for recovery above cost, if necessary to improve the
 22.28 overall economics of the project or projects or is otherwise in the public interest; and

22.29 ~~(8)~~ (9) terminates recovery once costs have been fully recovered or have otherwise
 22.30 been reflected in the utility's general rates.

22.31 (c) A public utility may file annual rate adjustments to be applied to customer bills
 22.32 paid under the tariff approved in paragraph (b). In its filing, the public utility shall provide:

22.33 (1) a description of and context for the facilities included for recovery;

22.34 (2) a schedule for implementation of applicable projects;

22.35 (3) the utility's costs for these projects;

23.1 (4) a description of the utility's efforts to ensure the lowest costs to ratepayers for
23.2 the project; and

23.3 (5) calculations to establish that the rate adjustment is consistent with the terms
23.4 of the tariff established in paragraph (b).

23.5 (d) Upon receiving a filing for a rate adjustment pursuant to the tariff established in
23.6 paragraph (b), the commission shall approve the annual rate adjustments provided that,
23.7 after notice and comment, the costs included for recovery through the tariff were or are
23.8 expected to be prudently incurred and achieve transmission system improvements at the
23.9 lowest feasible and prudent cost to ratepayers.

23.10 ARTICLE 5

23.11 CERTS FUNDING

23.12 Section 1. Minnesota Statutes 2012, section 216B.241, subdivision 1e, is amended to
23.13 read:

23.14 Subd. 1e. **Applied research and development grants.** (a) The commissioner
23.15 may, by order, approve and make grants for applied research and development projects
23.16 of general applicability that identify new technologies or strategies to maximize energy
23.17 savings, improve the effectiveness of energy conservation programs, or document
23.18 the carbon dioxide reductions from energy conservation programs. When approving
23.19 projects, the commissioner shall consider proposals and comments from utilities and
23.20 other interested parties. The commissioner may assess up to \$3,600,000 annually for the
23.21 purposes of this subdivision. The assessments must be deposited in the state treasury
23.22 and credited to the energy and conservation account created under subdivision 2a. An
23.23 assessment made under this subdivision is not subject to the cap on assessments provided
23.24 by section 216B.62, or any other law.

23.25 (b) The commissioner, as part of the assessment authorized under paragraph (a),
23.26 shall annually assess and grant up to \$500,000 for the purpose of subdivision 9.

23.27 (c) The commissioner, as part of the assessment authorized under paragraph (a),
23.28 each state fiscal year shall assess \$500,000 for a grant to the partnership created by section
23.29 216C.385, subdivision 2. The grant must be used to exercise the powers and perform the
23.30 duties specified in section 216C.385, subdivision 3.

23.31 (d) By February 15 annually, the commissioner shall report to the chairs and ranking
23.32 minority members of the committees of the legislature with primary jurisdiction over
23.33 energy policy and energy finance on the assessments made under this subdivision for the
23.34 previous calendar year and the use of the assessment. The report must clearly describe the
23.35 activities supported by the assessment and the parties that engaged in those activities.

24.1 **EFFECTIVE DATE.** Paragraph (c) is effective for assessments for state fiscal
 24.2 years commencing on or after July 1, 2013.

24.3 **ARTICLE 6**

24.4 **ENERGY POLICY AMENDMENT**

24.5 Section 1. Minnesota Statutes 2012, section 216B.2401, is amended to read:

24.6 **216B.2401 ENERGY CONSERVATION SAVINGS POLICY GOAL.**

24.7 The legislature finds that energy savings are an energy resource, and that
 24.8 cost-effective energy savings are preferred over all other energy resources. The legislature
 24.9 further finds that cost-effective energy savings should be procured systematically and
 24.10 aggressively in order to reduce utility costs for businesses and residents, improve the
 24.11 competitiveness and profitability of businesses, create more energy-related jobs, reduce the
 24.12 economic burden of fuel imports, and reduce pollution and emissions that cause climate
 24.13 change. Therefore, it is the energy policy of the state of Minnesota to achieve annual
 24.14 energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and
 24.15 natural gas directly through cost-effective energy conservation improvement programs
 24.16 and rate design, and indirectly through energy efficiency achieved by energy consumers
 24.17 without direct utility involvement, energy codes and appliance standards, programs
 24.18 designed to transform the market or change consumer behavior, energy savings resulting
 24.19 from efficiency improvements to the utility infrastructure and system, and other efforts to
 24.20 promote energy efficiency and energy conservation.

24.21 Sec. 2. Minnesota Statutes 2012, section 216C.05, is amended to read:

24.22 **216C.05 FINDINGS AND PURPOSE.**

24.23 Subdivision 1. **Energy planning.** The legislature finds and declares that continued
 24.24 growth in demand for energy will cause severe social and economic dislocations, and that
 24.25 the state has a vital interest in providing for: increased efficiency in energy consumption,
 24.26 the development and use of renewable energy resources wherever possible, and the
 24.27 creation of an effective energy forecasting, planning, and education program.

24.28 The legislature further finds and declares that the protection of life, safety, and
 24.29 financial security for citizens during an energy crisis is of paramount importance.

24.30 Therefore, the legislature finds that it is in the public interest to review, analyze, and
 24.31 encourage those energy programs that will minimize the need for annual increases in fossil
 24.32 fuel consumption by 1990 and the need for additional electrical generating plants, and

25.1 provide for an optimum combination of energy sources and energy conservation consistent
 25.2 with environmental protection and the protection of citizens.

25.3 The legislature intends to monitor, through energy policy planning and
 25.4 implementation, the transition from historic growth in energy demand to a period when
 25.5 demand for traditional fuels becomes stable and the supply of renewable energy resources
 25.6 is readily available and adequately utilized.

25.7 The legislature further finds that for economic growth, environmental improvement,
 25.8 and protection of citizens, it is in the public interest to encourage those energy programs
 25.9 that will provide an optimum combination of energy resources, including energy savings.

25.10 Therefore, the legislature, through its committees, must monitor and evaluate
 25.11 progress towards greater reliance on cost-effective energy efficiency and renewable
 25.12 energy and lesser dependence on fossil fuels in order to reduce the economic burden
 25.13 of fuel imports, diversify utility-owned and consumer-owned energy resources, reduce
 25.14 utility costs for businesses and residents, improve the competitiveness and profitability of
 25.15 Minnesota businesses, create more energy-related jobs that contribute to the Minnesota
 25.16 economy, and reduce pollution and emissions that cause climate change.

25.17 Subd. 2. **Energy policy goals.** It is the energy policy of the state of Minnesota that:

25.18 (1) annual energy savings equal to at least 1.5 percent of annual retail energy sales of
 25.19 electricity and natural gas be achieved through cost-effective energy efficiency;

25.20 ~~(1)~~ (2) the per capita use of fossil fuel as an energy input be reduced by 15 percent
 25.21 by the year 2015, through increased reliance on energy efficiency and renewable energy
 25.22 alternatives; and

25.23 ~~(2)~~ (3) 25 percent of the total energy used in the state be derived from renewable
 25.24 energy resources by the year 2025.

25.25 Sec. 3. **DEPARTMENT OF COMMERCE; DIVISION OF ENERGY**

25.26 **RESOURCES; STUDY.**

25.27 The Division of Energy Resources of the Department of Commerce must conduct
 25.28 public meetings with stakeholders and members of the public and shall produce a report
 25.29 on findings and legislative recommendations to accomplish the following purposes:

25.30 (1) clarify statewide energy-savings policies and utility energy-savings goals;

25.31 (2) maximize long-term cost-effective energy savings and minimize energy waste;

25.32 (3) maximize carbon reductions and economic benefits by increasing the efficiency
 25.33 of all sectors of the state's energy system;

25.34 (4) minimize total utility costs and rate impacts for ratepayers in all sectors;

26.1 (5) determine appropriate funding sources for nonconservation projects and
 26.2 programs, cogeneration, and combined heat and power projects;

26.3 (6) determine the appropriate consideration in the integrated resource planning and
 26.4 certificate of need processes of the requirements to meet the state's energy conservation
 26.5 and renewable energy goals; and

26.6 (7) provide the utility the appropriate incentives to meet the state's energy
 26.7 conservation and renewable energy goals.

26.8 The report must be submitted by January 15, 2014, to the chairs and ranking minority
 26.9 members of the committees of the legislature with primary jurisdiction over energy policy.

26.10 The division must provide public notice of the meetings.

26.11 **EFFECTIVE DATE.** This section is effective the day following final enactment.

26.12 **ARTICLE 7**

26.13 **EMISSION REDUCTION COST RECOVERY**

26.14 Section 1. Minnesota Statutes 2012, section 216B.1692, subdivision 1, is amended to
 26.15 read:

26.16 Subdivision 1. **Qualifying projects.** (a) Projects that may be approved for the
 26.17 emissions reduction-rate rider allowed in this section must:

26.18 (1) be installed on existing large electric generating power plants, as defined in
 26.19 section 216B.2421, subdivision 2, clause (1), that are located in the state and that are
 26.20 currently not subject to emissions limitations for new power plants under the federal Clean
 26.21 Air Act, United States Code, title 42, section 7401 et seq.;

26.22 (2) not increase the capacity of the existing electric generating power plant more
 26.23 than ten percent or more than 100 megawatts, whichever is greater; and

26.24 (3) result in the existing plant either:

26.25 (i) complying with applicable new source review standards under the federal Clean
 26.26 Air Act; or

26.27 (ii) emitting air contaminants at levels substantially lower than allowed for new
 26.28 facilities by the applicable new source performance standards under the federal Clean
 26.29 Air Act; or

26.30 (iii) reducing emissions from current levels at a unit to the lowest cost-effective level
 26.31 when, due to the age or condition of the generating unit, the public utility demonstrates
 26.32 that it would not be cost-effective to reduce emissions to the levels in item (i) or (ii).

26.33 (b) Notwithstanding paragraph (a), a project may be approved for the emission
 26.34 reduction rate rider allowed in this section if the project is to be installed on existing

27.1 large electric generating power plants, as defined in section 216B.2421, subdivision 2,
27.2 clause (1), that are located outside the state and are needed to comply with state or federal
27.3 air quality standards, but only if the project has received an advance determination of
27.4 prudence from the commission under section 216B.1695.

27.5 **EFFECTIVE DATE.** This section is effective the day following final enactment.

27.6 Sec. 2. Minnesota Statutes 2012, section 216B.1692, is amended by adding a
27.7 subdivision to read:

27.8 Subd. 1a. **Exemption.** Subdivisions 2, 4, and 5, paragraph (c), clause (1), do not
27.9 apply to projects qualifying under subdivision 1, paragraph (b).

27.10 **EFFECTIVE DATE.** This section is effective the day following final enactment.

27.11 Sec. 3. Minnesota Statutes 2012, section 216B.1692, subdivision 8, is amended to read:

27.12 Subd. 8. **Sunset.** This section is effective until December 31, ~~2015~~ 2020, and
27.13 applies to plans, projects, and riders approved before that date and modifications made to
27.14 them after that date.

27.15 Sec. 4. Minnesota Statutes 2012, section 216B.1695, subdivision 5, is amended to read:

27.16 Subd. 5. **Cost recovery.** The utility may begin recovery of costs that have been
27.17 incurred by the utility in connection with implementation of the project in the next rate
27.18 case following an advance determination of prudence or in a rider approved under section
27.19 216B.1692. The commission shall review the costs incurred by the utility for the project.
27.20 The utility must show that the project costs are reasonable and necessary, and demonstrate
27.21 its efforts to ensure the lowest reasonable project costs. Notwithstanding the commission's
27.22 prior determination of prudence, it may accept, modify, or reject any of the project costs.
27.23 The commission may determine whether to require an allowance for funds used during
27.24 construction offset.

27.25 **EFFECTIVE DATE.** This section is effective the day following final enactment.

27.26 Sec. 5. Minnesota Statutes 2012, section 216B.1695, is amended by adding a
27.27 subdivision to read:

27.28 Subd. 5a. **Rate of return.** The return on investment in the rider shall be at the
27.29 level approved by the commission in the public utility's last general rate case, unless the
27.30 commission determines that a different rate of return is in the public interest.

28.1 **EFFECTIVE DATE.** This section is effective the day following final enactment.

28.2 **ARTICLE 8**

28.3 **STATE BUILDINGS GUARANTEED ENERGY SAVINGS PROGRAM**

28.4 Section 1. Minnesota Statutes 2012, section 16C.144, subdivision 2, is amended to read:

28.5 Subd. 2. **Guaranteed energy-savings agreement.** The commissioner may enter
28.6 into a guaranteed energy-savings agreement with a qualified provider if:

28.7 (1) the qualified provider is selected through a competitive process in accordance
28.8 with the guaranteed energy-savings program guidelines within the Department of
28.9 Administration;

28.10 (2) the qualified provider agrees to submit an engineering report prior to the
28.11 execution of the guaranteed energy-savings agreement. The cost of the engineering report
28.12 may be considered as part of the implementation costs if the commissioner enters into a
28.13 guaranteed energy-savings agreement with the provider;

28.14 (3) the term of the guaranteed energy-savings agreement shall not exceed ~~15~~ 25
28.15 years from the date of final installation;

28.16 (4) the commissioner finds that the amount it would spend on the utility cost-savings
28.17 measures recommended in the engineering report will not exceed the amount to be
28.18 saved in utility operation and maintenance costs over ~~15~~ 25 years from the date of
28.19 implementation of utility cost-savings measures;

28.20 (5) the qualified provider provides a written guarantee that the annual utility,
28.21 operation, and maintenance cost savings during the term of the guaranteed energy-savings
28.22 agreement will meet or exceed the annual payments due under a lease purchase agreement.
28.23 The qualified provider shall reimburse the state for any shortfall of guaranteed utility,
28.24 operation, and maintenance cost savings; and

28.25 (6) the qualified provider gives a sufficient bond in accordance with section
28.26 574.26 to the commissioner for the faithful implementation and installation of the utility
28.27 cost-savings measures.

28.28 **ARTICLE 9**

28.29 **INTEGRATED RESOURCE PLANNING**

28.30 Section 1. Minnesota Statutes 2012, section 216B.2422, subdivision 4, is amended to
28.31 read:

28.32 Subd. 4. **Preference for renewable energy facility.** The commission shall not
28.33 approve a new or refurbished nonrenewable energy facility in an integrated resource plan

29.1 or a certificate of need, pursuant to section 216B.243, nor shall the commission allow rate
29.2 recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the
29.3 utility has demonstrated that a renewable energy facility is not in the public interest. The
29.4 public interest determination must include whether the resource plan helps the utility
29.5 achieve the greenhouse gas reduction goals under section 216H.02, the renewable energy
29.6 standard under section 216B.1691, or the solar energy standard under section 216B.2427.

29.7 **ARTICLE 10**

29.8 **RENEWABLE INTEGRATION STUDY**

29.9 Section 1. **RENEWABLE INTEGRATION STUDY.**

29.10 The commission shall order all Minnesota electric utilities, as defined in Minnesota
29.11 Statutes, section 216B.1691, subdivision 1, paragraph (b), to study and develop plans for
29.12 the transmission network enhancements necessary to support increasing the renewable
29.13 energy standard established in Minnesota Statutes, section 216B.1691, subdivision 2a, to
29.14 40 percent by 2030, while maintaining system reliability.

29.15 The Minnesota electric utilities must complete the study work under the direction of
29.16 the commissioner of commerce. Prior to the start of the study, the commissioner shall
29.17 appoint a technical review committee consisting of up to 15 individuals with experience
29.18 and expertise in electric transmission system engineering, electric power systems
29.19 operations, and renewable energy generation technology to review the study's proposed
29.20 methods and assumptions, ongoing work, and preliminary results.

29.21 As part of the planning process, the Minnesota electric utilities must incorporate
29.22 and build upon the analyses that have previously been done or that are in progress
29.23 including but not limited to the 2006 Minnesota Wind Integration Study and ongoing
29.24 work to address geographically dispersed development plans, the 2007 Minnesota
29.25 Transmission for Renewable Energy Standard Study, the 2008 and 2009 Statewide Studies
29.26 of Dispersed Renewable Generation, the 2009 Minnesota RES Update, Corridor, and
29.27 Capacity Validation Studies, the 2010 Regional Generation Outlet Study, the 2011 Multi
29.28 Value Project Portfolio Study, and recent and ongoing Midwest Independent System
29.29 Operator transmission expansion planning work. The utilities shall collaborate with the
29.30 Midwest Independent System Operator to optimize and integrate, to the extent possible,
29.31 Minnesota's transmission plans with other regional considerations and to encourage the
29.32 Midwest Independent System Operator to incorporate Minnesota's planning work into its
29.33 transmission expansion future planning.

30.1 The study must be completed and submitted to the Minnesota Public Utilities
 30.2 Commission by December 1, 2013. The report shall include a description of the analyses
 30.3 that have been conducted and the results, including:

30.4 (1) a conceptual plan for transmission necessary for generation interconnection and
 30.5 delivery and for access to regional geographic diversity and regional supply and demand
 30.6 side flexibility; and

30.7 (2) identification and development of potential solutions to any critical issues
 30.8 encountered to support increasing the renewable energy standard to 40 percent by 2030
 30.9 while maintaining system reliability, as well as potential impacts and barriers of increasing
 30.10 the renewable energy standard to 45 percent and 50 percent.

30.11 **ARTICLE 11**

30.12 **GAS UTILITY INFRASTRUCTURE COSTS**

30.13 Section 1. Minnesota Statutes 2012, section 216B.1635, is amended to read:

30.14 **216B.1635 RECOVERY OF GAS UTILITY INFRASTRUCTURE COSTS.**

30.15 Subdivision 1. **Definitions.** (a) "Gas utility" means a public utility as defined in
 30.16 section 216B.02, subdivision 4, that furnishes natural gas service to retail customers.

30.17 (b) "Gas utility infrastructure costs" or "GUIC" means costs incurred in gas utility
 30.18 projects that:

30.19 (1) do not serve to increase revenues by directly connecting the infrastructure
 30.20 replacement to new customers;

30.21 (2) are in service but were not included in the gas utility's rate base in its most recent
 30.22 general rate case; and, or are planned to be in service during the period covered by the
 30.23 report submitted under subdivision 2, but in no case longer than the one year forecast
 30.24 period in the report; and

30.25 ~~(3) replace or modify existing infrastructure if the replacement or modification does~~
 30.26 ~~not constitute a betterment, unless the betterment is required by a political subdivision,~~
 30.27 ~~as evidenced by specific documentation from the government entity requiring the~~
 30.28 ~~replacement or modification of infrastructure~~ do not constitute a betterment, unless the
 30.29 betterment is based on requirements by a political subdivision or a federal or state agency,
 30.30 as evidenced by specific documentation, an order, or other similar requirement from the
 30.31 government entity requiring the replacement or modification of infrastructure.

30.32 (c) "Gas utility projects" means ~~relocation and:~~

30.33 (1) replacement of natural gas facilities located in the public right-of-way required
 30.34 by the construction or improvement of a highway, road, street, public building, or other

31.1 public work by or on behalf of the United States, the state of Minnesota, or a political
31.2 subdivision; and

31.3 (2) replacement or modification of existing natural gas facilities, including surveys,
31.4 assessments, reassessment, and other work necessary to determine the need for replacement
31.5 or modification of existing infrastructure that is required by a federal or state agency.

31.6 Subd. 2. **Gas infrastructure filing.** ~~(a) The commission may approve a gas utility's~~
31.7 ~~petition for a rate schedule~~ A public utility submitting a petition to recover GUIC gas
31.8 infrastructure costs under this section. A gas utility may must submit to the commission,
31.9 the department, and interested parties a gas infrastructure project plan report and a
31.10 petition the commission to recover a rate of return, income taxes on the rate of return,
31.11 incremental property taxes, plus incremental depreciation expense associated with GUIC
31.12 for rate recovery of only incremental costs associated with projects under subdivision
31.13 1, paragraph (c), clause (2). The report and petition must be made at least 150 days in
31.14 advance of implementation of the rate schedule, provided that the rate schedule will not be
31.15 implemented until the petition is approved by the commission pursuant to subdivision
31.16 6. The report must be for a forecast period of one year.

31.17 ~~(b) The filing is subject to the following:~~

31.18 ~~(1) A gas utility may submit a filing under this section no more than once per year.~~

31.19 ~~(2) A gas utility must file sufficient information to satisfy the commission regarding~~
31.20 ~~the proposed GUIC or be subject to denial by the commission. The information includes,~~
31.21 ~~but is not limited to:~~

31.22 ~~(i) the government entity ordering the gas utility project and the purpose for which~~
31.23 ~~the project is undertaken;~~

31.24 ~~(ii) the location, description, and costs associated with the project;~~

31.25 ~~(iii) a description of the costs, and salvage value, if any, associated with the existing~~
31.26 ~~infrastructure replaced or modified as a result of the project;~~

31.27 ~~(iv) the proposed rate design and an explanation of why the proposed rate design~~
31.28 ~~is in the public interest;~~

31.29 ~~(v) the magnitude and timing of any known future gas utility projects that the utility~~
31.30 ~~may seek to recover under this section;~~

31.31 ~~(vi) the magnitude of GUIC in relation to the gas utility's base revenue as approved~~
31.32 ~~by the commission in the gas utility's most recent general rate case, exclusive of gas~~
31.33 ~~purchase costs and transportation charges;~~

31.34 ~~(vii) the magnitude of GUIC in relation to the gas utility's capital expenditures since~~
31.35 ~~its most recent general rate case;~~

32.1 ~~(viii) the amount of time since the utility last filed a general rate case and the utility's~~
 32.2 ~~reasons for seeking recovery outside of a general rate case; and~~
 32.3 ~~(ix) documentation supporting the calculation of the GUIC.~~

32.4 Subd. 3. **Gas infrastructure project plan report.** The gas infrastructure project
 32.5 plan report required to be filed under subdivision 2 shall include all pertinent information
 32.6 and supporting data on each proposed project including, but not limited to, project
 32.7 description and scope, estimated project costs, and project in-service date.

32.8 Subd. 4. **Cost recovery petition for utility's facilities.** Notwithstanding any other
 32.9 provision of this chapter, the commission may approve a rate schedule for the automatic
 32.10 annual adjustment of charges for gas utility infrastructure costs net of revenues under
 32.11 this section, including a rate of return, income taxes on the rate of return, incremental
 32.12 property taxes, incremental depreciation expense, and any incremental operation and
 32.13 maintenance costs. A gas utility's petition for approval of a rate schedule to recover
 32.14 gas utility infrastructure costs outside of a general rate case under section 216B.16, is
 32.15 subject to the following:

32.16 (1) a gas utility may submit a filing under this section no more than once per year; and

32.17 (2) a gas utility must file sufficient information to satisfy the commission regarding
 32.18 the proposed GUIC. The information includes, but is not limited to:

32.19 (i) the information required to be included in the gas infrastructure project plan
 32.20 report under subdivision 3;

32.21 (ii) the government entity ordering or requiring the gas utility project and the
 32.22 purpose for which the project is undertaken;

32.23 (iii) a description of the estimated costs and salvage value, if any, associated with the
 32.24 existing infrastructure replaced or modified as a result of the project;

32.25 (iv) a comparison of the utility's estimated costs included in the gas infrastructure
 32.26 project plan and the actual costs incurred, including a description of the utility's efforts to
 32.27 ensure the costs of the facilities are reasonable and prudently incurred;

32.28 (v) calculations to establish that the rate adjustment is consistent with the terms
 32.29 of the rate schedule, including the proposed rate design and an explanation of why the
 32.30 proposed rate design is in the public interest;

32.31 (vi) the magnitude and timing of any known future gas utility projects that the
 32.32 utility may seek to recover under this section;

32.33 (vii) the magnitude of GUIC in relation to the gas utility's base revenue as approved
 32.34 by the commission in the gas utility's most recent general rate case, exclusive of gas
 32.35 purchase costs and transportation charges;

33.1 (viii) the magnitude of GUIC in relation to the gas utility's capital expenditures
 33.2 since its most recent general rate case; and

33.3 (ix) the amount of time since the utility last filed a general rate case and the utility's
 33.4 reasons for seeking recovery outside of a general rate case.

33.5 Subd. 5. **Commission action.** Upon receiving a gas utility report and petition for
 33.6 cost recovery under subdivision 2 and assessment and verification under subdivision 4, the
 33.7 commission may approve the annual GUIC rate adjustments provided that, after notice
 33.8 and comment, the costs included for recovery through the rate schedule are prudently
 33.9 incurred and achieve gas facility improvements at the lowest reasonable and prudent
 33.10 cost to ratepayers.

33.11 Subd. 5a. **Rate of return.** The return on investment for the rate adjustment shall be
 33.12 at the level approved by the commission in the public utility's last general rate case, unless
 33.13 the commission determines that a different rate of return is in the public interest.

33.14 Subd. 3 6. **Commission authority; rules.** The commission may issue orders and
 33.15 adopt rules necessary to implement and administer this section.

33.16 **EFFECTIVE DATE.** This section is effective the day following final enactment.

33.17 Sec. 2. Laws 2005, chapter 97, article 10, section 3, is amended to read:

33.18 Sec. 3. **SUNSET.**

33.19 Sections 1 and 2 shall expire on June 30, ~~2015~~ 2023.

33.20 Sec. 3. **REPEALER.**

33.21 Minnesota Statutes 2012, section 216B.1637, is repealed.

33.22 **ARTICLE 12**

33.23 **PACE**

33.24 Section 1. Minnesota Statutes 2012, section 216C.435, is amended by adding a
 33.25 subdivision to read:

33.26 Subd. 3a. **Cost-effective energy improvements.** "Cost-effective energy
 33.27 improvements" mean energy improvements that have been identified in an energy audit
 33.28 or renewable energy system feasibility study as repaying their purchase and installation
 33.29 costs in 20 years or less, based on the amount of future energy saved and estimated future
 33.30 energy prices.

33.31 **EFFECTIVE DATE.** This section is effective the day following final enactment.

34.1 Sec. 2. Minnesota Statutes 2012, section 216C.435, subdivision 8, is amended to read:

34.2 Subd. 8. **Qualifying real property.** "Qualifying real property" means a
 34.3 single-family or multifamily residential dwelling, or a commercial or industrial building,
 34.4 that the implementing entity has determined, after review of an energy audit or renewable
 34.5 energy system feasibility study, can be benefited by installation of cost-effective energy
 34.6 improvements.

34.7 **EFFECTIVE DATE.** This section is effective the day following final enactment.

34.8 Sec. 3. Minnesota Statutes 2012, section 216C.436, subdivision 2, is amended to read:

34.9 Subd. 2. **Program requirements.** A financing program must:

34.10 (1) impose requirements and conditions on financing arrangements to ensure timely
 34.11 repayment;

34.12 (2) require an energy audit or renewable energy system feasibility study to be
 34.13 conducted on the qualifying real property and reviewed by the implementing entity prior
 34.14 to approval of the financing;

34.15 (3) require the inspection of all installations and a performance verification of at
 34.16 least ten percent of the energy improvements financed by the program;

34.17 (4) not prohibit the financing of all cost-effective energy improvements not otherwise
 34.18 prohibited by this section;

34.19 (5) require that all cost-effective energy improvements be made to a qualifying
 34.20 real property prior to, or in conjunction with, an applicant's repayment of financing for
 34.21 energy improvements for that property;

34.22 ~~(5)~~ (6) have energy improvements financed by the program performed by licensed
 34.23 contractors as required by chapter 326B or other law or ordinance;

34.24 ~~(6)~~ (7) require disclosures to borrowers by the implementing entity of the risks
 34.25 involved in borrowing, including the risk of foreclosure if a tax delinquency results from
 34.26 a default;

34.27 ~~(7)~~ (8) provide financing only to those who demonstrate an ability to repay;

34.28 ~~(8)~~ (9) not provide financing for a qualifying real property in which the owner is not
 34.29 current on mortgage or real property tax payments;

34.30 ~~(9)~~ (10) require a petition to the implementing entity by all owners of the qualifying
 34.31 real property requesting collections of repayments as a special assessment under section
 34.32 429.101;

34.33 ~~(10)~~ (11) provide that payments and assessments are not accelerated due to a default
 34.34 and that a tax delinquency exists only for assessments not paid when due; and

35.1 ~~(11)~~ (12) require that liability for special assessments related to the financing runs
35.2 with the qualifying real property.

35.3 **EFFECTIVE DATE.** This section is effective the day following final enactment.

35.4 Sec. 4. Minnesota Statutes 2012, section 216C.436, subdivision 7, is amended to read:

35.5 Subd. 7. **Repayment.** An implementing entity that finances an energy improvement
35.6 under this section must:

35.7 (1) secure payment with a lien against the benefited qualifying real property; and

35.8 (2) collect repayments as a special assessment as provided for in section 429.101
35.9 or by charter, provided that special assessments may be made payable in up to 20 equal
35.10 annual installments.

35.11 If the implementing entity is an authority, the local government that authorized
35.12 the authority to act as implementing entity shall impose and collect special assessments
35.13 necessary to pay debt service on bonds issued by the implementing entity under subdivision
35.14 8, and shall transfer all collections of the assessments upon receipt to the authority.

35.15 Sec. 5. Minnesota Statutes 2012, section 216C.436, subdivision 8, is amended to read:

35.16 Subd. 8. **Bond issuance; repayment.** (a) An implementing entity may issue
35.17 revenue bonds as provided in chapter 475 for the purposes of this section, provided the
35.18 revenue bond must not be payable more than 20 years from the date of issuance.

35.19 (b) The bonds must be payable as to both principal and interest solely from the
35.20 revenues from the assessments established in subdivision 7.

35.21 (c) No holder of bonds issued under this subdivision may compel any exercise of the
35.22 taxing power of the implementing entity that issued the bonds to pay principal or interest
35.23 on the bonds, and if the implementing entity is an authority, no holder of the bonds may
35.24 compel any exercise of the taxing power of the local government. Bonds issued under
35.25 this subdivision are not a debt or obligation of the issuer or any local government that
35.26 issued them, nor is the payment of the bonds enforceable out of any money other than the
35.27 revenue pledged to the payment of the bonds.

35.28 Sec. 6. Minnesota Statutes 2012, section 429.101, subdivision 2, is amended to read:

35.29 Subd. 2. **Procedure for assessment.** Any special assessment levied under
35.30 subdivision 1 shall be payable in a single installment, or by up to ten equal annual
35.31 installments as the council may provide, except that a special assessment made under an
35.32 energy improvements financing program under subdivision 1, paragraph (c), may be

36.1 repayable in up to 20 equal installments. With ~~this exception~~ these exceptions, sections
36.2 429.061, 429.071, and 429.081 shall apply to assessments made under this section.

36.3 **EFFECTIVE DATE.** This section is effective the day following final enactment.

36.4 **ARTICLE 13**

36.5 **WASTE HEAT RECOVERY**

36.6 Section 1. Minnesota Statutes 2012, section 216B.241, subdivision 1, is amended to
36.7 read:

36.8 Subdivision 1. **Definitions.** For purposes of this section and section 216B.16,
36.9 subdivision 6b, the terms defined in this subdivision have the meanings given them.

36.10 (a) "Commission" means the Public Utilities Commission.

36.11 (b) "Commissioner" means the commissioner of commerce.

36.12 (c) "Department" means the Department of Commerce.

36.13 (d) "Energy conservation" means demand-side management of energy supplies
36.14 resulting in a net reduction in energy use. Load management that reduces overall energy
36.15 use is energy conservation.

36.16 (e) "Energy conservation improvement" means a project that results in energy
36.17 efficiency or energy conservation. Energy conservation improvement may include waste
36.18 heat ~~recovery~~ that is recovered and converted into electricity, but does not include electric
36.19 utility infrastructure projects approved by the commission under section 216B.1636.

36.20 Energy conservation improvement also includes waste heat recovered and used as thermal
36.21 energy.

36.22 (f) "Energy efficiency" means measures or programs, including energy conservation
36.23 measures or programs, that target consumer behavior, equipment, processes, or devices
36.24 designed to produce either an absolute decrease in consumption of electric energy or natural
36.25 gas or a decrease in consumption of electric energy or natural gas on a per unit of production
36.26 basis without a reduction in the quality or level of service provided to the energy consumer.

36.27 (g) "Gross annual retail energy sales" means annual electric sales to all retail
36.28 customers in a utility's or association's Minnesota service territory or natural gas
36.29 throughput to all retail customers, including natural gas transportation customers, on a
36.30 utility's distribution system in Minnesota. For purposes of this section, gross annual
36.31 retail energy sales exclude:

36.32 (1) gas sales to:

36.33 (i) a large energy facility;

37.1 (ii) a large customer facility whose natural gas utility has been exempted by the
37.2 commissioner under subdivision 1a, paragraph (b), with respect to natural gas sales made
37.3 to the large customer facility; and

37.4 (iii) a commercial gas customer facility whose natural gas utility has been exempted
37.5 by the commissioner under subdivision 1a, paragraph (c), with respect to natural gas sales
37.6 made to the commercial gas customer facility; and

37.7 (2) electric sales to a large customer facility whose electric utility has been exempted
37.8 by the commissioner under subdivision 1a, paragraph (b), with respect to electric sales
37.9 made to the large customer facility.

37.10 (h) "Investments and expenses of a public utility" includes the investments
37.11 and expenses incurred by a public utility in connection with an energy conservation
37.12 improvement, including but not limited to:

37.13 (1) the differential in interest cost between the market rate and the rate charged on a
37.14 no-interest or below-market interest loan made by a public utility to a customer for the
37.15 purchase or installation of an energy conservation improvement;

37.16 (2) the difference between the utility's cost of purchase or installation of energy
37.17 conservation improvements and any price charged by a public utility to a customer for
37.18 such improvements.

37.19 (i) "Large customer facility" means all buildings, structures, equipment, and
37.20 installations at a single site that collectively (1) impose a peak electrical demand on an
37.21 electric utility's system of not less than 20,000 kilowatts, measured in the same way as the
37.22 utility that serves the customer facility measures electrical demand for billing purposes or
37.23 (2) consume not less than 500 million cubic feet of natural gas annually. In calculating
37.24 peak electrical demand, a large customer facility may include demand offset by on-site
37.25 cogeneration facilities and, if engaged in mineral extraction, may aggregate peak energy
37.26 demand from the large customer facility's mining and processing operations.

37.27 (j) "Large energy facility" has the meaning given it in section 216B.2421,
37.28 subdivision 2, clause (1).

37.29 (k) "Load management" means an activity, service, or technology to change the
37.30 timing or the efficiency of a customer's use of energy that allows a utility or a customer to
37.31 respond to wholesale market fluctuations or to reduce peak demand for energy or capacity.

37.32 (l) "Low-income programs" means energy conservation improvement programs that
37.33 directly serve the needs of low-income persons, including low-income renters.

37.34 (m) "Qualifying utility" means a utility that supplies the energy to a customer that
37.35 enables the customer to qualify as a large customer facility.

38.1 (n) "Waste heat recovered and used as thermal energy" means capturing heat energy
 38.2 that would otherwise be exhausted or dissipated to the environment from machinery,
 38.3 buildings, or industrial processes and productively using such recovered thermal energy
 38.4 where it was captured or distributing it as thermal energy to other locations where it is
 38.5 used to reduce demand side consumption of natural gas, electric energy, or both.

38.6 ~~(n)~~ (o) "Waste heat recovery converted into electricity" means an energy recovery
 38.7 process that converts otherwise lost energy from the heat of exhaust stacks or pipes used
 38.8 for engines or manufacturing or industrial processes, or the reduction of high pressure
 38.9 in water or gas pipelines.

38.10 Sec. 2. Minnesota Statutes 2012, section 216B.241, is amended by adding a
 38.11 subdivision to read:

38.12 Subd. 10. **Waste heat recovery; thermal energy distribution.** Demand side
 38.13 natural gas or electric energy displaced by use of waste heat recovered and used as thermal
 38.14 energy, including the recovered thermal energy from a cogeneration or combined heat and
 38.15 power facility, is eligible to be counted towards a utility's natural gas or electric energy
 38.16 savings goals, subject to department approval.

38.17 **ARTICLE 14**

38.18 **SOLAR ENERGY INCENTIVE PROGRAM**

38.19 Section 1. **[116C.7792] SOLAR ENERGY INCENTIVE PROGRAM.**

38.20 The utility subject to section 116C.779 shall operate a program to provide solar
 38.21 energy production incentives for solar energy systems of no more than a total nameplate
 38.22 capacity of 20 kilowatts direct current. The program shall be operated for five consecutive
 38.23 calendar years commencing in 2014. The lesser of \$10,000,000 or as much as is available
 38.24 in the account shall be allocated for each of the five years from the renewable development
 38.25 account established in section 116C.779 to a separate account for the purpose of the solar
 38.26 production incentive program. The solar system must be sized to less than 120 percent of
 38.27 the customer's on-site annual energy consumption. The production incentive must be paid
 38.28 for ten years commencing with the commissioning of the system. The utility must file
 38.29 a plan to operate the program with the commissioner of commerce. The utility may not
 38.30 operate the program until it is approved by the commissioner.

39.1

ARTICLE 15

39.2

STUDY OF INDUSTRIAL ENERGY EFFICIENCY

39.3

Section 1. **Study.**

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The Legislative Energy Commission may study and report to the chairs and ranking minority members of the legislative committees and divisions with primary jurisdiction over energy policy on how best to increase the competitiveness of the paper, pulp, mining, foundry, and steel industries in the state through additional cost-effective energy efficiency, including the potential use of renewable energy systems, work process initiatives, or best practices. In addition, the study must examine ways to use industrial energy efficiency to assist in creating markets for new energy efficiency products and services, and assess the impact of industrial energy efficiency in moderating electricity, water, and waste prices by reducing demand. The commission may include legislative recommendations in its report. The commission shall seek input from interested stakeholders, including entities with recognized expertise with industrial efficiency and work processes with these industries. The commission may contract for all or part of the activities related to preparation of the report.

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ARTICLE 16

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APPROPRIATIONS

39.19

Section 1. **APPROPRIATIONS.**

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(a) \$364,000 in fiscal year 2014 and \$100,000 in fiscal year 2015 are appropriated from the general fund to the commissioner of commerce for the purpose of carrying out the activities required in this act. It is assumed that an amount equal to this appropriation will be assessed by the commissioner of commerce under Minnesota Statutes, section 216B.62, and deposited in the general fund. The base for this appropriation is \$22,000 in fiscal year 2016 and \$23,000 in fiscal year 2017.

(b) \$279,000 in fiscal year 2014 and \$263,000 in fiscal year 2015 are appropriated from the general fund from the assessments on utilities to the Public Utilities Commission for the purpose of carrying out the activities required in this act. It is assumed that an amount equal to this appropriation will be assessed by the commission under Minnesota Statutes, section 216B.62, and deposited in the general fund. The base for this appropriation is \$63,000 in fiscal year 2016 and \$27,000 in fiscal year 2017.

APPENDIX
Article locations in S0901-2

ARTICLE 1	STATE ENERGY POLICY	Page.Ln 1.18
ARTICLE 2	DISTRIBUTED GENERATION; SOLAR STANDARD	Page.Ln 3.10
ARTICLE 3	MADE IN MINNESOTA	Page.Ln 14.30
ARTICLE 4	TRANSMISSION COST RECOVERY	Page.Ln 21.18
ARTICLE 5	CERTS FUNDING	Page.Ln 23.10
ARTICLE 6	ENERGY POLICY AMENDMENT	Page.Ln 24.3
ARTICLE 7	EMISSION REDUCTION COST RECOVERY	Page.Ln 26.12
	STATE BUILDINGS GUARANTEED ENERGY SAVINGS	
ARTICLE 8	PROGRAM	Page.Ln 28.2
ARTICLE 9	INTEGRATED RESOURCE PLANNING	Page.Ln 28.28
ARTICLE 10	RENEWABLE INTEGRATION STUDY	Page.Ln 29.7
ARTICLE 11	GAS UTILITY INFRASTRUCTURE COSTS	Page.Ln 30.11
ARTICLE 12	PACE	Page.Ln 33.22
ARTICLE 13	WASTE HEAT RECOVERY	Page.Ln 36.4
ARTICLE 14	SOLAR ENERGY INCENTIVE PROGRAM	Page.Ln 38.17
ARTICLE 15	STUDY OF INDUSTRIAL ENERGY EFFICIENCY	Page.Ln 39.1
ARTICLE 16	APPROPRIATIONS	Page.Ln 39.17

216B.1637 RECOVERY OF CERTAIN GREENHOUSE GAS INFRASTRUCTURE COSTS.

A public utility that owns a nuclear power plant and a public utility furnishing gas service may file for recovery of investments and expenses associated with the replacement of cast iron natural gas distribution and service lines owned by the utility and to replace breakers that contain sulfur hexafluoride in order to reduce the risk of greenhouse gases being released into the atmosphere. Upon a finding that the projects are consistent with the public interest and do not impose excessive costs on customers, the commission shall provide timely recovery of the utility's investment and expenses on any approved projects through a rate adjustment mechanism similar to that provided for transmission projects under section 216B.16, subdivision 7b, paragraphs (b) to (d).