SENATE STATE OF MINNESOTA EIGHTY-EIGHTH LEGISLATURE

S.F. No. 901

(SENATE AUTHORS: MARTY, Scalze, Hoffman, Eaton and Dibble)

DATE	D-PG	OFFICIAL STATUS
02/28/2013	453	Introduction and first reading Referred to Environment and Energy
04/02/2013 05/07/2013	1465a	Comm report: To pass as amended and re-refer to Finance Comm report: To pass as amended Second reading

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 recovery 1.5 for certain transmission, emission reduction, and gas infrastructure investments; 1.6 providing state energy policies; regulating various energy conservation 1.7 investment programs; amending Minnesota Statutes 2012, sections 16C.144, 1.8 subdivision 2; 216B.02, subdivision 4; 216B.16, subdivision 7b; 216B.1635; 19 216B.164, subdivisions 3, 4, 6, by adding subdivisions; 216B.1692, subdivisions 1.10 1, 8, by adding a subdivision; 216B.1695, subdivision 5, by adding a subdivision; 1.11 216B.2401; 216B.241, subdivisions 1, 1e, by adding a subdivision; 216B.2422, 1.12 subdivision 4; 216C.05; 216C.435, subdivision 8, by adding a subdivision; 1.13 216C.436, subdivisions 2, 7, 8; 429.101, subdivision 2; Laws 2005, chapter 1 14 97, article 10, section 3; proposing coding for new law in Minnesota Statutes, 1.15 chapters 3; 216B; 216C; repealing Minnesota Statutes 2012, section 216B.1637. 1.16

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

1.18 ARTICLE 1

1.19 **STATE ENERGY POLICY**

Section 1. [3.8852] PLANNING STRATEGY FOR SUSTAINABLE ENERGY FUTURE.

(a) The Legislative Energy Commission, in consultation with the Division of Energy Resources and the Environmental Quality Board shall develop a framework for the state of Minnesota to transition to a renewable energy economy that ends Minnesota's contribution to greenhouse gases from burning fossil fuels over the next few decades. The energy commission framework and strategy must aim to make Minnesota the first state in the nation to use only renewable energy. The framework must be consistent with the goal of reducing carbon dioxide emissions by 80 percent by the year 2050 in section 216H.02.

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Commission shall consult with stakeholders, including but not limited to cooperative, municipal, and investor-owned utilities, stakeholders in transportation, agriculture, forestry, waste management, renewable energy and renewable fuels, energy efficiency and conservation, natural resources and environmental advocates, labor, and industry; technical and scientific experts, and other Minnesotans to examine the challenges and opportunities involved, and develop a strategy and timeline to protect the environment and create jobs. The timeline shall establish goals and strategies that prepare for the steps beyond the renewable energy standards already established. The Environmental Quality Board shall provide guidance to economic sectors including transportation, agriculture, forestry, water and waste management, and the overall economy. The Division of Energy Resources shall provide technical support.

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- (c) The Legislative Energy Commission and its stakeholders must consider the following in creating the framework:
- (1) the early impacts of climate change that are beginning to illustrate the significant impacts that the growing concentration of greenhouse gases will have on Minnesotans' lives, economy, and the environment. The almost three-fold increase in homeowner insurance premiums in a decade due to more severe weather events, along with record flooding in northeastern and southeastern Minnesota, severe drought, extreme heat events, and descriptions of Hurricane Sandy as "the new norm" provide hints of the trends that will affect future generations. The commission and stakeholders must consider the economic and environmental costs of continued global reliance on fossil fuels;
- (2) while all states and countries will need to move to a sustainable energy system to prevent a climate catastrophe, by planning and developing a thoughtful cost-effective strategy to make this transition efficiently, Minnesota can provide leadership. By leading the way, Minnesota will create jobs and industry in the state while states that follow will be turning to Minnesota industries for the products and services to help them make a similar transition;
- (3) the Minnesota economy currently loses about \$13 billion per year to other states and nations to import fossil fuels. Energy efficiency and renewable energy expenditures reduce that huge drain on the economy and recycle those dollars in Minnesota jobs and businesses; and
- (4) the challenge of moving to a completely sustainable energy economy will be great and will take many years. To fully integrate solar, wind, and other renewable energy sources, Minnesota will need to develop new technologies, whether hydrogen, battery, or other means of energy storage in order to ensure our renewable energy sources reliably

meet electricity demand. The Division of Energy Resources, the Environmental Quality Board, and other stakeholders shall monitor new storage and renewable generation technologies, as well as energy efficiency and conservation options. The state strategy and timeline shall be modified as needed to take advantage of each new development to move the state forward in ending fossil fuel use in power generation, heating and cooling, industry, and transportation.

(d) The Legislative Energy Commission shall report to relevant legislative committees by January 15, 2014 and annually thereafter, on progress towards these goals.

ARTICLE 2

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DISTRIBUTED GENERATION; SOLAR STANDARD

Section 1. Minnesota Statutes 2012, section 216B.02, subdivision 4, is amended to read: Subd. 4. **Public utility.** "Public utility" means persons, corporations, or other legal entities, their lessees, trustees, and receivers, now or hereafter operating, maintaining, or controlling in this state equipment or facilities for furnishing at retail natural, manufactured, or mixed gas or electric service to or for the public or engaged in the production and retail sale thereof but does not include (1) a municipality or a cooperative electric association, organized under the provisions of chapter 308A, producing or furnishing natural, manufactured, or mixed gas or electric service; (2) a retail seller of compressed natural gas used as a vehicular fuel which purchases the gas from a public utility; or (3) a retail seller of electricity used to recharge a battery that powers an electric vehicle, as defined in section 169.011, subdivision 26a, and that is not otherwise a public utility under this chapter. Except as otherwise provided, the provisions of this chapter shall not be applicable to any sale of natural, manufactured, or mixed gas or electricity by a public utility to another public utility for resale. In addition, the provisions of this chapter shall not apply to a public utility whose total natural gas business consists of supplying natural, manufactured, or mixed gas to not more than 650 customers within a city pursuant to a franchise granted by the city, provided a resolution of the city council requesting exemption from regulation is filed with the commission. The city council may rescind the resolution requesting exemption at any time, and, upon the filing of the rescinding resolution with the commission, the provisions of this chapter shall apply to the public utility. No person shall be deemed to be a public utility if it furnishes its services only to tenants or cooperative or condominium owners in buildings owned, leased, or operated by such person. No person shall be deemed to be a public utility if it furnishes service to occupants of a manufactured home or trailer park owned, leased, or operated by such person. No person shall be deemed to be a public utility if it produces or furnishes

service to less than 25 persons. No person shall be deemed to be a public utility solely as a result of the person furnishing consumers with electricity or heat generated from solar generating equipment located on the consumer's property, provided the equipment is owned or operated by an entity other than the consumer.

- Sec. 2. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:
- Subd. 2a. **Definitions.** (a) For the purposes of this section, the following terms have the meanings given them:
- (b) "Aggregated meter" means a meter located on the premises of a customer's owned or leased property that is contiguous with property containing the customer's designated meter.
- (c) "Capacity" means the number of megawatts AC (alternative current) at the point of interconnection between a distributed generation facility and a utility's electric system.
- (d) "Cogeneration" means a combined process whereby electrical and useful thermal energy are produced simultaneously.
- (e) "Contiguous property" means property owned or leased by the customer sharing a common border, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way.
- (f) "Customer" means the person who is named on the utility electric bill for the premises.
- (g) "Designated meter" means a meter that is physically attached to the customer's facility that the customer-generator designates as the first meter to which net metered credits are to be applied as the primary meter for billing purposes when the customer is serviced by more than one meter.
 - (h) "Distributed generation" means a facility that:
- (1) has a capacity of ten megawatts or less;
- (2) is interconnected with a utility's distribution system, over which the commission has jurisdiction; and
 - (3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel, and may include waste heat, cogeneration, or fuel cell technology.
 - (i) "High-efficiency, distributed generation" means a distributed energy facility that has a minimum efficiency of 40 percent, as calculated under section 272.0211.
- 4.33 (j) "Net metered facility" means an electric generation facility with the purpose of
 4.34 offsetting energy use through the use of renewable energy or high-efficiency distributed
 4.35 generation sources.

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(k) "Renewable energy" has the meaning given in section 216B.2411, subdivision 2.

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

- Subd. 3. Purchases; small facilities. (a) For a qualifying facility having less than 40-kilowatt 1,000-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having: (i) more than 40-kilowatt but less than 40-kilowatt 1,000-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (b) or (e); or (ii) less than 40-kilowatt capacity, compensation to the customer shall be at a per-kilowatt rate determined under paragraph (c). Compensation for net input into the utility system shall be applied as a credit to the customer's energy bill, carried forward and applied to subsequent energy bills for a period of up to 12 months. If any credit remains after the 12-month period, the value of the remaining credit must be paid to the customer within 15 days of the next billing date. The customer may choose the month in which the 12-month billing and credit period begins.
- (b) In setting rates, the commission shall consider the fixed distribution costs to the utility not otherwise accounted for in the basic monthly charge and shall ensure that the costs charged to the qualifying facility are not discriminatory in relation to the costs charged to other customers of the utility. The commission shall set the rates for net input into the utility system based on avoided costs as defined in the Code of Federal Regulations, title 18, section 292.101, paragraph (b)(6), the factors listed in Code of Federal Regulations, title 18, section 292.304, and all other relevant factors.
- (c) Notwithstanding any provision in this chapter to the contrary, a qualifying facility that began generating electricity before January 1, 2015, having less than 40-kilowatt capacity may elect that the compensation for net input by the qualifying facility into the utility system shall be at the average retail utility energy rate. "Average retail utility energy rate" is defined as the average of the retail energy rates, exclusive of special rates based on income, age, or energy conservation, according to the applicable rate schedule of the utility for sales to that class of customer.
- (d) If the qualifying facility or net metered facility is interconnected with a nongenerating utility which has a sole source contract with a municipal power agency or a generation and transmission utility, the nongenerating utility may elect to treat its purchase of any net input under this subdivision as being made on behalf of its supplier and shall be reimbursed by its supplier for any additional costs incurred in making the purchase. Qualifying facilities or net metered facilities having less than 40-kilowatt

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1,000-kilowatt capacity may, at the customer's option, elect to be governed by the provisions of subdivision 4.

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

- Subd. 4. **Purchases; wheeling; costs.** (a) Except as otherwise provided in paragraph (c), this subdivision shall apply to all qualifying facilities having 40-kilowatt 1,000-kilowatt capacity or more as well as qualifying facilities as defined in subdivision 3 and net metered systems under subdivision 4a which elect to be governed by its provisions.
- (b) The utility to which the qualifying facility is interconnected shall purchase all energy and capacity made available by the qualifying facility. The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission. The full avoided capacity and energy costs to be paid a qualifying facility that generates electric power by means of a renewable energy source are the utility's least cost renewable energy facility or the bid of a competing supplier of a least cost renewable energy facility, whichever is lower, unless the commission's resource plan order, under section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet the identified capacity need is not in the public interest.
- (c) For all qualifying facilities having 30-kilowatt capacity or more, the utility shall, at the qualifying facility's or the utility's request, provide wheeling or exchange agreements wherever practicable to sell the qualifying facility's output to any other Minnesota utility having generation expansion anticipated or planned for the ensuing ten years. The commission shall establish the methods and procedures to insure that except for reasonable wheeling charges and line losses, the qualifying facility receives the full avoided energy and capacity costs of the utility ultimately receiving the output.
 - (d) The commission shall set rates for electricity generated by renewable energy.
- Sec. 5. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:
 - Subd. 4a. Net metered facility. Notwithstanding any provision of this chapter to the contrary, a customer with a net metered facility having less than 1,000-kilowatt capacity may elect to be compensated for the customer's net input into the utility system in the form of a kilowatt-hour credit on the customer's energy bill carried forward and applied to subsequent energy bills. Any net input supplied by the customer into the utility system that exceeds energy supplied to the customer by the utility during a 12-month period must be compensated at the utility's avoided cost rate under subdivision 3, paragraph (b), or

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subdivision 4, paragraph (b), as applicable. The customer may choose the month in which the annual billing period begins.

- Sec. 6. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:
- Subd. 4b. **Aggregation of meters.** (a) For the purpose of measuring electricity under subdivisions 3 and 4a, a utility must aggregate for billing purposes a customer's designated meter with one or more aggregated meters if a customer requests that it do so.
- (b) A utility must comply with a request by a customer-generator to aggregate additional meters within 60 days. The specific meters must be identified at the time of the request. In the event that more than one meter is identified, the customer must designate the rank order for the aggregated meters to which the net metered credits are to be applied. At least 60 days prior to the beginning of the next annual billing period, a customer may amend the rank order of the aggregated meters, subject to this subdivision.
- (c) The aggregation of meters applies only to charges that use kilowatt-hours as the billing determinant. All other charges applicable to each meter account shall be billed to the customer.
- (d) The utility will first apply the kilowatt-hour credit to the charges for the designated meter and then to the charges for the aggregated meters in the rank order specified by the customer. If the net metered facility supplies more electricity to the utility than the energy usage recorded by the customer-generator's designated and aggregated meters during a monthly billing period, the utility shall apply credits to the customer's next monthly bill for the excess kilowatt-hours.
- (e) With the commission's prior approval, a utility may charge the customer-generator requesting to aggregate meters a reasonable fee to cover the administrative costs incurred in implementing the costs of this subdivision, pursuant to a tariff approved by the commission for a public utility or governing body for a municipal electric utility or electric cooperative.
- Sec. 7. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:
- Subd. 4c. Limiting cumulative generation prohibited. The commission and any other governing body regulating public utilities, municipal electric utilities, or electric cooperatives are prohibited from limiting the cumulative generation of net metered facilities under subdivision 4a and qualifying facilities under subdivision 3 to less than five percent of a utility or cooperative's average annual retail electricity sales over the previous three calendar years. Prior to interconnecting a net metered facility that would result

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in cumulative net metered facility generation in excess of five percent, a public utility,
municipal electric utility, or electric cooperative's obligation to offer net metering to a new
customer-generator may be limited by the commission or governing body if it determines
doing so is in the public interest. The commission may limit net metering obligations
under this subdivision only after providing notice and opportunity for public comment.
The governing body of a municipal electric utility or electric cooperative may limit net
metering obligations under this subdivision only after providing the affected municipal
electric utility or electric cooperative's customers with notice and opportunity to comment.
When determining whether limiting net metering obligations under this subdivision is in
the public interest, the commission or governing body shall consider:

- (1) the environmental and other public policy benefits of net metered systems;
- (2) the impact of net metered systems on the electricity costs for customers without net metered systems;
 - (3) the effects of net metering on the reliability of the electric system;
 - (4) technical advances or technical concerns; and
 - (5) other statutory obligations imposed on the commission or a utility.
- The commission or governing body may limit net metering obligations under clauses 8.17 (2) to (4) only if it finds implementation would cause significant rate impact, require 8.18 8.19 significant measures to address reliability, or raise significant technical issues.
 - Sec. 8. Minnesota Statutes 2012, section 216B.164, subdivision 6, is amended to read:
 - Subd. 6. Rules and uniform contract. (a) The commission shall promulgate rules to implement the provisions of this section. The commission shall also establish a uniform statewide form of contract for use between utilities and a net metered or qualifying facility having less than 40-kilowatt 1,000-kilowatt capacity.
 - (b) The commission shall require the qualifying facility to provide the utility with reasonable access to the premises and equipment of the qualifying facility if the particular configuration of the qualifying facility precludes disconnection or testing of the qualifying facility from the utility side of the interconnection with the utility remaining responsible for its personnel.
 - (c) The uniform statewide form of contract shall be applied to all new and existing interconnections established between a utility and a net metered or qualifying facility having less than 40-kilowatt capacity, except that existing contracts may remain in force until written notice of election that the uniform statewide contract form applies is given by either party to the other, with the notice being of the shortest time period permitted under

the existing contract for termination of the existing contract by either party, but not less 9.1 9.2 than ten nor longer than 30 days terminated by mutual agreement between both parties. (d) An electric utility may not apply a standby charge to a net metered facility. 9.3 Sec. 9. Minnesota Statutes 2012, section 216B.164, is amended by adding a 9.4 subdivision to read: 9.5 Subd. 10. Alternative tariff; compensation for resource value. (a) An electric 9.6 utility may apply for commission approval, or a cooperative electric association or 9.7 municipal electric utility may apply for approval from its governing body, for an 9.8 alternative tariff that compensates customers through a bill credit mechanism for the 9.9 value to the utility, its customers, and society for operating distributed solar photovoltaic 9.10 9.11 resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs. 9.12 (b) If approved, the alternative tariff shall apply to customers' interconnections 9.13 9.14 occurring after the date of approval. The alternative tariff is in lieu of the small facility rate or net metering for distributed solar resources under subdivisions 3 and 4a. 9.15 (c) The commission or governing body may after notice and opportunity for 9.16 9.17 public comment approve the alternative tariff provided the utility has demonstrated the alternative tariff: 9.18 (1) appropriately applies a methodology established by the department under this 9.19 subdivision; 9.20 (2) includes a mechanism to allow recovery of the cost to serve customers operating 9.21 9.22 distributed solar systems; (3) charges the customer for all electricity consumed by the customer at the 9.23 applicable rate schedule for sales to that class of customer; 9.24 9.25 (4) credits the customer for all electricity generated by the solar photovoltaic device at the value-based credit rate established under this subdivision; 9.26 (5) applies the charges and credits in clauses (3) and (4) to a monthly bill that 9.27 includes a provision so that the unused portion of the credit in any month or billing period 9.28 shall be carried forward and credited against all charges. In the event that the customer 9.29 has a positive balance after the 12-month cycle ending on the last day in February, that 9.30 balance will be eliminated and the credit cycle will restart the following billing period 9.31 beginning on March 1; 9.32

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

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

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

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(d) A utility must provide to the custome	r the meter and any o	other equipment needed
to provide service under the alternative tariff.		
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- (e) In no case shall the commission or governing body approve an alternative tariff rate where the value-based credit rate under paragraph (c), clause (4), is lower than the applicable retail rate schedule of the subject utility.
- (f) The department must establish the distributed solar value methodology in paragraph (c), clause (1), no later than January 31, 2014. When developing the distributed solar value methodology, the department shall consult stakeholders with experience and expertise in power systems, solar energy, and electric utility ratemaking regarding the proposed methodology, underlying assumptions, and preliminary data.
- (g) The distributed solar value methodology established by the department must, at a minimum, account for the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value.

 The department may, based on known and measurable evidence of the cost or benefit of solar operation, incorporate other values into the methodology, including credit for locally manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, or other factors.
- (h) The credit for distributed solar value applied to alternative tariffs approved under this section shall represent the present value of the future revenue streams of the value components identified in paragraph (g).
- (i) The utility shall recalculate the alternative tariff on an annual cycle, and shall file the recalculated alternative tariff with the commission or governing body for approval.
- (j) Renewable energy credits for solar energy credited under this subdivision belong to the electric utility providing the credit.

Sec. 10. [216B.2427] SOLAR ELECTRICITY STANDARD.

- Subdivision 1. **Definitions.** (a) For the purposes of this section, the terms defined in this subdivision have the meanings given them.
- (b) "Electric utility" has the meaning given in section 216B.1691, subdivision 1, paragraph (b).
- (c) "Total retail electric sales" has the meaning given in section 216B.1691, subdivision 1, paragraph (c).
- Subd. 2. Solar electricity standard. (a) Except as otherwise provided in paragraph

 (b), each electric utility shall generate or procure solar electric generation capacity for

 its retail customers in Minnesota or the retail customers of a distribution utility to which

 the electric utility provides wholesale electric services. At a minimum, the following

percentages of the electric utility's total retail sales to retail customers in Minnesota must be generated by solar energy by the end of the year indicated:

- (1) 2016: 0.25 percent;
- 11.4 (2) 2020: 1.0 percent; and
- 11.5 (3) 2025: 2.0 percent.

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- (b) A public utility must meet the requirements of this paragraph. An electric utility subject to this paragraph must generate or procure solar electric generation capacity for its retail customers in Minnesota or the retail customers of a distribution utility to which the electric utility provides wholesale electric service. At a minimum, the following percentages of the electric utility's total retail electric sales to retail customers in Minnesota must be generated by solar energy by the end of the year indicated:
- 11.12 <u>(1) 2016: 0.5 percent;</u>
- 11.13 (2) 2020: 2.0 percent; and
- 11.14 (3) 2025: 4.0 percent.
- (c) An electric utility may not use energy used to satisfy the solar energy standard under this section to satisfy its standard obligation under section 216B.1691, nor may energy used to satisfy the standard under section 216B.1691 be used to satisfy the standard under this section.
 - Subd. 3. Use of integrated resource planning process. Except if inconsistent with this section, the commission may modify or delay implementation of a standard obligation in the same manner as in section 26B.1691, subdivision 2b, as a part of an integrated resource planning proceeding under section 216B.2422, or in other proceedings before the commission. The order to delay or modify shall not be considered advisory with respect to any electric utility. This subdivision shall not be construed to limit the commission's authority to modify or delay implementation of a standard obligation in other proceedings before it.
- Subd. 4. Utility plans filed with commission. Each electric utility shall report to the commission on its plans, activities, and progress demonstrating the efforts made towards complying with this section. The report shall be included in its filings under section 216B.2422 or in a separate report submitted to the commission every two years, whichever is more frequent. In its resource plan or separate report, each electric utility shall provide a description of:
- 11.33 (1) the status of the utility's solar energy mix relative to the standards;
- 11.34 (2) efforts taken to meet the standards;
- 11.35 (3) any obstacles encountered or anticipated in meeting the standards;
- 11.36 (4) potential solutions to the identified obstacles; and

(5) an estimation of the rate impact related to measures taken by the electric utility
necessary to comply with this section. The rate impact estimate must be for wholesale
rates and, if the electric utility makes retail sales, an estimate shall also be completed
for the impact on the electric utility's retail rates. An estimation of rate impacts must
also account for acquisition of energy capacity, distribution, and transmission upgrades
avoided as a result of the standards.
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- Subd. 5. Renewable energy credits. In lieu of generating or procuring energy directly to satisfy the solar electricity standard of this section, an electric utility may use renewable energy credits that originate from a solar electricity generator to satisfy the standard. In doing so, an electric utility must follow protocols established by the commission under section 216B.1691, subdivision 4 for registering, tracking, and retiring credits.
- Subd. 6. Compliance; penalties. (a) The commission must regularly investigate whether an electric utility is in compliance with its standard obligation under subdivision 2.
- (b) If the commission finds noncompliance, it may order the electric utility to construct solar energy facilities, purchase solar energy, purchase renewable energy credits generated by solar energy, or engage in other activities to achieve compliance. If an electric utility fails to comply with an order under this subdivision, the commission may impose a financial penalty on the electric utility in an amount not to exceed the estimated cost of the electric utility to achieve compliance. The penalty may not exceed the lesser of the cost of constructing facilities or purchasing renewable energy credits necessary for the electric utility to achieve compliance. The commission must deposit financial penalties imposed under this subdivision in the energy and conservation account established in the special revenue fund under section 216B.241, subdivision 2a.
- (c) Nothing in this subdivision shall be construed to limit any other authority the commission possesses to enforce this section.

12.27 ARTICLE 3

SOLAR ENERGY PRODUCTION INCENTIVE

Section 1. [216C.411] SOLAR ACCOUNT DEPOSIT AND PRODUCTION INCENTIVE.

Subdivision 1. **Deposit.** Each public utility, cooperative electric association, and municipal utility shall create an account to pay incentives for electricity generated by solar photovoltaic devices as specified in this section. A utility or association shall each year deposit one percent of the utility's or association's gross annual retail electric sales during the preceding calendar year. Each utility and association must report annually by

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13.1	August 1 to the Division of Energy Resources, Department of Commerce, on the amount
13.2	deposited in the account in the previous year and the solar photovoltaic energy incented in
13.3	the previous year.
13.4	Subd. 2. Incentive payment. (a) Incentive payments must, if sufficient funds are in
13.5	the account and only to the extent of those funds, be made under this section only to an
13.6	owner of a solar photovoltaic device who is a customer of the utility or association, who has:
13.7	(1) submitted to the utility or association on a form prescribed by it, an application
13.8	to receive the incentive; and
13.9	(2) received from the utility or association in writing a determination that the solar
13.10	photovoltaic device qualifies for the incentive.
13.11	(b) A solar photovoltaic device with a capacity in excess of two megawatts is
13.12	ineligible to receive incentive payments under this section.
13.13	(c) A utility or association that owns a solar photovoltaic device is not eligible
13.14	for an incentive.
13.15	Subd. 3. Eligibility window; payment duration. (a) Payments may be made under
13.16	this section only for electricity generated from a solar photovoltaic device that first begins
13.17	generating electricity after January 1, 2014.
13.18	(b) Payment of the incentive begins and runs consecutively from the date the solar
13.19	photovoltaic device begins generating electricity.
13.20	(c) The owner of a solar photovoltaic device may receive payments under this
13.21	section for a device for a period of 20 years. No payment may be made under this section
13.22	for electricity generated after December 31, 2049.
13.23	Subd. 4. Amount of payment. (a) An incentive payment is based on the number of
13.24	kilowatt hours of electricity generated. The per-kilowatt-hour amount of the payment is at
13.25	a level determined by the commissioner. The commissioner shall set the rate at a level
13.26	the commissioner determines necessary to incent solar photovoltaic device installation
13.27	at the lowest incentive rate consistent with maximum installation of devices considering
13.28	available account resources to pay the incentive.
13.29	(b) By January 1, 2015, and every January 1 thereafter through 2049, the
13.30	commissioner shall make a determination as to whether the incentive needs to be
13.31	adjusted. In making the determination, the commissioner shall solicit comments and
13.32	recommendations from utilities, associations, ratepayers, and other interested parties.
13.33	After considering the comments and recommendations, the commissioner may adjust
13.34	the incentive rate.

EFFECTIVE DATE. This section is effective January 1, 2014.

14.1	ARTICLE 4
14.2	COMMUNITY SOLAR GENERATING FACILITY
14.3	Section 1. [216B.1641] DEFINITIONS.
14.4	Subdivision 1. Scope. For the purposes of sections 216B.1641 to 216B.1644, the
14.5	following definitions have the meanings given.
14.6	Subd. 2. Community solar generating facility. "Community solar generating
14.7	facility" means a facility:
14.8	(1) that generates electricity by means of a solar photovoltaic device that has a
14.9	capacity of less than two megawatts;
14.10	(2) that is interconnected with a utility's distribution system under the jurisdiction
14.11	of the commission;
14.12	(3) that is located in the electric service area of the utility with which it is
14.13	interconnected;
14.14	(4) whose subscribers purchase, under long-term contract with the community solar
14.15	generating facility, the right to consume the electricity generated from a specified portion
14.16	of the facility's generating capacity;
14.17	(5) that is not owned by a utility; and
14.18	(6) that has at least two subscribers.
14.19	Subd. 3. Facility manager. "Facility manager" means an entity that manages a
14.20	community solar generating facility for the benefit of subscribers and may, in addition,
14.21	develop, construct, own, or operate the community solar generating facility. A facility
14.22	manager may not be a utility, but may be:
14.23	(1) a person whose sole purpose is to beneficially own and operate a community
14.24	solar generating facility;
14.25	(2) a Minnesota nonprofit corporation organized under chapter 317A;
14.26	(3) a Minnesota cooperative association organized under chapter 308A or 308B;
14.27	(4) a Minnesota political subdivision or local government, including, but not limited
14.28	to, a county, statutory or home rule charter city, town, school district, public or private
14.29	higher education institution, or any other local or regional governmental organization such
14.30	as a board, commission, or association; or
14.31	(5) a tribal council.
14.32	Subd. 4. Renewable energy credit. "Renewable energy credit" has the meaning
14.33	given in section 216B.1691, subdivision 1, paragraph (d).
14.34	Subd. 5. Solar photovoltaic device. "Solar photovoltaic device" has the meaning
14.35	given in section 216C.06, subdivision 16.

15.34 must provide certification to the subscriber signed by the facility manager under penalty of perjury: 15.35

Subd. 3. **Certification.** Prior to the sale of a subscription, a facility manager

device providing electricity to the subscriber, subject to the limit in paragraph (b).

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6.1	(1) identifying the rate of insolation at the community solar generating facility;
6.2	(2) certifying that the solar photovoltaic devices employed by the community solar
6.3	generating facility to generate electricity have an electrical energy degradation rate of no
6.4	more than 0.5 percent annually; and
6.5	(3) certifying that the community solar generating facility is in full compliance with
6.6	all applicable federal and state utility, securities, and tax laws.
6.7	Subd. 4. On-site subscriber. A subscriber who owns the property on which
6.8	a community solar generating facility is located has no more rights with respect to
6.9	subscription size or price than any other subscriber.
6.10	Subd. 5. Subscription prices. The price for a subscription to a community solar
6.11	generating facility is not subject to regulation by the commission and is negotiated
6.12	between the prospective subscriber and the facility manager.
6.13	Subd. 6. Subscription transfer. A subscriber that terminates the contract between
6.14	the subscriber and the community solar generating facility must transfer the subscription
6.15	to a person eligible to be a subscriber or to the facility manager at a price negotiated
6.16	by both parties.
6.17	Subd. 7. New subscribers. Within 30 days of the execution of a contract between the
6.18	community solar generating facility and a new subscriber, the facility manager shall submit
6.19	the following information to the utility serving the community solar generating facility:
6.20	(1) the new subscriber's name, address, number of meters, and utility customer
6.21	account; and
6.22	(2) the share of the community solar generating facility's nameplate capacity owned
6.23	by the new subscriber.
6.24	Subd. 8. Meter change. A subscriber that moves to a different property served by
6.25	the community solar generating facility from the property at which the subscriber resided
6.26	at the time the contract between the subscriber and the community solar generating facility
6.27	was executed, or that changes the number of meters attached to the subscriber's account,
6.28	must notify the facility manager within 30 days of the change.
6.29	Subd. 9. Disputes. The dispute resolution provisions available under section
6.30	216B.164 shall be used to resolve disputes between a facility manager and the utility
6.31	serving the community solar generating facility.
6.32	Sec. 3. [216B.1643] DISPOSITION OF ELECTRICITY GENERATED.
6.33	Subdivision 1. Allocation. (a) The total amount of electricity available for allocation

production meter installed by the utility.

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to all subscribers of a community solar generating facility shall be determined by a

17.1	(b) The total amount of electricity available to a subscriber shall be the total amount
17.2	of electricity available for allocation to all subscribers of a community solar generating
17.3	facility prorated by a subscriber's subscription size in relation to the nameplate capacity of
17.4	the community solar generating facility.
17.5	(c) A subscriber may not resell electricity governed by the subscriber's contract
17.6	with a community solar generating facility.
17.7	(d) All electricity generated by a community solar generating facility that is not
17.8	consumed by subscribers must be sold to the utility interconnected with the community
17.9	solar generating facility.
17.10	Subd. 2. Utility purchases. The utility to which the community solar generating
17.11	facility is interconnected shall purchase all electricity generated by the community solar
17.12	generating facility that is not consumed by subscribers. The price paid to the community
17.13	solar generating facility by the utility is governed by section 216B.164, or any law that
17.14	governs the price a utility must pay to purchase electricity from a solar photovoltaic device.
17.15	Subd. 3. Interconnection. The commission shall establish uniform fees for the
17.16	interconnection of a community solar generating facility with a utility.
17.17	Subd. 4. Nonutility status. Notwithstanding section 216B.02, a community solar
17.18	generating facility is not a public utility.
17.19	Sec. 4. [216B.1644] BILLING.
17.20	Subdivision 1. Billing procedure. A subscriber to a community solar generating
17.21	facility must be:
17.22	(1) charged by the utility interconnected with the community solar generating
17.23	facility the utility's applicable rate schedule for sales to that class of customer for all
17.24	electricity consumed by the subscriber;
17.25	(2) paid by the utility the maximum rate allowable under section 216B.164, or
17.26	any other law that may govern the price a utility must pay to purchase electricity from
17.27	a solar photovoltaic device, for a portion of all electricity the utility purchases from
17.28	the community solar generating facility that is equal to the ratio of the subscriber's
17.29	subscription to the nameplate capacity of the community solar generating facility;
17.30	(3) provided by the utility with a monthly bill that contains, in addition to the
17.31	amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized by
17.32	the owner for that month and on a year-to-date basis; and
17.33	(4) provided by the utility with a meter that allows for the separate calculation of the

amount of electricity consumed and generated at the property.

8.1	Subd. 2. Bining system. The Department of Commerce shall, by January 1, 2014,
8.2	establish a uniform administrative system to credit the utility accounts of subscribers to a
8.3	community solar generating facility. In determining the uniform administrative system, the
8.4	commission shall solicit comments and recommendations from utilities, ratepayers, and
8.5	other interested parties, and shall review commercially available administrative systems
8.6	and administrative systems used in jurisdictions where entities similar to community
8.7	solar generating facilities are operating.
8.8	Subd. 3. Commission proceeding; rate adjustment. By September 1, 2014, the
8.9	commission shall initiate a proceeding to examine whether the rate paid by a utility to
8.10	purchase energy from a community solar generating facility under section 216B.1643,
8.11	subdivision 2, should be adjusted to reflect the actual fixed costs incurred by a utility to
8.12	provide service to a community solar generating facility.
8.13	ARTICLE 5
8.14	MADE IN MINNESOTA INCENTIVE
8.15	Section 1. [216C.411] DEFINITIONS.
8.16	For the purposes of sections 216C.411 to 216C.415, the following terms have the
8.17	meanings given.
8.18	(a) "Made in Minnesota" means the manufacture in this state of solar photovoltaic
8.19	modules:
8.20	(1) at a manufacturing facility located in Minnesota that is registered and authorized
8.21	to manufacture and apply the UL 1703 certification mark to solar photovoltaic modules by
8.22	Underwriters Laboratory (UL), CSA International, Intertek, or an equivalent UL-approved
8.23	independent certification agency;
8.24	(2) that bear UL 1703 certification marks from UL, CSA International, Intertek, or
8.25	an equivalent UL-approved independent certification agency, which must be physically
8.26	applied to the modules at a manufacturing facility described in clause (1); and
8.27	(3) that are manufactured in Minnesota:
8.28	(i) by manufacturing processes that must include tabbing, stringing, and lamination;
8.29	<u>or</u>
8.30	(ii) by interconnecting low-voltage direct current photovoltaic elements that produce
8.31	the final useful photovoltaic output of the modules.
8.32	A solar photovoltaic module that is manufactured by attaching microinverters, direct
8.33	current optimizers, or other power electronics to a laminate or solar photovoltaic

module that has received UL 1703 certification marks outside Minnesota from UL, CSA

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International, Intertek, or an equivalent UL-approved independent certification agency is not "Made in Minnesota" under this paragraph.

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

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

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

Subdivision 1. Account established; account management. A "Made in Minnesota" solar energy production incentive account is established as a separate account in the special revenue fund in the state treasury. The commissioner of management and budget shall credit to the account the amounts authorized under this section and appropriations and transfers to the account. Earnings, such as interest, dividends, and any other earnings arising from account assets, must be credited to the account. Funds remaining in the account at the end of a fiscal year do not cancel to the general fund but remain in the account. The commissioner shall manage the account. There is annually appropriated from the account to the commissioner money sufficient to make the payments required by section 216C.415 and to administer sections 216C.412 to 216C.415. The commissioner shall manage payments from the account and may adjust incentive payment amounts otherwise required under section 216C.415 so that funds are available in the account to make payments, adjusted or otherwise, until the time payments cease under section 216C.415.

Subd. 2. Purpose. The purpose of the account is to pay the "Made in Minnesota" solar renewable energy production incentive to owners of solar photovoltaic modules that have received a "Made in Minnesota" certificate from the commissioner under section 216C.413.

Subd. 3. Allocations; deposit. (a) Beginning January 1, 2014, and each January 1 thereafter, through 2024, each public utility, cooperative electric association, and municipal utility subject to section 216B.241 must annually pay to the commissioner five percent of the amount it was required to spend in the previous year, based on its sale of electricity, on energy conservation improvements under section 216B.241, subdivisions 1a and 1b. The commissioner shall, upon receipt of the funds, deposit them in the account established in subdivision 1.

(b) Notwithstanding section 116C.779, subdivision 1, paragraph (g), beginning

January 1, 2014, and continuing each January 1 until 2024, the utility that manages the

account under section 116C.779 must annually pay from that account to the commissioner

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an amount that, when added to the amount paid to the commissioner under paragraph (a), totals \$15,000,000 for the purposes of this section. The commissioner shall, upon receipt of the funds, deposit them in the account established in subdivision 1.

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

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

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

- (1) a technical description of the solar photovoltaic module and the processes used to manufacture it, excluding proprietary details;
- (2) documentation that the solar photovoltaic module meets all the required applicable parts of the "Made in Minnesota" definition in section 216C.411, including evidence of the UL 1703 right to mark for all solar photovoltaic modules seeking to qualify as "Made in Minnesota";
- (3) documentation, including, but not limited to, purchase orders, invoices, and shipping documents, establishing:
 - (i) the origin of components used to manufacture the solar photovoltaic modules;
- (ii) the costs of raw materials, direct manufacturing labor in Minnesota, and overhead to manufacture the solar photovoltaic module; and
- (iii) the total costs of manufacturing the solar photovoltaic module, expressed in dollars per watts-peak governed by Standard Test Conditions under UL 1703;
 - (4) any additional information requested by the commissioner of commerce; and
- (5) certification signed by the chief executive officer of the manufacturing company attesting to the truthfulness of the contents of the application and supporting materials under penalty of perjury.
- Subd. 2. Plant inspection. After reviewing the application materials submitted under subdivision 1, the commissioner, or the commissioner's designee, shall physically inspect the manufacturer's Minnesota plant to verify that the manufacturing processes meet the requirements of subdivision 1. The commissioner shall contract with an independent technical advisor with expertise in the manufacture of solar photovoltaic modules to accompany the commissioner, or the commissioner's designee, on the inspection. The commissioner may assess a fee on the manufacturer that is equal to the costs billed by the

contractor for the contractor's services with respect to the inspection, including review of the application and the writing of a postinspection report.

- Subd. 3. Certification. If the commissioner determines that a manufacturer's solar photovoltaic module meets the definition of "Made in Minnesota" in section 216C.411, the commissioner shall issue the manufacturer a "Made in Minnesota" certificate containing the name and model numbers of the certified solar photovoltaic modules and the date of certification. A copy of the certificate must be provided to each purchaser of the solar photovoltaic module.
- Subd. 4. **Reinspection.** The commissioner may reinspect the manufacturing facility of a manufacturer who has received certification under subdivision 3 at any time, but must do so at least every two years.
- Subd. 5. Notice of change; certification review. A manufacturer that has received a "Made in Minnesota" certificate under subdivision 3 must notify the commissioner of commerce at least 60 days in advance of any changes in the components used in production, manufacturing processes, or any other changes that could affect the manufacturer's solar photovoltaic modules' certification as "Made in Minnesota," and must submit to the commissioner detailed information describing and documenting the changes. The commissioner shall, after reviewing the submitted material and, if necessary, conducting a reinspection of the manufacturer's manufacturing facility, determine whether the proposed changes warrant revoking the manufacturer's "Made in Minnesota" certification. Within ten days of making a determination under this subdivision, the commissioner shall inform the manufacturer of the determination in writing.

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

Sec. 4. [216C.414] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION INCENTIVE; CALCULATION.

Subdivision 1. Components. (a) By October 1, 2013, the Department of Commerce shall calculate a "Made in Minnesota" solar energy production incentive for the purpose of the incentive payments under section 216C.415 for each solar photovoltaic module that has received certification under section 216C.413 as being manufactured in Minnesota. The "Made in Minnesota" solar energy production incentive is a performance-based financial incentive expressed as a per kilowatt-hour amount that, when added to the amount paid by a utility to the owner of a solar photovoltaic module under section 216B.164 or other rate approved by the commission, reduces the payback of the owner's investment in the solar photovoltaic modules to a period of ten years. The Department of

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Commerce shall calculate the "Made in Minnesota" solar energy production incentive by utilizing a financial model composed of the following components: 22.2 (1) an estimate of the installed cost per kilowatt-direct current, based on the cost data 22.3 supplied by the manufacturer in the application submitted under section 216C.413, and an 22.4 estimate of the average installation cost based on a representative sample of Minnesota 22.5 solar photovoltaic projects installed by installers certified by the North American Board of 22.6 Certified Energy Practitioners and the Minnesota Joint Apprenticeship Training Committee; 22.7 (2) the average insolation rate in Minnesota; 22.8 (3) an estimate of the decline in the generation efficiency of the solar photovoltaic 22.9 22.10 modules over time; (4) the rate paid by utilities to owners of solar photovoltaic modules under section 22.11 216B.164 or other law; 22.12 (5) applicable federal tax incentives for installing solar photovoltaic modules; 22.13 (6) the maximum amount of debt the project can support based on current 22.14 22.15 commercial borrowing rates and a ten-year term; and (7) the estimated levelized cost per kilowatt-hour generated. 22.16 (b) In determining the amount of the incentive, the commissioner shall consider, 22.17 after consulting with Minnesota solar photovoltaic manufacturers, the degree to which 22.18 solar photovoltaic modules contain components manufactured in Minnesota; the solar 22.19 photovoltaic modules' estimated length of life, taking into account design, quality of 22.20 materials used, and independent testing results; UL 1703 or equivalent fire safety ratings 22.21 and additional integrated safety features; and the ability to use the solar photovoltaic 22.22 modules in innovative applications, including for purposes other than solely electric 22.23 22.24 generation. (c) "Made in Minnesota" solar photovoltaic modules shall receive: 22.25 22.26 (1) 100 percent of the incentive calculated in paragraph (a) if they are manufactured under the process described in section 216C.411, paragraph (a), clause (3), item (i); or 22.27 (2) 65 percent of the incentive calculated in paragraph (a) if they are manufactured 22.28 under the process described in section 216C.411, paragraph (a), clause (3), item (ii). 22.29 Subd. 2. Notice; recalculation. A manufacturer that has received a "Made in 22.30 Minnesota" certificate under section 216C.413 must notify the commissioner at least 60 22.31 days in advance of any changes in the parameters listed in subdivision 1 that may affect the 22.32 calculation of the "Made in Minnesota" solar energy production incentive, and must submit 22.33 to the commissioner detailed information describing and documenting the changes. The 22.34 commissioner, after reviewing the submitted material, shall determine whether the changes 22.35 warrant recalculation of the "Made in Minnesota" solar energy production incentive for 22.36

23.1	the manufacturer's solar photovoltaic modules and, if so, shall conduct the recalculation.
23.2	Within ten days of recalculating the incentive, the commissioner shall inform the
23.3	manufacturer of the recalculation in writing. A recalculated incentive is effective 90 days
23.4	after the first day of the first month following the date of notice of the recalculation.
23.5	Subd. 3. Annual review. Unless a review of the calculation of the "Made in
23.6	Minnesota" solar energy production incentive has been conducted under subdivision 2
23.7	in a calendar year, the commissioner of commerce shall annually review the calculation
23.8	of the "Made in Minnesota" solar energy production incentive for each manufacturer
23.9	receiving the incentive. As part of the review, the commissioner of commerce may
23.10	require the manufacturer to submit current information to support the calculation of the
23.11	"Made in Minnesota" solar energy production incentive. A manufacturer shall submit the
23.12	information requested by the commissioner in a timely fashion.
23.13	EFFECTIVE DATE. This section is effective the day following final enactment.
23.14	Sec. 5. [216C.415] "MADE IN MINNESOTA" SOLAR ENERGY PRODUCTION
23.15	INCENTIVE; PAYMENT.
23.16	Subdivision 1. Incentive payment. Incentive payments may be made under this
23.17	section only to an owner of solar photovoltaic modules with a total nameplate capacity
23.18	below 100 kilowatts who:
23.19	(1) has submitted to the commissioner, on a form established by the commissioner,
23.20	an application to receive the incentive;
23.21	(2) has received from the commissioner a "Made in Minnesota" certificate under
23.22	section 216C.413; and
23.23	(3) has installed on or adjacent to residential or commercial property solar
23.24	photovoltaic modules that are generating electricity and has received a "Made in
23.25	Minnesota" certificate under section 216C.413.
23.26	Subd. 2. Eligibility window; payment duration. (a) Payments may be made
23.27	under this section only for electricity generated from solar photovoltaic modules that are
23.28	operational and generating electricity from January 1, 2014, through December 31, 2034.
23.29	(b) Payment of the incentive begins and runs consecutively from the date the solar
23.30	photovoltaic modules begin generating electricity.
23.31	(c) An owner of solar photovoltaic modules shall receive payments under this
23.32	section for a period of ten years.
23.33	(d) No payment may be made under this section for electricity generated after
23.34	December 31, 2034.

24.1	(e) No owner of solar photovoltaic modules may first begin to receive payments
24.2	under this section after December 31, 2024.
24.3	Subd. 3. Amount of payment. (a) An incentive payment is based on the number
24.4	of kilowatt-hours of electricity generated by the solar photovoltaic modules installed at
24.5	a single property, except as provided in paragraph (b). The per-kilowatt amount of the
24.6	payment is the "Made in Minnesota" solar energy production incentive for those modules
24.7	determined by the commissioner of commerce under section 216C.414.
24.8	(b) The owner of solar photovoltaic modules eligible to receive incentives under this
24.9	section and whose total nameplate capacity exceeds 40 kilowatts DC but is less than 100
24.10	kilowatts DC shall be paid an incentive according to the formula:
24.11	$I = (M) \times [(P \text{ kWh AC}) \div (C \text{ kW DC})] \times (40 \text{ kW DC}), \text{ where:}$
24.12	(1) I equals the incentive paid to an owner of solar photovoltaic modules whose
24.13	nameplate capacity exceeds 40 kilowatts DC, but is less than 100 kilowatts DC;
24.14	(2) M equals the "Made in Minnesota" solar energy production incentive calculated
24.15	under section 216C.414;
24.16	(3) P equals the number of kilowatt-hours AC generated by the solar photovoltaic
24.17	modules whose nameplate capacity exceeds 40 kilowatts DC, but is less than 100
24.18	kilowatts DC; and
24.19	(4) C equals the nameplate capacity of the solar photovoltaic modules whose
24.20	nameplate capacity exceeds 40 kilowatts DC, but is less than 100 kilowatts DC.
24.21	(c) For purposes of this subdivision, (i) "AC" means alternating current; (ii) "DC"
24.22	means direct current; (iii) "kWh" means kilowatt-hours; and (iv) "kW" means kilowatts.
24.23	Subd. 4. Allocation of payments. (a) Fifty percent of the funds deposited in the
24.24	account established in section 216C.412 available each year to pay incentives shall be for
24.25	owners of eligible solar photovoltaic modules installed on residential property, and 50
24.26	percent shall be for owners of eligible solar photovoltaic modules installed on commercial
24.27	property.
24.28	(b) The commissioner may not award more than 25 percent of the annual
24.29	contribution made by the public utility that owns a nuclear generating plant in this state
24.30	to the account established in section 216C.412 to owners of solar photovoltaic modules
24.31	that are installed in buildings located outside the area where that public utility provides
24.32	electric service in this state.
24.33	(c) The commissioner shall endeavor to geographically distribute incentives paid
24.34	under this section to owners of solar photovoltaic modules installed throughout the state.
24.35	(d) For purposes of this subdivision:

(1) "residential property" means residential real estate that is occupied and used as a
homestead by its owner or by a renter and includes "multifamily housing development"
as defined in section 462C.02, subdivision 5, except that residential property on which
solar photovoltaic modules (i) whose capacity exceeds 10 kilowatts is installed; or (ii)
connected to a utility's distribution system and whose electricity is purchased by several
residents, each of whom own a share of the electricity generated, shall be deemed
commercial property; and
(2) "commercial property" means real property on which is located a business,
government, or nonprofit establishment.
Subd. 5. Limitation. An owner receiving an incentive payment under this section
may not receive a rebate under section 116C.7791 for the same solar photovoltaic modules.
EFFECTIVE DATE. This section is effective the day following final enactment.
Sec. 6. <u>VALUE OF ON-SITE ENERGY STORAGE STUDY.</u>
(a) The commissioner of commerce shall contract with an independent consultant
selected through a request for proposal process to produce a report analyzing the potential
costs and benefits of installing utility-managed energy storage modules in residential and
commercial buildings in this state. The study must:
(1) estimate the potential value of on-site energy storage modules as a
load-management tool to reduce costs for individual customers and for the utility,
including, but not limited to, reductions in energy, particularly peaking, costs, and
capacity costs;
(2) examine the interaction of energy storage modules with on-site solar photovoltaic
modules; and
(3) analyze existing barriers to the installation of on-site energy storage modules
by utilities, and examine strategies and design potential economic incentives, including
using utility funds expended under Minnesota Statutes, section 216B.241, to overcome
those barriers.
By January 1, 2014, the commissioner of commerce shall submit the study to the chairs
and ranking minority members of the legislative committees with jurisdiction over energy
policy and finance.
(b) The commissioner of commerce shall assess an amount, not to exceed \$100,000,
necessary under Minnesota Statutes, section 216B.241, subdivision 1e, for the purpose of
completing the study described in this section.
EFFECTIVE DATE. This section is effective the day following final enactment.

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(a) The commissioner of commerce shall contract with an independent consultant selected through a request for proposal process to produce a report analyzing the potential costs and benefits of expanding the installation of solar thermal projects, as defined in Minnesota Statutes, section 216B.2411, subdivision 2, in residential and commercial buildings in this state. The study must examine the potential for solar thermal projects to reduce heating and cooling costs for individual customers and to reduce utilities' costs. The study must also analyze existing barriers to the installation of solar thermal projects by utilities, and examine strategies and design potential economic incentives, including using utility funds expended under Minnesota Statutes, section 216B.241, to overcome those barriers. By January 1, 2014, the commissioner of commerce shall submit the study to the chairs and ranking minority members of the legislative committees with jurisdiction over energy policy and finance.

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

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

ARTICLE 6

TRANSMISSION COST RECOVERY

Section 1. Minnesota Statutes 2012, section 216B.16, subdivision 7b, is amended to read:

- Subd. 7b. **Transmission cost adjustment.** (a) Notwithstanding any other provision of this chapter, the commission may approve a tariff mechanism for the automatic annual adjustment of charges for the Minnesota jurisdictional costs <u>net of associated revenues of:</u>
- (i) new transmission facilities that have been separately filed and reviewed and approved by the commission under section 216B.243 or are certified as a priority project or deemed to be a priority transmission project under section 216B.2425; and
- (ii) new transmission facilities approved by the regulatory commission of the state
 in which the new transmission facilities are to be constructed, to the extent approval
 is required by the laws of that state, and determined by the Midwest Independent
 Transmission System Operator to benefit the utility or integrated transmission system; and
- (iii) charges incurred by a utility <u>under a federally approved tariff</u> that accrue from other transmission owners' regionally planned transmission projects that have been

determined by the Midwest Independent <u>Transmission</u> System Operator to benefit the utility, as provided for under a federally approved tariff or integrated transmission system.

- (b) Upon filing by a public utility or utilities providing transmission service, the commission may approve, reject, or modify, after notice and comment, a tariff that:
- (1) allows the utility to recover on a timely basis the costs net of revenues of facilities approved under section 216B.243 or certified or deemed to be certified under section 216B.2425 or exempt from the requirements of section 216B.243;
- (2) allows the <u>utility to recover</u> charges incurred by a <u>utility under a federally</u> approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midwest Independent <u>Transmission</u> System Operator to benefit the utility, as provided for under a federally approved tariff or integrated transmission system. These charges must be reduced or offset by revenues received by the utility and by amounts the utility charges to other regional transmission owners, to the extent those revenues and charges have not been otherwise offset;
- (3) allows the utility to recover on a timely basis the costs net of revenues of facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed and determined by the Midwest Independent Transmission System Operator to benefit the utility or integrated transmission system;
- (4) allows a return on investment at the level approved in the utility's last general rate case, unless a different return is found to be consistent with the public interest;
- (4) (5) provides a current return on construction work in progress, provided that recovery from Minnesota retail customers for the allowance for funds used during construction is not sought through any other mechanism;
- (5) (6) allows for recovery of other expenses if shown to promote a least-cost project option or is otherwise in the public interest;
 - (6) (7) allocates project costs appropriately between wholesale and retail customers;
- (7) (8) provides a mechanism for recovery above cost, if necessary to improve the overall economics of the project or projects or is otherwise in the public interest; and
- (8) (9) terminates recovery once costs have been fully recovered or have otherwise been reflected in the utility's general rates.
- (c) A public utility may file annual rate adjustments to be applied to customer bills paid under the tariff approved in paragraph (b). In its filing, the public utility shall provide:
 - (1) a description of and context for the facilities included for recovery;
- 27.34 (2) a schedule for implementation of applicable projects;
- 27.35 (3) the utility's costs for these projects;

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

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- (5) calculations to establish that the rate adjustment is consistent with the terms of the tariff established in paragraph (b).
- (d) Upon receiving a filing for a rate adjustment pursuant to the tariff established in paragraph (b), the commission shall approve the annual rate adjustments provided that, after notice and comment, the costs included for recovery through the tariff were or are expected to be prudently incurred and achieve transmission system improvements at the lowest feasible and prudent cost to ratepayers.

28.10 **ARTICLE 7**

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28.11 CERTS FUNDING

- Section 1. Minnesota Statutes 2012, section 216B.241, subdivision 1e, is amended to read:
- Subd. 1e. **Applied research and development grants.** (a) The commissioner may, by order, approve and make grants for applied research and development projects of general applicability that identify new technologies or strategies to maximize energy savings, improve the effectiveness of energy conservation programs, or document the carbon dioxide reductions from energy conservation programs. When approving projects, the commissioner shall consider proposals and comments from utilities and other interested parties. The commissioner may assess up to \$3,600,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.
- (b) The commissioner, as part of the assessment authorized under paragraph (a), shall annually assess and grant up to \$500,000 for the purpose of subdivision 9.
- (c) The commissioner, as part of the assessment authorized under paragraph (a), each state fiscal year shall assess \$500,000 for a grant to the partnership created by section 216C.385, subdivision 2. The grant must be used to exercise the powers and perform the duties specified in section 216C.385, subdivision 3.
- (d) By February 15 annually, the commissioner shall report to the chairs and ranking minority members of the committees of the legislature with primary jurisdiction over energy policy and energy finance on the assessments made under this subdivision for the previous calendar year and the use of the assessment. The report must clearly describe the activities supported by the assessment and the parties that engaged in those activities.

EFFECTIVE DATE. Paragraph (b) is effective for assessments for state fiscal years commencing after July 1, 2013.

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ENERGY POLICY AMENDMENT

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

216B.2401 ENERGY CONSERVATION SAVINGS POLICY GOAL.

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

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

216C.05 FINDINGS AND PURPOSE.

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

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

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

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provide for an optimum combination of energy sources <u>and energy conservation</u> consistent with environmental protection and the protection of citizens.

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

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

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

- Subd. 2. **Energy policy goals.** It is the energy policy of the state of Minnesota that:
- (1) annual energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and natural gas be achieved through energy efficiency;
- (1) (2) the per capita use of fossil fuel as an energy input be reduced by 15 percent by the year 2015, through increased reliance on energy efficiency and renewable energy alternatives; and
- (2) (3) 25 percent of the total energy used in the state be derived from renewable energy resources by the year 2025.

Sec. 3. <u>DEPARTMENT OF COMMERCE</u>; <u>DIVISION OF ENERGY</u> RESOURCES; STUDY.

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

- (1) clarify statewide energy-savings policies and utility energy-savings goals;
- (2) maximize long-term cost-effective energy savings and minimize energy waste;
- 30.32 (3) maximize carbon reductions and economic benefits by increasing the efficiency of all sectors of the state's energy system;
- 30.34 (4) minimize total utility costs and rate impacts for ratepayers in all sectors;

programs, cogeneration, and combined heat and power projects; and

(6) determine the appropriate consideration in the integrated resource planning the content of the content of

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

The report must be submitted by January 15, 2015, to the chairs and ranking minority members of the committees of the legislature with primary jurisdiction over energy policy.

The division must provide public notice of the meetings.

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

ARTICLE 9

EMISSION REDUCTION COST RECOVERY

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

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

- (1) be installed on existing large electric generating power plants, as defined in section 216B.2421, subdivision 2, clause (1), that are located in the state and that are currently not subject to emissions limitations for new power plants under the federal Clean Air Act, United States Code, title 42, section 7401 et seq.;
- (2) not increase the capacity of the existing electric generating power plant more than ten percent or more than 100 megawatts, whichever is greater; and
 - (3) result in the existing plant either:
- 31.23 (i) complying with applicable new source review standards under the federal Clean
 31.24 Air Act; or
 - (ii) emitting air contaminants at levels substantially lower than allowed for new facilities by the applicable new source performance standards under the federal Clean Air Act; or
 - (iii) reducing emissions from current levels at a unit to the lowest cost-effective level when, due to the age or condition of the generating unit, the public utility demonstrates that it would not be cost-effective to reduce emissions to the levels in item (i) or (ii).
 - (b) Notwithstanding paragraph (a), a project may be approved for the emission reduction rate rider allowed in this section if the project is to be installed on existing large electric generating power plants, as defined in section 216B.2421, subdivision 2, clause (1), that are located outside the state and are needed to comply with state or federal

32.1	air quality standards, but only if the project has received an advance determination of
32.2	prudence from the commission under section 216B.1695.
32.3	EFFECTIVE DATE. This section is effective the day following final enactment.
32.4	Sec. 2. Minnesota Statutes 2012, section 216B.1692, is amended by adding a
32.5	subdivision to read:
32.6	Subd. 1a. Exemption. Subdivisions 2, 4, and 5, paragraph (c), clause (1), do not
32.7	apply to projects qualifying under subdivision 1, paragraph (b).
32.8	EFFECTIVE DATE. This section is effective the day following final enactment.
32.9	Sec. 3. Minnesota Statutes 2012, section 216B.1692, subdivision 8, is amended to read
32.10	Subd. 8. Sunset. This section is effective until December 31, 2015 2020, and
32.11	applies to plans, projects, and riders approved before that date and modifications made to
32.12	them after that date.
32.13	Sec. 4. Minnesota Statutes 2012, section 216B.1695, subdivision 5, is amended to read
32.14	Subd. 5. Cost recovery. The utility may begin recovery of costs that have been
32.15	incurred by the utility in connection with implementation of the project in the next rate
32.16	case following an advance determination of prudence or in a rider approved under section
32.17	<u>216B.1692</u> . The commission shall review the costs incurred by the utility for the project.
32.18	The utility must show that the project costs are reasonable and necessary, and demonstrate
32.19	its efforts to ensure the lowest reasonable project costs. Notwithstanding the commission's
32.20	prior determination of prudence, it may accept, modify, or reject any of the project costs.
32.21	The commission may determine whether to require an allowance for funds used during
32.22	construction offset.
32.23	EFFECTIVE DATE. This section is effective the day following final enactment.
32.24	Sec. 5. Minnesota Statutes 2012, section 216B.1695, is amended by adding a
32.25	subdivision to read:
32.26	Subd. 5a. Rate of return. The return on investment in the rider shall be at the
32.27	level approved by the commission in the public utility's last general rate case, unless the
32.28	commission determines that a different rate of return is in the public interest.
32.29	EFFECTIVE DATE. This section is effective the day following final enactment.

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- Subd. 2. **Guaranteed energy-savings agreement.** The commissioner may enter into a guaranteed energy-savings agreement with a qualified provider if:
- (1) the qualified provider is selected through a competitive process in accordance with the guaranteed energy-savings program guidelines within the Department of Administration;
- (2) the qualified provider agrees to submit an engineering report prior to the execution of the guaranteed energy-savings agreement. The cost of the engineering report may be considered as part of the implementation costs if the commissioner enters into a guaranteed energy-savings agreement with the provider;
- (3) the term of the guaranteed energy-savings agreement shall not exceed <u>15_25</u> years from the date of final installation;
- (4) the commissioner finds that the amount it would spend on the utility cost-savings measures recommended in the engineering report will not exceed the amount to be saved in utility operation and maintenance costs over 15 25 years from the date of implementation of utility cost-savings measures;
- (5) the qualified provider provides a written guarantee that the annual utility, operation, and maintenance cost savings during the term of the guaranteed energy-savings agreement will meet or exceed the annual payments due under a lease purchase agreement. The qualified provider shall reimburse the state for any shortfall of guaranteed utility, operation, and maintenance cost savings; and
- (6) the qualified provider gives a sufficient bond in accordance with section 574.26 to the commissioner for the faithful implementation and installation of the utility cost-savings measures.

33.27 **ARTICLE 11**

INTEGRATED RESOURCE PLANNING

- Section 1. Minnesota Statutes 2012, section 216B.2422, subdivision 4, is amended to read:
- Subd. 4. **Preference for renewable energy facility.** The commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the commission allow rate

recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is not in the public interest. The public interest determination must include an assessment of whether the resource plan helps the utility achieve the greenhouse gas reduction goals under section 216H.02, the renewable energy standard under section 216B.1691, or the solar energy standard under section 216B.2427.

34.7 ARTICLE 12

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RENEWABLE INTEGRATION STUDY

Section 1. RENEWABLE INTEGRATION STUDY.

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

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

The study must be completed and submitted to the Minnesota Public Utilities

Commission by December 1, 2014. The report shall include a description of the analyses that have been conducted and the results, including:

(1) a conceptual plan for transmission necessary for generation interconnection and delivery, and operational integration including access to regional geographic diversity and regional supply and demand side flexibility; and

(2) identification and development of potential solutions to any critical issues encountered to support increasing the renewable energy standard under Minnesota Statutes, section 216B.1691, to 40 percent by 2030 while maintaining system reliability, as well as potential impacts and barriers of increasing the renewable energy standard to 45 percent and 50 percent.

35.6 **ARTICLE 13**

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GAS UTILITY INFRASTRUCTURE COSTS

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

216B.1635 RECOVERY OF GAS UTILITY INFRASTRUCTURE COSTS.

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

- (b) "Gas utility infrastructure costs" or "GUIC" means costs incurred in gas utility projects that:
- (1) do not serve to increase revenues by directly connecting the infrastructure replacement to new customers;
- (2) are in service but were not included in the gas utility's rate base in its most recent general rate case; and, or are planned to be in service during the period covered by the report submitted under subdivision 2, but in no case longer than the one year forecast period in the report; and
- (3) replace or modify existing infrastructure if the replacement or modification does not constitute a betterment, unless the betterment is required by a political subdivision, as evidenced by specific documentation from the government entity requiring the replacement or modification of infrastructure do not constitute a betterment, unless the betterment is based on requirements by a political subdivision or a federal or state agency, as evidenced by specific documentation, an order, or other similar requirement from the government entity requiring the replacement or modification of infrastructure.
 - (c) "Gas utility projects" means relocation and:
- (1) replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision-; and
- (2) replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.

36.1	Subd. 2. Gas infrastructure filing. (a) The commission may approve a gas utility's
36.2	petition for a rate schedule A public utility submitting a petition to recover GUIC gas
36.3	infrastructure costs under this section. A gas utility may must submit to the commission,
36.4	the department, and interested parties a gas infrastructure project plan report and a
36.5	petition the commission to recover a rate of return, income taxes on the rate of return,
36.6	incremental property taxes, plus incremental depreciation expense associated with GUIC
36.7	for rate recovery of only incremental costs associated with projects under subdivision
36.8	1, paragraph (c), clause (2). The report and petition must be made at least 150 days in
36.9	advance of implementation of the rate schedule, provided that the rate schedule will not be
36.10	implemented until the petition is approved by the commission pursuant to subdivision
36.11	6. The report must be for a forecast period of one year.
36.12	(b) The filing is subject to the following:
36.13	(1) A gas utility may submit a filing under this section no more than once per year.
36.14	(2) A gas utility must file sufficient information to satisfy the commission regarding
36.15	the proposed GUIC or be subject to denial by the commission. The information includes,
36.16	but is not limited to:
36.17	(i) the government entity ordering the gas utility project and the purpose for which
36.18	the project is undertaken;
36.19	(ii) the location, description, and costs associated with the project;
36.20	(iii) a description of the costs, and salvage value, if any, associated with the existing
36.21	infrastructure replaced or modified as a result of the project;
36.22	(iv) the proposed rate design and an explanation of why the proposed rate design
36.23	is in the public interest;
36.24	(v) the magnitude and timing of any known future gas utility projects that the utility
36.25	may seek to recover under this section;
36.26	(vi) the magnitude of GUIC in relation to the gas utility's base revenue as approved
36.27	by the commission in the gas utility's most recent general rate case, exclusive of gas
36.28	purchase costs and transportation charges;
36.29	(vii) the magnitude of GUIC in relation to the gas utility's capital expenditures since
36.30	its most recent general rate case;
36.31	(viii) the amount of time since the utility last filed a general rate case and the utility's
36.32	reasons for seeking recovery outside of a general rate case; and
36.33	(ix) documentation supporting the calculation of the GUIC.
36.34	Subd. 3. Gas infrastructure project plan report. The gas infrastructure project
36.35	plan report required to be filed under subdivision 2 shall include all pertinent information

and supporting data on each proposed project including, but not limited to, project description and scope, estimated project costs, and project in-service date.

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- Subd. 4. Cost recovery petition for utility's facilities. Notwithstanding any other provision of this chapter, the commission may approve a rate schedule for the automatic annual adjustment of charges for gas utility infrastructure costs net of revenues under this section, including a rate of return, income taxes on the rate of return, incremental property taxes, incremental depreciation expense, and any incremental operation and maintenance costs. A gas utility's petition for approval of a rate schedule to recover gas utility infrastructure costs outside of a general rate case under section 216B.16, is subject to the following:
 - (1) a gas utility may submit a filing under this section no more than once per year; and
- (2) a gas utility must file sufficient information to satisfy the commission regarding the proposed GUIC. The information includes, but is not limited to:
- (i) the information required to be included in the gas infrastructure project plan report under subdivision 3;
- (ii) the government entity ordering or requiring the gas utility project and the purpose for which the project is undertaken;
- (iii) a description of the estimated costs and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;
- (iv) a comparison of the utility's estimated costs included in the gas infrastructure project plan and the actual costs incurred, including a description of the utility's efforts to ensure the costs of the facilities are reasonable and prudently incurred;
- (v) calculations to establish that the rate adjustment is consistent with the terms of the rate schedule, including the proposed rate design and an explanation of why the proposed rate design is in the public interest;
- (vi) the magnitude and timing of any known future gas utility projects that the utility may seek to recover under this section;
- (vii) the magnitude of GUIC in relation to the gas utility's base revenue as approved by the commission in the gas utility's most recent general rate case, exclusive of gas purchase costs and transportation charges; 37.30
 - (viii) the magnitude of GUIC in relation to the gas utility's capital expenditures since its most recent general rate case; and
- (ix) the amount of time since the utility last filed a general rate case and the utility's 37.33 reasons for seeking recovery outside of a general rate case. 37.34
- Subd. 5. Commission action. Upon receiving a gas utility report and petition for 37.35 cost recovery under subdivision 2 and assessment and verification under subdivision 4, the 37.36

38.1	commission may approve the annual GUIC rate adjustments provided that, after notice
38.2	and comment, the costs included for recovery through the rate schedule are prudently
38.3	incurred and achieve gas facility improvements at the lowest reasonable and prudent
38.4	cost to ratepayers.
38.5	Subd. 5a. Rate of return. The return on investment for the rate adjustment shall be
38.6	at the level approved by the commission in the public utility's last general rate case, unless
38.7	the commission determines that a different rate of return is in the public interest.
38.8	Subd. 3 <u>6</u> . Commission authority; rules. The commission may issue orders and
38.9	adopt rules necessary to implement and administer this section.
38.10	EFFECTIVE DATE. This section is effective the day following final enactment.
38.11	Sec. 2. Laws 2005, chapter 97, article 10, section 3, is amended to read:
38.12	Sec. 3. SUNSET.
38.13	Sections 1 and 2 shall expire on June 30, 2015 2023.
38.14	Sec. 3. REPEALER.
38.15	Minnesota Statutes 2012, section 216B.1637, is repealed.
38.16	ARTICLE 14
38.17	PACE
38.18	Section 1. Minnesota Statutes 2012, section 216C.435, is amended by adding a
38.19	subdivision to read:
38.20	Subd. 3a. Cost-effective energy improvements. "Cost-effective energy
38.21	improvements" mean energy improvements that have been identified in an energy audit
38.22	or renewable energy system feasibility study as repaying their purchase and installation
38.23	costs in 20 years or less, based on the amount of future energy saved and estimated future
38.24	energy prices.
38.25	EFFECTIVE DATE. This section is effective the day following final enactment.
38.26	Sec. 2. Minnesota Statutes 2012, section 216C.435, subdivision 8, is amended to read:
38.27	Subd. 8. Qualifying real property. "Qualifying real property" means a
38.28	single-family or multifamily residential dwelling, or a commercial or industrial building,
38.29	that the implementing entity has determined, after review of an energy audit or renewable
38.30	energy system feasibility study, can be benefited by installation of cost-effective energy
38.31	improvements.

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REVISOR

S0901-1

1st Engrossment

SF901

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

39.2	Sec. 3. Minnesota Statutes 2012, section 216C.436, subdivision 2, is amended to read:
39.3	Subd. 2. Program requirements. A financing program must:
39.4	(1) impose requirements and conditions on financing arrangements to ensure timely
39.5	repayment;
39.6	(2) require an energy audit or renewable energy system feasibility study to be
39.7	conducted on the qualifying real property and reviewed by the implementing entity prior
39.8	to approval of the financing;
39.9	(3) require the inspection of all installations and a performance verification of at
39.10	least ten percent of the energy improvements financed by the program;
39.11	(4) not prohibit the financing of all cost-effective energy improvements not otherwise
39.12	prohibited by this section;
39.13	(5) require that all cost-effective energy improvements be made to a qualifying
39.14	real property prior to, or in conjunction with, an applicant's repayment of financing for
39.15	energy improvements for that property;
39.16	(5) (6) have energy improvements financed by the program performed by licensed
39.17	contractors as required by chapter 326B or other law or ordinance;
39.18	(6) (7) require disclosures to borrowers by the implementing entity of the risks
39.19	involved in borrowing, including the risk of foreclosure if a tax delinquency results from
39.20	a default;
39.21	(7) (8) provide financing only to those who demonstrate an ability to repay;
39.22	(8) (9) not provide financing for a qualifying real property in which the owner is not
39.23	current on mortgage or real property tax payments;
39.24	(9) (10) require a petition to the implementing entity by all owners of the qualifying
39.25	real property requesting collections of repayments as a special assessment under section
39.26	429.101;
39.27	(10) (11) provide that payments and assessments are not accelerated due to a default
39.28	and that a tax delinquency exists only for assessments not paid when due; and
39.29	(11) (12) require that liability for special assessments related to the financing runs
39.30	with the qualifying real property.
39.31	EFFECTIVE DATE. This section is effective the day following final enactment.
39.32	Sec. 4. Minnesota Statutes 2012, section 216C.436, subdivision 7, is amended to read:

Article 14 Sec. 4.

under this section must:

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Subd. 7. Repayment. An implementing entity that finances an energy improvement

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- (1) secure payment with a lien against the benefited qualifying real property; and
- (2) collect repayments as a special assessment as provided for in section 429.101 or by charter, provided that special assessments may be made payable in up to 20 equal annual installments.

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

- Sec. 5. Minnesota Statutes 2012, section 216C.436, subdivision 8, is amended to read:
- Subd. 8. **Bond issuance; repayment.** (a) An implementing entity may issue revenue bonds as provided in chapter 475 for the purposes of this section, provided the revenue bond must not be payable more than 20 years from the date of issuance.
- (b) The bonds must be payable as to both principal and interest solely from the revenues from the assessments established in subdivision 7.
- (c) No holder of bonds issued under this subdivision may compel any exercise of the taxing power of the implementing entity that issued the bonds to pay principal or interest on the bonds, and if the implementing entity is an authority, no holder of the bonds may compel any exercise of the taxing power of the local government. Bonds issued under this subdivision are not a debt or obligation of the issuer or any local government that issued them, nor is the payment of the bonds enforceable out of any money other than the revenue pledged to the payment of the bonds.
 - Sec. 6. Minnesota Statutes 2012, section 429.101, subdivision 2, is amended to read:
- Subd. 2. **Procedure for assessment.** Any special assessment levied under subdivision 1 shall be payable in a single installment, or by up to ten equal annual installments as the council may provide, except that a special assessment made under an energy improvements financing program under subdivision 1, paragraph (c), may be repayable in up to 20 equal installments. With this exception these exceptions, sections 429.061, 429.071, and 429.081 shall apply to assessments made under this section.
 - **EFFECTIVE DATE.** This section is effective the day following final enactment.

41.1 ARTICLE 15

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41.2 **WASTE HEAT RECOVERY**

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

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

- (a) "Commission" means the Public Utilities Commission.
- (b) "Commissioner" means the commissioner of commerce.
- (c) "Department" means the Department of Commerce.
- (d) "Energy conservation" means demand-side management of energy supplies resulting in a net reduction in energy use. Load management that reduces overall energy use is energy conservation.
- (e) "Energy conservation improvement" means a project that results in energy efficiency or energy conservation. Energy conservation improvement may include waste heat recovery that is recovered and converted into electricity, but does not include electric utility infrastructure projects approved by the commission under section 216B.1636.

 Energy conservation improvement also includes waste heat recovered and used as thermal energy.
- (f) "Energy efficiency" means measures or programs, including energy conservation measures or programs, that target consumer behavior, equipment, processes, or devices designed to produce either an absolute decrease in consumption of electric energy or natural gas or a decrease in consumption of electric energy or natural gas on a per unit of production basis without a reduction in the quality or level of service provided to the energy consumer.
- (g) "Gross annual retail energy sales" means annual electric sales to all retail customers in a utility's or association's Minnesota service territory or natural gas throughput to all retail customers, including natural gas transportation customers, on a utility's distribution system in Minnesota. For purposes of this section, gross annual retail energy sales exclude:
- 41.29 (1) gas sales to:
- 41.30 (i) a large energy facility;
- (ii) a large customer facility whose natural gas utility has been exempted by the commissioner under subdivision 1a, paragraph (b), with respect to natural gas sales made to the large customer facility; and

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- (iii) a commercial gas customer facility whose natural gas utility has been exempted by the commissioner under subdivision 1a, paragraph (c), with respect to natural gas sales made to the commercial gas customer facility; and
- (2) electric sales to a large customer facility whose electric utility has been exempted by the commissioner under subdivision 1a, paragraph (b), with respect to electric sales made to the large customer facility.
- (h) "Investments and expenses of a public utility" includes the investments and expenses incurred by a public utility in connection with an energy conservation improvement, including but not limited to:
- (1) the differential in interest cost between the market rate and the rate charged on a no-interest or below-market interest loan made by a public utility to a customer for the purchase or installation of an energy conservation improvement;
- (2) the difference between the utility's cost of purchase or installation of energy conservation improvements and any price charged by a public utility to a customer for such improvements.
- (i) "Large customer facility" means all buildings, structures, equipment, and installations at a single site that collectively (1) impose a peak electrical demand on an electric utility's system of not less than 20,000 kilowatts, measured in the same way as the utility that serves the customer facility measures electrical demand for billing purposes or (2) consume not less than 500 million cubic feet of natural gas annually. In calculating peak electrical demand, a large customer facility may include demand offset by on-site cogeneration facilities and, if engaged in mineral extraction, may aggregate peak energy demand from the large customer facility's mining and processing operations.
- (j) "Large energy facility" has the meaning given it in section 216B.2421, subdivision 2, clause (1).
- (k) "Load management" means an activity, service, or technology to change the timing or the efficiency of a customer's use of energy that allows a utility or a customer to respond to wholesale market fluctuations or to reduce peak demand for energy or capacity.
- (l) "Low-income programs" means energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters.
- (m) "Qualifying utility" means a utility that supplies the energy to a customer that enables the customer to qualify as a large customer facility.
- (n) "Waste heat recovered and used as thermal energy" means capturing heat energy that would otherwise be exhausted or dissipated to the environment from machinery, buildings, or industrial processes and productively using such recovered thermal energy

SF901	REVISOR	PP	S0901-1	1st Engrossment
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where it was captured or distributing it as thermal energy to other locations where it is used to reduce demand side consumption of natural gas, electric energy, or both.

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

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

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

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APPENDIX Article locations in S0901-1

ARTICLE 1	STATE ENERGY POLICY	Page.Ln 1.18
ARTICLE 2	DISTRIBUTED GENERATION; SOLAR STANDARD	Page.Ln 3.9
ARTICLE 3	SOLAR ENERGY PRODUCTION INCENTIVE	Page.Ln 12.27
ARTICLE 4	COMMUNITY SOLAR GENERATING FACILITY	Page.Ln 14.1
ARTICLE 5	MADE IN MINNESOTA INCENTIVE	Page.Ln 18.13
ARTICLE 6	TRANSMISSION COST RECOVERY	Page.Ln 26.18
ARTICLE 7	CERTS FUNDING	Page.Ln 28.10
ARTICLE 8	ENERGY POLICY AMENDMENT	Page.Ln 29.3
ARTICLE 9	EMISSION REDUCTION COST RECOVERY	Page.Ln 31.10
ARTICLE 10	STATE BUILDINGS GUARANTEED ENERGY SAVINGS PROGRAM	Page.Ln 33.1
ARTICLE 11	INTEGRATED RESOURCE PLANNING	Page.Ln 33.27
ARTICLE 12	RENEWABLE INTEGRATION STUDY	Page.Ln 34.7
ARTICLE 13	GAS UTILITY INFRASTRUCTURE COSTS	Page.Ln 35.6
ARTICLE 14	PACE	Page.Ln 38.16
ARTICLE 15	WASTE HEAT RECOVERY	Page.Ln 41.1

APPENDIX

Repealed Minnesota Statutes: S0901-1

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).