1.1 moves to amend H.F. No. 956, the second engrossment, as follows:

Delete everything after the enacting clause and insert:

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

- 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 <u>15 25</u> 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.

Section 1.

Sec. 2. Minnesota Statutes 2012, section 116C.779, subdivision 3, is amended to read:

Subd	3	Initiative for	Renewable	Energy an	d the Environment.	(a)
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Notwithstanding subdivision 1, paragraph (g), beginning July 1, 2009, and each July 1 through 2011 2014, \$5,000,000 must be allocated from the renewable development account to fund a grant to the Board of Regents of the University of Minnesota for the Initiative for Renewable Energy and the Environment for the purposes described in paragraph (b). The Initiative for Renewable Energy and the Environment must set aside at least 15 percent of the funds received annually under the grant for qualified projects conducted at a rural campus or experiment station. Any set-aside funds not awarded to a rural campus or experiment station at the end of the fiscal year revert back to the Initiative for Renewable Energy and the Environment for its exclusive use. This subdivision does not create an obligation to contribute funds to the account.

- (b) Activities funded under this grant may include, but are not limited to:
- (1) environmentally sound production of energy from a renewable energy source, including biomass and agricultural crops;
- (2) environmentally sound production of hydrogen from biomass and any other renewable energy source for energy storage and energy utilization;
 - (3) development of energy conservation and efficient energy utilization technologies;
 - (4) energy storage technologies; and

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- (5) analysis of policy options to facilitate adoption of technologies that use or produce low-carbon renewable energy.
 - (c) For the purposes of this subdivision:
- (1) "biomass" means plant and animal material, agricultural and forest residues, mixed municipal solid waste, and sludge from wastewater treatment; and
- (2) "renewable energy source" means hydro, wind, solar, biomass, and geothermal energy, and microorganisms used as an energy source.
- (d) Beginning January 15 of 2010, and each year thereafter, the director of the Initiative for Renewable Energy and the Environment at the University of Minnesota shall submit a report to the chair and ranking minority members of the senate and house of representatives committees with primary jurisdiction over energy finance describing the activities conducted during the previous year funded under this subdivision.
- Sec. 3. 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,

Sec. 3. 2

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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 wind or solar generating equipment located on the consumer's property, provided the equipment is owned or operated by an entity other than the consumer.

Sec. 4. Minnesota Statutes 2012, section 216B.03, is amended to read:

216B.03 REASONABLE RATE.

Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable. Rates shall not be unreasonably preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to a class of consumers. To the maximum reasonable extent, the commission shall set rates to encourage energy conservation and renewable energy use and to further the goals of sections 216B.164, 216B.241, and 216C.05, and 216C.412. Any doubt as to reasonableness should be resolved in favor of the consumer. For rate-making

Sec. 4. 3

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purposes a public utility may treat two or more municipalities served by it as a single class wherever the populations are comparable in size or the conditions of service are similar.

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Sec. 5. Minnesota Statutes 2012, section 216B.16, is amended by adding a subdivision to read:

- Subd. 6e. Solar energy production incentive. (a) Except as otherwise provided in this subdivision, all assessments authorized by section 216C.412 incurred in connection with the solar energy production incentive shall be recognized and included by the commission in the determination of just and reasonable rates as if the expenses were directly made or incurred by the utility in furnishing utility service.
- (b) The commission shall not include expenses for the solar energy production incentive in determining just and reasonable electric rates for retail electric service provided to customers receiving the low-income electric rate discount authorized by subdivision 14.
 - Sec. 6. 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

Sec. 6. 4

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transmission projects that have been determined by the Midwest Independent Transmission 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 associated 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; (2) a schedule for implementation of applicable projects; (3) the utility's costs for these projects; (4) a description of the utility's efforts to ensure the lowest costs to ratepayers for the project; and (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

Sec. 6. 5

lowest feasible and prudent cost to ratepayers.

Sec. 7. Minnesota Statutes 2012, section 216B.1635, is amended to read:

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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 <u>costs incurred in gas utility</u> 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.
- Subd. 2. Gas infrastructure filing. (a) The commission may approve a gas utility's petition for a rate schedule A public utility submitting a petition to recover GUIC gas infrastructure costs under this section. A gas utility may must submit to the commission, the department, and interested parties a gas infrastructure project plan report and a petition the commission to recover a rate of return, income taxes on the rate of return, incremental property taxes, plus incremental depreciation expense associated with GUIC for rate recovery of only incremental costs associated with projects under subdivision 1, paragraph (c). The report and petition must be made at least 150 days in advance of implementation of the rate schedule, provided that the rate schedule will not be implemented until the

Sec. 7. 6

petition is approved by the commission pursuant to subdivision 5. The report must be 7.1 7.2 for a forecast period of one year. (b) The filing is subject to the following: 7.3 (1) A gas utility may submit a filing under this section no more than once per year. 7.4 (2) A gas utility must file sufficient information to satisfy the commission regarding 7.5 the proposed GUIC or be subject to denial by the commission. The information includes, 7.6 but is not limited to: 7.7 (i) the government entity ordering the gas utility project and the purpose for which 7.8 the project is undertaken; 7.9 (ii) the location, description, and costs associated with the project; 7.10 (iii) a description of the costs, and salvage value, if any, associated with the existing 7.11 infrastructure replaced or modified as a result of the project; 7.12 (iv) the proposed rate design and an explanation of why the proposed rate design 7.13 is in the public interest; 7.14 7.15 (v) the magnitude and timing of any known future gas utility projects that the utility may seek to recover under this section; 7.16 (vi) the magnitude of GUIC in relation to the gas utility's base revenue as approved 7.17 by the commission in the gas utility's most recent general rate case, exclusive of gas 7.18 purchase costs and transportation charges; 7.19 (vii) the magnitude of GUIC in relation to the gas utility's capital expenditures since 7.20 its most recent general rate case; 7.21 (viii) the amount of time since the utility last filed a general rate case and the utility's 7.22 7.23 reasons for seeking recovery outside of a general rate ease; and (ix) documentation supporting the calculation of the GUIC. 7.24 Subd. 3. Gas infrastructure project plan report. The gas infrastructure project 7.25 7.26 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 7.27 description and scope, estimated project costs, and the estimated project in-service date. 7.28 Subd. 4. Cost recovery petition for utility's facilities. Notwithstanding any other 7.29 provision of this chapter, the commission may approve a rate schedule for the automatic 7.30 annual adjustment of charges for gas utility infrastructure costs net of revenues under 7.31 this section, including a rate of return, income taxes on the rate of return, incremental 7.32 property taxes, incremental depreciation expense, and any incremental operation and 7.33 maintenance costs. A gas utility's petition for approval of a rate schedule to recover 7.34 gas utility infrastructure costs outside of a general rate case under section 216B.16 is 7.35 subject to the following: 7.36

Sec. 7. 7

8.1	(1) a gas utility may submit a filing under this section no more than once per year; and
8.2	(2) a gas utility must file sufficient information to satisfy the commission regarding
8.3	the proposed GUIC. The information includes, but is not limited to:
8.4	(i) the information required to be included in the gas infrastructure project plan
8.5	report under subdivision 3;
8.6	(ii) the government entity ordering or requiring the gas utility project and the
8.7	purpose for which the project is undertaken;
8.8	(iii) a description of the estimated costs and salvage value, if any, associated with the
8.9	existing infrastructure replaced or modified as a result of the project;
8.10	(iv) a comparison of the utility's estimated costs included in the gas infrastructure
8.11	project plan and the actual costs incurred, including a description of the utility's efforts to
8.12	ensure the costs of the facilities are reasonable and prudently incurred;
8.13	(v) calculations to establish that the rate adjustment is consistent with the terms
8.14	of the rate schedule, including the proposed rate design and an explanation of why the
8.15	proposed rate design is in the public interest;
8.16	(vi) the magnitude and timing of any known future gas utility projects that the
8.17	utility may seek to recover under this section;
8.18	(vii) the magnitude of GUIC in relation to the gas utility's base revenue as approved
8.19	by the commission in the gas utility's most recent general rate case, exclusive of gas
8.20	purchase costs and transportation charges;
8.21	(viii) the magnitude of GUIC in relation to the gas utility's capital expenditures
8.22	since its most recent general rate case; and
8.23	(ix) the amount of time since the utility last filed a general rate case and the utility's
8.24	reasons for seeking recovery outside of a general rate case.
8.25	Subd. 5. Commission action. Upon receiving a gas utility report and petition for
8.26	cost recovery under subdivision 2, the commission may approve the annual GUIC rate
8.27	adjustments provided that, after notice and comment, the commission determines that the
8.28	costs included for recovery through the rate schedule are prudently incurred and achieve
8.29	gas facility improvements at the lowest reasonable and prudent cost to ratepayers.
8.30	Subd. 6. Rate of return. The return on investment for the rate adjustment shall be
8.31	at the level approved by the commission in the public utility's most recently completed
8.32	general rate case, unless the commission determines that a different rate of return is in
8.33	the public interest.
8.34	Subd. 37. Commission authority; rules. The commission may issue orders and
8.35	adopt rules necessary to implement and administer this section.

Sec. 7. 8

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9.1	Sec. 8. Minnesota Statutes 2012, section 216B.164, is amended by adding a
9.2	subdivision to read:
9.3	Subd. 2a. Definitions. (a) For the purposes of this section, the following terms
9.4	have the meanings given them:
9.5	(b) "Aggregated meter" means a meter located on the premises of a customer's
9.6	owned or leased property that is contiguous with property containing the customer's
9.7	designated meter.
9.8	(c) "Capacity" means the number of megawatts alternating current (AC) at the point
9.9	of interconnection between a solar photovoltaic device and a utility's electric system.
9.10	(d) "Cogeneration" means a combined process whereby electrical and useful thermal
9.11	energy are produced simultaneously.
9.12	(e) "Contiguous property" means property owned or leased by the customer sharing
9.13	a common border, without regard to interruptions in contiguity caused by easements,
9.14	public thoroughfares, transportation rights-of-way, or utility rights-of-way.
9.15	(f) "Customer" means the person who is named on the utility electric bill for the
9.16	premises.
9.17	(g) "Designated meter" means a meter that is physically attached to the customer's
9.18	facility that the customer-generator designates as the first meter to which net metered
9.19	credits are to be applied as the primary meter for billing purposes when the customer is
9.20	serviced by more than one meter.
9.21	(h) "Distributed generation" means a facility that:
9.22	(1) has a capacity of ten megawatts or less;
9.23	(2) is interconnected with a utility's distribution system, over which the commission
9.24	has jurisdiction; and
9.25	(3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel,
9.26	and may include waste heat, cogeneration, or fuel cell technology.
9.27	(i) "High-efficiency distributed generation" means a distributed energy facility
9.28	that has a minimum efficiency of 40 percent, as calculated under section 272.0211,
9.29	subdivision 1.
9.30	(j) "Net metered facility" means an electric generation facility constructed for the
9.31	purpose of offsetting energy use through the use of renewable energy or high-efficiency
9.32	distributed generation sources.
9.33	(k) "Renewable energy" has the meaning given in section 216B.2411, subdivision 2.
9.34	(l) "Standby charge" means a charge imposed by an electric utility upon a distributed
9.35	generation facility for the recovery of fixed costs necessary to make electricity service
9.36	available to the distributed generation facility.

Sec. 8. 9

Sec. 9. 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 capacity <u>if interconnected with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacity if interconnected with a public utility, 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</u>

- system by a qualifying facility having less than 40-kilowatt capacity <u>if interconnected</u> with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacity
- with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacition of intercorporated with a public utility, compared to the systemer shall be at a per-
- if interconnected with a public utility, compensation to the customer shall be at a per
- 10.10 kilowatt-hour rate determined under paragraph (b) or (c).

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- (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 having less than 40-kilowatt capacity <u>if interconnected with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacity if interconnected with a public utility, 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.</u>
- (d) If the qualifying 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 having less than 40-kilowatt capacity if interconnected with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacity if interconnected with a public utility, may, at the customer's option, elect to be governed by the provisions of subdivision 4.

Sec. 10. Minnesota Statutes 2012, section 216B.164, subdivision 4, is amended to read:

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

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

Sec. 11.

Sec. 12. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:

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- 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. Any aggregation of meters must be governed under this section.
- (b) A customer must give at least 60 days' notice to the utility prior to a request that additional meters be included in meter aggregation. 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 the provisions of 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 must be billed to the customer.
- (d) If the net metered facility supplies more electricity to the utility than the energy usage recorded by the customer's designated and aggregated meters during a monthly billing period, the utility must apply credits to the customer's next monthly bill for the excess kilowatt-hours. The utility must 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.
- (e) With the commission's prior approval, a utility may charge a customer requesting to aggregate meters a reasonable fee to cover the administrative costs incurred as a result of implementing the provisions of this subdivision, pursuant to a tariff approved by the commission for a public utility or by a governing body for a municipal electric utility or electric cooperative.
- Sec. 13. 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's or cooperative's average annual retail electricity sales as measured over the previous three calendar years. After the cumulative limit of five percent has been reached,

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a public utility, municipal electric utility, or electric cooperative's obligation to offer net metering to additional customers may be limited by the commission or governing body if it determines doing so is in the public interest. The commission may limit additional 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 additional 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. In determining whether to limit additional net metering obligations under this subdivision, the commission or governing body shall consider:

- (1) the environmental and other public policy benefits of net metered facilities;
- (2) the impact of net metered facilities on electricity rates 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

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

 The commission or governing body may limit additional net metering obligations under clauses (2) to (4) only if it determines that additional net metering obligations would cause significant rate impact, require significant measures to address reliability, or raise significant technical issues.
 - Sec. 14. 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 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 qualifying facility having less than 40-kilowatt 1,000-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

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under the existing contract for termination of the existing contract by either party, but not less than ten nor longer than 30 days.

Sec. 15. Minnesota Statutes 2012, section 216B.164, is amended by adding a subdivision to read:

Subd. 10. Energy for public buildings. (a) All the provisions of this section that apply to a qualifying facility with a capacity of less than one megawatt shall apply to a wind energy conversion system with a capacity of up to 3.5 megawatts or an energy storage device storing energy generated by a wind energy conversion system that provides energy to a public building.

(b) For the purposes of this subdivision:

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- (1) "energy storage device" means a device capable of storing up to 3.5 megawatt-hours of previously generated energy and releasing that energy for use at a later time; and
- 14.14 (2) "public building" means a building or facility financed wholly or in part with

 14.15 public funds, including facilities financed by the Public Facilities Authority.

Sec. 16. [216B.1641] VALUE OF SOLAR RATE.

Subdivision 1. **Definition.** For the purposes of this section, "solar photovoltaic device" has the meaning given in section 216C.06, subdivision 16, and must meet the requirements of section 216C.25.

- Subd. 2. Applicability. (a) Beginning January 1, 2014, this section shall apply to public utilities selling electricity at retail in Minnesota, and to electric cooperatives and municipal electric utilities selling electricity at retail in Minnesota that have elected to be governed under section 216C.412.
- (b) Notwithstanding section 216B.164, an owner of a solar photovoltaic device may, with respect to the purchase price credited by a utility to an owner of a solar photovoltaic device, elect to be governed under this section or section 216B.164. All other provisions of section 216B.164, except those in subdivision 3, subdivision 4, paragraphs (a) to (c), and subdivision 4a, shall apply to an owner of a solar photovoltaic device electing to be governed under this section.
 - (c) This section does not apply to a utility that owns a solar photovoltaic device.
- (d) An owner of a solar photovoltaic device governed under the net metering provisions of section 216B.164 prior to the effective date of the commission order issued under subdivision 9 and who elects to be governed under this section with respect to the purchase price credited by a utility must provide written notice of that election to the

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utility. The utility shall begin crediting the value of solar rate most recently approved by the commission to the owner of the solar photovoltaic device on the first day of the first month that begins at least 30 days after receipt of the notice. (e) This section does not apply to a solar photovoltaic device whose capacity exceeds two megawatts. Subd. 3. **Standby charge prohibited.** A utility may not apply a standby charge to a solar photovoltaic device governed under this section. Subd. 4. **Standard contract.** The commission shall establish a statewide uniform form of contract that must be used by a purchasing utility and an owner of a solar photovoltaic device who elects to be governed under this section. The term of a contract entered into under this section must be no less than 20 years. The agreement must provide for credit of the value of solar rate as approved by the commission under this section, and must require the transfer of all renewable energy credits associated with the energy generated by the solar photovoltaic device to the purchasing utility. Subd. 5. Credits. The utility interconnected to a solar photovoltaic device whose owner elects to be governed under this section shall purchase, throughout the term of the contract, all energy and capacity made available by the owner of the solar photovoltaic device. All credits must be made at the value of solar rate approved by the commission under this section. Subd. 6. Value of solar rate; guidance document. (a) By December 1, 2013, and each December 1 thereafter through 2048, the Department of Commerce shall develop a value of solar guidance document that contains step-by-step procedures that a utility subject to this section must use to calculate the utility's value of solar rate. The guidance document must specify a method a utility must use to calculate the value of all the components listed in paragraph (b), and may include formulas, discount rates, and other provisions governing how the value of solar rate must be calculated. (b) The value of solar rate is expressed on a per kilowatt-hour basis, and consists of

- the following components:
- (1) line loss savings equal to the value of the average amount of electricity lost through transmission and distribution when electricity is generated by the utility's nonsolar photovoltaic generators;
- (2) transmission and distribution capacity savings equal to the value of delaying the need for capital investment in a utility's transmission and distribution system by contracting to purchase energy from solar photovoltaic devices;

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(3) energy savings equal to the reduction in a utility's wholesale energy purchases and costs, based on the time of day the energy would have been generated, realized as a result of energy purchases from solar photovoltaic devices; (4) generation capacity savings equal to the value of the benefit of the capacity added to the utility's system by solar photovoltaic devices; (5) fuel price hedge value equal to the value of eliminating price uncertainty associated with the utility's purchases of fuel for electricity generation; and (6) environmental benefits equal to the premium retail customers are willing to pay to consume energy produced from renewable resources. (c) The department may, based on known and measurable evidence of the economic development benefits of solar electricity generation, including the net increase in local employment and taxes generated from the manufacture, assembly, installation, operation, and maintenance of solar photovoltaic devices, or other factors, incorporate additional amounts into the value of solar rate. (d) The value of solar rate is equal to the present value of the future revenue streams of the value components calculated in paragraphs (b) and (c) over the useful life of a solar photovoltaic device. (e) Prior to preparing the value of solar guidance document, the Department of Commerce shall obtain comments and recommendations from utilities, ratepayers, and other interested parties regarding the content of the value of solar guidance document. (f) By January 1, 2015, and every January 1 thereafter through 2049, the commissioner shall make a determination as to whether the value of solar guidance document developed under subdivision 6 needs to be revised. In making that determination, the commissioner shall solicit comments and recommendations from interested parties in the same manner as required under paragraph (e). After considering the comments and recommendations, the commissioner may revise the value of solar guidance document. Subd. 7. Utilities to offer tariff. By April 1, 2014, and each April 1 thereafter through 2049, a utility subject to this section shall file with the commission a value of solar tariff based on its calculation of the utility's value of solar rate that is consistent with the department's value of solar guidance document developed in subdivision 6. A utility must include in its filing its method of calculation for each component listed in subdivision 6, paragraph (b). A utility filing a value of solar rate that differs from the value of solar rate filed by the utility for the previous year shall submit to the commission the reasons for and the methods it used to calculate the differences.

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17.1	Subd. 8. Value of solar rate; billing. Notwithstanding section 216B.164, an owner
17.2	of a solar photovoltaic device who elects to receive the value of solar rate for electricity
17.3	generated by the solar photovoltaic device that is sold to a utility must be:
17.4	(1) charged by the utility the applicable rate schedule for sales to that class of
17.5	customer for all electricity consumed by the customer;
17.6	(2) credited the value of solar rate by the utility for all electricity generated by the
17.7	solar photovoltaic device;
17.8	(3) provided by the utility with a monthly bill that contains, in addition to the
17.9	amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized
17.10	by the owner for that month and on a year-to-date basis. In the event that the customer
17.11	has a positive balance after the 12-month cycle ending on the last day of February, that
17.12	balance will be eliminated and the credit cycle will restart the following billing period
17.13	beginning March 1; and
17.14	(4) provided by the utility a meter that allows for the separate calculation of the
17.15	amount of electricity consumed and generated at the property.
17.16	Subd. 9. Commission review; approval. (a) By July 1, 2014, and each July
17.17	1 thereafter through 2049, the commission shall review the filing submitted under
17.18	subdivision 7 and any comments on the filing made by the department or other interested
17.19	parties, and approve or modify each utility's value of solar tariff. The commission may,
17.20	at its discretion, solicit additional comments, information, and recommendations from
17.21	utilities, the department, and other interested parties.
17.22	(b) By July 1, 2014, and each January 1 thereafter through 2049, the commission
17.23	shall, by order, direct all electric utilities subject to this section to begin crediting the value
17.24	of solar rate most recently approved by the commission to:
17.25	(1) owners of solar photovoltaic devices who sign a standard contract under this
17.26	section on or after the first day of the first month following the effective date of the order;
17.27	(2) owners of solar photovoltaic devices who were governed under the net metering
17.28	provisions of section 216B.164 prior to the effective date of the order and who elect to be
17.29	governed under section 216B.1641 with respect to the purchase price credited by a utility
17.30	by complying with the provisions of section 216B.1641, subdivision 2, paragraph (d); and
17.31	(3) owners of solar photovoltaic devices interconnected with electric cooperative
17.32	associations or municipalities that have elected to be governed under section 216C.412.
17.33	(c) In no case shall the commission approve a value of solar rate under this section
17.34	that is lower than the applicable retail rate of the subject utility.

Sec. 17. [216B.1651] DEFINITIONS.

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18.1	Subdivision 1. Scope. For the purposes of sections 216B.1651 to 216B.1654, the
18.2	following definitions have the meanings given.
18.3	Subd. 2. Community solar generating facility. "Community solar generating
18.4	facility" means a facility:
18.5	(1) that generates electricity by means of a solar photovoltaic device that has a
18.6	capacity of less than two megawatts direct current nameplate;
18.7	(2) that is interconnected with a utility's distribution system under the jurisdiction
18.8	of the commission;
18.9	(3) that is located in the electric service area of the utility with which it is
18.10	interconnected;
18.11	(4) whose subscribers purchase, under long-term contract with the community solar
18.12	generating facility, the right to consume the electricity generated from a specified portion
18.13	of the facility's generating capacity;
18.14	(5) that is not owned by a utility; and
18.15	(6) that has at least two subscribers.
18.16	Subd. 3. Facility manager. "Facility manager" means an entity that manages a
18.17	community solar generating facility for the benefit of subscribers and may, in addition,
18.18	develop, construct, own, or operate the community solar generating facility. A facility
18.19	manager may not be a utility, but may be:
18.20	(1) a person whose sole purpose is to beneficially own and operate a community
18.21	solar generating facility;
18.22	(2) a Minnesota nonprofit corporation organized under chapter 317A;
18.23	(3) a Minnesota cooperative association organized under chapter 308A or 308B;
18.24	(4) a Minnesota political subdivision or local government including, but not limited
18.25	to, a county, statutory or home rule charter city, town, school district, public or private
18.26	higher education institution, or any other local or regional governmental organization such
18.27	as a board, commission, or association; or
18.28	(5) a tribal council.
18.29	Subd. 4. Renewable energy credit. "Renewable energy credit" has the meaning
18.30	given in section 216B.1691, subdivision 1, paragraph (d).
18.31	Subd. 5. Solar photovoltaic device. "Solar photovoltaic device" has the meaning
18.32	given in section 216C.06, subdivision 16.
18.33	Subd. 6. Subscriber. "Subscriber" means a retail customer of a utility who owns
18.34	one or more subscriptions of a community solar generating facility interconnected with
18.35	that utility. A facility manager may be a subscriber.

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Subd. 7. Subscription. "Subscription" means a contract between a subscriber and a community solar generating facility that has a term of no less than 20 years and that provides to the subscriber a portion of the generation of the community solar generating facility and a corresponding proportion of the electricity generated by the community solar generating facility.

Subd. 8. <u>Utility.</u> "Utility" means a public utility or a cooperative association or municipality that has elected to be governed under section 216C.412.

Sec. 18. [216B.1652] SUBSCRIPTIONS.

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Subdivision 1. Presale of subscriptions. A community solar generating facility may not commence construction of the facility until contracts have been executed for subscriptions, excluding the subscription of the facility manager, that represent at least 80 percent of the proposed nameplate capacity of the community solar generating facility.

- Subd. 2. Size. (a) A subscription must be a portion of the community solar generating facility's nameplate capacity sized so as to produce no more than 120 percent of the annual average amount of electricity consumed over the previous three years at the site where the subscriber's meter is located. If the site is newly constructed, the subscription must be sized based on 120 percent of the average annual amount of electricity consumed by a facility of similar size and type in the utility's service area, as determined by the facility manager.
- (b) A subscriber may not own one or more subscriptions whose total capacity exceeds the maximum capacity allowed for a qualifying facility subject to section 216B.164, subdivision 3.
- (c) A facility manager may not own subscriptions whose total capacity exceeds the maximum subscription size allowed under paragraph (a) plus ten percent of the remaining available nameplate capacity in the community solar generating facility, subject to the limit in paragraph (b).
- (d) The maximum subscription size for a subscriber consuming electricity generated from an eligible energy technology, as defined in section 216B.1691, subdivision 1, at any time during the term of the subscriber's subscription, is the maximum subscription size allowed under paragraph (a) minus the nameplate capacity of the eligible energy technology device providing electricity to the subscriber, subject to the limit in paragraph (b).
- Subd. 3. Certification. Prior to the sale of a subscription, a facility manager must provide certification to the subscriber signed by the facility manager under penalty of perjury:
 - (1) identifying the rate of insolation at the community solar generating facility;

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20.1	(2) certifying that the solar photovoltaic devices employed by the community solar
20.2	generating facility to generate electricity have an electrical energy degradation rate of no
20.3	more than 0.5 percent annually; and
20.4	(3) certifying that the community solar generating facility is in full compliance with
20.5	all applicable federal and state utility, securities, and tax laws.
20.6	Subd. 4. On-site subscriber. A subscriber who owns the property on which
20.7	a community solar generating facility is located has no more rights with respect to
20.8	subscription size or price than any other subscriber.
20.9	Subd. 5. Subscription prices. The price for a subscription to a community solar
20.10	generating facility is not subject to regulation by the commission and is negotiated
20.11	between the prospective subscriber and the facility manager.
20.12	Subd. 6. Subscription transfer. A subscriber that terminates the contract between
20.13	the subscriber and the community solar generating facility must transfer the subscription
20.14	to a person eligible to be a subscriber or to the facility manager at a price negotiated
20.15	by both parties.
20.16	Subd. 7. New subscribers. Within 30 days of the execution of a contract between the
20.17	community solar generating facility and a new subscriber, the facility manager shall submit
20.18	the following information to the utility serving the community solar generating facility:
20.19	(1) the new subscriber's name, address, number of meters, and utility customer
20.20	account; and
20.21	(2) the share of the community solar generating facility's nameplate capacity owned
20.22	by the new subscriber.
20.23	Subd. 8. Meter change. A subscriber that moves to a different property served by
20.24	the community solar generating facility from the property at which the subscriber resided
20.25	at the time the contract between the subscriber and the community solar generating facility
20.26	was executed, or that changes the number of meters attached to the subscriber's account,
20.27	must notify the facility manager within 30 days of the change.
20.28	Subd. 9. Renewable energy credits. (a) Notwithstanding any other law, a
20.29	subscriber owns the renewable energy credits associated with the electricity allocated to
20.30	the subscriber's subscription. A utility or facility manager may purchase renewable energy
20.31	credits under a contract with a subscriber.
20.32	(b) Renewable energy credits may not be assigned to a utility as a condition of entering
20.33	into a contract or an interconnection agreement with a community solar generating facility.
20.34	Subd. 10. Disputes. The dispute resolution provisions available under section
20.35	216B.164 shall be used to resolve disputes between a facility manager and the utility
20.36	serving the community solar generating facility.

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21.1	Sec. 19. [216B.1653] DISPOSITION OF ELECTRICITY GENERATED.
21.2	Subdivision 1. Allocation. (a) The total amount of electricity available for allocation
21.3	to all subscribers of a community solar generating facility shall be determined by a
21.4	production meter installed by the utility.
21.5	(b) The total amount of electricity available to a subscriber shall be the total amount
21.6	of electricity available for allocation to all subscribers of a community solar generating
21.7	facility prorated by a subscriber's subscription size in relation to the nameplate capacity of
21.8	the community solar generating facility.
21.9	(c) A subscriber may not resell electricity governed by the subscriber's contract
21.10	with a community solar generating facility.
21.11	(d) All electricity generated by a community solar generating facility that is not
21.12	allocated to or consumed by subscribers must be sold to the utility interconnected with
21.13	the community solar generating facility.
21.14	Subd. 2. Utility purchases. The utility to which the community solar generating
21.15	facility is interconnected shall purchase all electricity generated by the community solar
21.16	generating facility that is not consumed by subscribers. The price paid to the community
21.17	solar generating facility by the utility is governed by section 216B.164 or any law that
21.18	governs the price a utility must pay to purchase electricity from a solar photovoltaic device.
21.19	Subd. 3. Interconnection. The commission shall establish uniform fees for the
21.20	interconnection of a community solar generating facility with a utility.
21.21	Subd. 4. Nonutility status. Notwithstanding section 216B.02, a community solar
21.22	generating facility is not a public utility.
21.23	Sec. 20. [216B.1654] BILLING.
21.24	Subdivision 1. Billing procedure. A subscriber to a community solar generating
21.25	facility must be:
21.26	(1) charged by the utility interconnected with the community solar generating
21.27	facility the utility's applicable rate schedule for sales to that class of customer for all
21.28	electricity consumed by the subscriber;
21.29	(2) paid by the utility the maximum rate allowable under section 216B.164, or
21.30	any other law that may govern the price a utility must pay to purchase electricity from
21.31	a solar photovoltaic device, for a portion of all electricity the utility purchases from
21.32	the community solar generating facility that is equal to the ratio of the subscriber's
21.33	subscription to the nameplate capacity of the community solar generating facility;

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22.1	(3) provided by the utility with a monthly bill that contains, in addition to the
22.2	amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized by
22.3	the owner for that month and on a year-to-date basis; and
22.4	(4) provided by the utility with a meter that allows for the separate calculation of the
22.5	amount of electricity consumed and generated at the property.
22.6	Subd. 2. Billing system. The Department of Commerce shall, by January 1, 2014,
22.7	establish a uniform administrative system to credit the utility accounts of subscribers to a
22.8	community solar generating facility. In determining the uniform administrative system, the
22.9	commission shall solicit comments and recommendations from utilities, ratepayers, and
22.10	other interested parties, and shall review commercially available administrative systems
22.11	and administrative systems used in jurisdictions where entities similar to community
22.12	solar generating facilities are operating.
22.13	Subd. 3. Commission proceeding; rate adjustment. By September 1, 2014, the
22.14	commission shall initiate a proceeding to examine whether the rate paid by a utility to
22.15	purchase energy from a community solar generating facility under section 216B.1653,
22.16	subdivision 2, should be adjusted to reflect the actual fixed costs incurred by a utility to
22.17	provide service to a community solar generating facility.
22.18	Sec. 21. Minnesota Statutes 2012, section 216B.1691, subdivision 1, is amended to read:
22.19	Subdivision 1. Definitions. (a) Unless otherwise specified in law, "eligible energy
22.20	technology" means an energy technology that generates electricity from the following
22.21	renewable energy sources:
22.22	(1) solar;
22.23	(2) wind;
22.24	(3) hydroelectric with a capacity of less than 100 megawatts;
22.25	(4) hydrogen, provided that after January 1, 2010, the hydrogen must be generated
22.26	from the resources listed in this paragraph; or
22.27	(5) biomass, which includes, without limitation, landfill gas; an anaerobic digester
22.28	system; the predominantly organic components of wastewater effluent, sludge, or related
22.29	by-products from publicly owned treatment works, but not including incineration of
22.30	wastewater sludge to produce electricity; and an energy recovery facility used to capture
22.31	the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal
22.32	solid waste as a primary fuel.
22.33	(b) "Electric utility" means a public utility providing electric service, a generation
22.34	and transmission cooperative electric association, a municipal power agency, or a power
22.35	district.

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(c) "Total retail electric sales" means the kilowatt-hours of electricity sold in a year by an electric utility to retail customers of the electric utility or to a distribution utility for distribution to the retail customers of the distribution utility. "Total retail electric sales" does not include the sale of hydroelectricity supplied by a federal power marketing administration or other federal agency, regardless of whether the sales are directly to a distribution utility or are made to a generation and transmission utility and pooled for further allocation to a distribution utility.

- (d) "Renewable energy credit" means a certificate of proof, issued through the accounting system approved by the commission under subdivision 4, attesting that one unit of electricity was generated and delivered by an eligible energy technology, and including all renewable and environmental attributes associated with the production of electricity from the eligible energy technology.
- Sec. 22. Minnesota Statutes 2012, section 216B.1691, subdivision 2a, is amended to read:
 - Subd. 2a. **Eligible energy technology standard.** (a) Except as provided in paragraph (b), each electric utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota are generated by eligible energy technologies by the end of the year indicated:
- (1) 2012 12 percent 23.22 **(2)** 2016 17 percent 23.23 (3) 2020 20 percent 23.24 2025 25 percent. (4) 23.25

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- (b) An electric utility that owned a nuclear generating facility as of January 1, 2007, must meet the requirements of this paragraph rather than paragraph (a). An electric utility subject to this paragraph must generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota or the retail customer of a distribution utility to which the electric utility provides wholesale electric service so that at least the following percentages of the electric utility's total retail electric sales to retail customers in Minnesota are generated by eligible energy technologies by the end of the year indicated:
- 23.34 (1) 2010 15 percent
- 23.35 (2) 2012 18 percent

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(3)	2016	25 percent
(4)	2020	30 percent.

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Of the 30 percent in 2020, at least 25 percent must be generated by solar energy or wind energy conversion systems and the remaining five percent by other eligible energy technology. Of the 25 percent that must be generated by wind or solar, no more than one percent may be solar generated and the remaining 24 percent or greater must be wind generated.

(c) By the end of 2030, each public utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide at least 40 percent of the public utility's total retail electric sales to retail customers in Minnesota.

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

Sec. 23. Minnesota Statutes 2012, section 216B.1691, subdivision 2e, is amended to read:

Subd. 2e. Rate impact of standard compliance; report. Each electric utility must submit to the commission and the legislative committees with primary jurisdiction over energy policy a report containing an estimation of the rate impact of activities of the electric utility necessary to comply with this section. In consultation with the Department of Commerce, the commission shall determine a uniform reporting system to ensure that individual utility reports are consistent and comparable, and shall, by order, require each electric utility subject to this section to use that reporting system. The rate impact estimate must be for wholesale rates and, if the electric utility makes retail sales, the estimate shall also be for the impact on the electric utility's retail rates. Those activities include, without limitation, energy purchases, generation facility acquisition and construction, and transmission improvements. An initial report must be submitted within 150 days of May 28, 2011. After the initial report, a report must be updated and submitted as part of each integrated resource plan or plan modification filed by the electric utility under section 216B.2422. The reporting obligation of an electric utility under this subdivision expires December 31, 2025, for an electric utility subject to subdivision 2a, paragraph (a), and December 31, 2020, for an electric utility subject to subdivision 2a, paragraph (b).

Sec. 24. Minnesota Statutes 2012, section 216B.1691, is amended by adding a subdivision to read:

Subd. 2f. Solar energy standard. (a) In addition to the requirements of subdivision 2a, each public utility shall generate or procure sufficient electricity generated by solar

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25.1	energy to serve its retail electricity customers in Minnesota so that at least the following
25.2	standard percentages of the utility's total retail electric sales to retail customers in
25.3	Minnesota are generated by solar energy by the end of the year indicated:
25.4 25.5	(1) 2016 0.5 percent (2) 2020 2.0 percent
25.6	(3) 2025 4.0 percent
25.7	(b) The solar energy standard established in this subdivision is subject to all the
25.8	provisions of this section governing a utility's standard obligation under subdivision 2a.
25.9	(c) It is an energy goal of the state of Minnesota that by 2030, ten percent of the
25.10	retail electric sales in Minnesota be generated by solar energy.
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25.12	Sec. 25. Minnesota Statutes 2012, section 216B.1692, subdivision 1, is amended to read:
25.13	Subdivision 1. Qualifying projects. (a) Projects that may be approved for the
25.14	emissions reduction-rate rider allowed in this section must:
25.15	(1) be installed on existing large electric generating power plants, as defined in
25.16	section 216B.2421, subdivision 2, clause (1), that are located in the state and that are
25.17	currently not subject to emissions limitations for new power plants under the federal Clean
25.18	Air Act, United States Code, title 42, section 7401 et seq.;
25.19	(2) not increase the capacity of the existing electric generating power plant more
25.20	than ten percent or more than 100 megawatts, whichever is greater; and
25.21	(3) result in the existing plant either:
25.22	(i) complying with applicable new source review standards under the federal Clean
25.23	Air Act; or
25.24	(ii) emitting air contaminants at levels substantially lower than allowed for new
25.25	facilities by the applicable new source performance standards under the federal Clean
25.26	Air Act; or
25.27	(iii) reducing emissions from current levels at a unit to the lowest cost-effective level
25.28	when, due to the age or condition of the generating unit, the public utility demonstrates
25.29	that it would not be cost-effective to reduce emissions to the levels in item (i) or (ii).
25.30	(b) Notwithstanding paragraph (a), a project may be approved for the emission
25.31	reduction rate rider allowed in this section if the project is to be installed on existing
25.32	large electric generating power plants, as defined in section 216B.2421, subdivision 2,
25.33	clause (1), that are located outside the state and are needed to comply with state or federal
25.34	air quality standards, but only if the project has received an advance determination of
25.35	prudence from the commission under section 216B.1695.

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Sec. 26. Minnesota Statutes 2012, section 216B.1692, is amended by adding a 26.1 subdivision to read: 26.2 Subd. 1a. Exemption. Subdivisions 2, 4, and 5, paragraph (c), clause (1), do not 26.3 26.4 apply to projects qualifying under subdivision 1, paragraph (b). Sec. 27. Minnesota Statutes 2012, section 216B.1692, subdivision 8, is amended to read: 26.5 Subd. 8. Sunset. This section is effective until December 31, 2015 2020, and 26.6 applies to plans, projects, and riders approved before that date and modifications made to 26.7 them after that date. 26.8 Sec. 28. Minnesota Statutes 2012, section 216B.1695, subdivision 5, is amended to read: 26.9 Subd. 5. Cost recovery. The utility may begin recovery of costs that have been 26.10 incurred by the utility in connection with implementation of the project in the next rate 26.11 case following an advance determination of prudence or in a rider approved under section 26.12 26.13 216B.1692. The commission shall review the costs incurred by the utility for the project. The utility must show that the project costs are reasonable and necessary, and demonstrate 26.14 its efforts to ensure the lowest reasonable project costs. Notwithstanding the commission's 26.15 prior determination of prudence, it may accept, modify, or reject any of the project costs. 26.16 The commission may determine whether to require an allowance for funds used during 26.17 construction offset. 26.18 Sec. 29. Minnesota Statutes 2012, section 216B.1695, is amended by adding a 26.19 26.20 subdivision to read: Subd. 5a. Rate of return. The return on investment in the rider shall be at the level 26.21 approved by the commission in the public utility's most recently completed general rate 26.22 case, unless the commission determines that a different rate of return is in the public interest. 26.23 Sec. 30. Minnesota Statutes 2012, section 216B.23, subdivision 1a, is amended to read: 26.24 Subd. 1a. Authority to issue refund. (a) On determining that a public utility has 26.25 charged a rate in violation of this chapter, a commission rule, or a commission order, the 26.26 commission, after conducting a proceeding, may require the public utility to refund to its 26.27 customers, in a manner approved by the commission, any revenues the commission finds 26.28 were collected as a result of the unlawful conduct. Any refund authorized by this section 26.29 is permitted in addition to any remedies authorized by section 216B.16 or any other law 26.30 governing rates. Exercising authority under this section does not preclude the commission 26.31

from pursuing penalties under sections 216B.57 to 216B.61 for the same conduct.

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(b)	This	section	must not	be	construed	as	allowing:
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(1) retroactive ratemaking;

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- (2) refunds based on claims that prior or current approved rates have been unjust, unreasonable, unreasonably preferential, discriminatory, insufficient, inequitable, or inconsistent in application to a class of customers; or
- (3) refunds based on claims that approved rates have not encouraged energy conservation or renewable energy use, or have not furthered the goals of section 216B.164, 216B.241, or 216C.05, or 216C.412.
- (c) A refund under this subdivision does not apply to revenues collected more than six years before the date of the notice of the commission proceeding required under this subdivision.
 - Sec. 31. 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), shall annually assess \$500,000 per fiscal year for a grant to the partnership created in 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, 2014, and each February 15 thereafter, 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.

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Sec. 32. Minnesota Statutes 2012, section 216B.241, subdivision 5c, is amended to read: Subd. 5c. **Large solar electric generating plant.** (a) For the purpose of this subdivision:

- (1) "project" means a solar electric generation project consisting of arrays of solar photovoltaic cells with a capacity of up to two megawatts located on the site of a closed landfill in Olmsted County owned by the Minnesota Pollution Control Agency; and
- (2) "cooperative electric association" means a generation and transmission cooperative electric association that has a member distribution cooperative association to which it provides wholesale electric service in whose service territory a project is located.
- (b) A cooperative electric association may elect to count all of its purchases of electric energy from a project toward only one of the following:
 - (1) its energy-savings goal under subdivision 1c; or

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- (2) its <u>energy objective or solar energy</u> standard under section 216B.1691₂ subdivision 2f.
- (c) A cooperative electric association may include in its conservation plan purchases of electric energy from a project. The cost-effectiveness of project purchases may be determined by a different standard than for other energy conservation improvements under this section if the commissioner determines that doing so is in the public interest in order to encourage solar energy. The kilowatt hours of solar energy purchased by a cooperative electric association from a project may count for up to 33 percent of its one percent savings goal under subdivision 1c or up to 22 percent of its 1.5 percent savings goal under that subdivision. Expenditures made by a cooperative association for the purchase of energy from a project may not be used to meet the revenue expenditure requirements of subdivisions 1a and 1b.
 - Sec. 33. Minnesota Statutes 2012, section 216B.2411, subdivision 3, is amended to read:
- Subd. 3. **Other provisions.** (a) Electricity generated by a facility constructed with funds provided under this section and using an eligible renewable energy source may be counted toward the renewable energy objectives in section 216B.1691, subject to the provisions of that section, except as provided in paragraph (c).
- (b) Two or more entities may pool resources under this section to provide assistance jointly to proposed eligible renewable energy projects. The entities shall negotiate and agree among themselves for allocation of benefits associated with a project, such as the ability to count energy generated by a project toward a utility's renewable energy objectives under section 216B.1691, except as provided in paragraph (c). The entities shall provide a

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summary of the allocation of benefits to the commissioner. A utility may spend funds under this section for projects in Minnesota that are outside the service territory of the utility.

(c) Electricity generated by a solar photovoltaic device constructed with funds provided under this section may be counted toward a public utility's solar energy standard under section 216B.1691, subdivision 2f.

Sec. 34. Minnesota Statutes 2012, section 216B.40, is amended to read:

216B.40 EXCLUSIVE SERVICE RIGHT; SERVICE EXTENSION.

Except as provided in sections 216B.42 and 216B.421, each electric utility shall have the exclusive right to provide electric service by electric line at retail to each and every present and future customer in its assigned service area and no electric utility shall render or extend electric service at retail within the assigned service area of another electric utility unless the electric utility consents thereto in writing; provided that any electric utility may extend its facilities through the assigned service area of another electric utility if the extension is necessary to facilitate the electric utility connecting its facilities or customers within its own assigned service area.

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Sec. 35. [216C.411] SOLAR ENERGY PRODUCTION INCENTIVE ACCOUNT.

Subdivision 1. Account established; account management. A solar energy production incentive account is established as a separate account in the special revenue fund in the state treasury. The commissioner of commerce shall credit to the account the amounts assessed and collected 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 are not canceled to the general fund but remain in the account. The commissioner of commerce shall manage the account.

Subd. 2. **Purpose.** The purpose of the account is to pay the solar energy production incentive to owners of qualified solar photovoltaic devices located in the electric service territory of a cooperative association or municipal electric utility that has elected to be governed under section 216C.412, and the Department of Commerce's actual and reasonable costs to administer this section and section 216C.412.

Subd. 3. Administrative procedure. By April 1, 2014, the commissioner of commerce shall develop an administrative procedure that transfers funds from the account to pay the solar energy production incentive to owners of solar photovoltaic devices

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located in the electric service territory of a cooperative association or municipality that has elected to be governed under section 216C.412.

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Subd. 4. Transfer. The public utility that contributes to the account established under section 116C.779 shall transfer from that account up to \$5,000,000 annually to the commissioner of commerce for deposit in the account established in subdivision 1 for the purpose of paying the solar energy production incentive to owners of solar photovoltaic devices located in the electric service territory of a cooperative association or municipal electric utility that has elected to be governed under section 216C.412. The commissioner of commerce shall request funds to be transferred by the public utility only to the extent necessary to fully fund the annual aggregate solar production incentives paid to owners of solar photovoltaic devices that are interconnected with cooperative associations or municipal electric utilities that have elected to be governed under section 216C.412.

Sec. 36. [216C.412] SOLAR ENERGY PRODUCTION INCENTIVE.

Subdivision 1. **Applicability.** (a) A public utility providing retail electric service to Minnesota customers is subject to the provisions of this section.

- (b) A cooperative association or a municipal electric utility providing retail electric service to Minnesota customers may elect to be subject to the provisions of this section.

 The election shall be approved by resolution of the board of directors of the association or the governing body of the municipal electric utility, a copy of which must be provided to the commissioner of commerce. The election is effective 30 days after the election by the board of directors or governing body.
- Subd. 2. **Incentive payment.** (a) Incentive payments may be made under this section only to an owner of a solar photovoltaic device who has:
- (1) submitted to the utility to which the solar photovoltaic device is interconnected, on a form prescribed by the utility, an application to receive the incentive; and
- (2) received from the utility in writing a determination that the solar photovoltaic device qualifies for the incentive.
- (b) A utility shall make incentive payments under this section on a first-come, first-served basis. A utility is not required to make aggregate incentive payments under this section in any one calendar year that exceed 1.33 percent of the utility's gross operating revenues from retail sales of electric service provided to Minnesota customers during the previous calendar year.
- (c) A cooperative association or a municipal electric utility that elects to be subject to the provisions of this section may elect to have the Department of Commerce pay

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31.1	the incentive to owners of solar photovoltaic devices from the account established in		
31.2	section 216C.411.		
31.3	(d) A utility that owns a solar photovoltaic device is not eligible to receive incentive		
31.4	payments under this section.		
31.5	(e) A solar photovoltaic device whose capa	acity exceeds two megawatts is ineligible	
31.6	to receive incentive payments under this section	<u>-</u>	
31.7	Subd. 3. Eligibility window; payment du	uration. (a) Payments may be made under	
31.8	this section only for electricity generated from a	solar photovoltaic device that first begins	
31.9	generating electricity after January 1, 2014, thro	ugh December 31, 2049.	
31.10	(b) Payment of the incentive begins and ru	ins consecutively from the date the solar	
31.11	photovoltaic device begins generating electricity	<u>/.</u>	
31.12	(c) A utility paying an incentive under this	s section must enter into a contract with	
31.13	an owner of a solar photovoltaic system under w	which the utility agrees to make incentive	
31.14	payments for a period of 20 years.		
31.15	(d) No payment may be made under this s	ection for electricity generated after	
31.16	December 31, 2049.		
31.17	Subd. 4. Amount of payment. (a) An incentive payment is based on the number of		
31.18	kilowatt hours of electricity generated. The per-	kilowatt-hour amount of the payment for	
31.19	each category of qualified solar photovoltaic dev	vice listed below is equal to the applicable	
31.20	reference price specified in this subdivision minus:		
31.21	(1) the value of solar rate approved by the commissioner under section 216B.1641,		
31.22	for owners of solar photovoltaic devices that have elected to have the utility's purchase		
31.23	price for electricity governed by that section; or		
31.24	(2) the rate a utility pays an owner of a sola	r photovoltaic device for excess electricity	
31.25	generation under section 216B.164, for owners	of solar photovoltaic devices that have	
31.26	elected to have the utility's purchase price for ele	ectricity governed by that section.	
31.27	Nameplate Capacity	Reference Price	
31.28	Residential	20.4 cents per kilowatt-hour	
31.29	Nonresidential:		
31.30	<u>Under 25 kilowatts</u>	18.1 cents per kilowatt-hour	
31.31 31.32	Rooftop, 25 kilowatts to 2 megawatts	15.9 cents per kilowatt-hour	
31.33	Ground-mounted, 25 kilowatts to	10.5 conto per knowatt nour	
31.34	2 megawatts	13.6 cents per kilowatt-hour	
31.35	(b) By January 1, 2015, and every January	y 1 thereafter through 2049, the	
31.36	commissioner shall make a determination as to	whether the reference price needs to be	
31.37	adjusted in order to achieve the solar energy standard established in section 216B.1691,		

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subdivision 2f, at the lowest level of incentive payments. In making the determination, the 32.1 32.2 commissioner shall solicit comments and recommendations from utilities, ratepayers, and other interested parties regarding the calculation of the reference price. After considering 32.3 the comments and recommendations, the commissioner may adjust the reference price. 32.4 (c) For the purposes of this subdivision, "reference price" means the lowest 32.5 per-kilowatt price for electricity generated by a qualified solar photovoltaic system the 32.6 commissioner determines is sufficient to provide an economic incentive that will result 32.7 in the development of aggregate capacity in this state to meet the solar energy standard 32.8 established in section 216B.1691, subdivision 2f. 32.9 Subd. 5. **Dispute resolution.** Disputes between an owner of a solar photovoltaic 32.10 device and a utility paying an incentive under this section shall be resolved by the 32.11 commissioner of commerce. 32.12 Subd. 6. **Appropriation.** An amount sufficient to pay the solar energy production 32.13 incentive under this section is annually appropriated from the account established under 32.14 32.15 section 216C.411 to the commissioner of commerce for the purposes of this section. Sec. 37. [216C.413] DEFINITIONS. 32.16 32.17 For the purposes of sections 216C.411 to 216C.417, the following terms have the meanings given. 32.18 (a) "Made in Minnesota" means the manufacture in this state of solar photovoltaic 32.19 modules: 32.20 (1) at a manufacturing facility located in Minnesota that is registered and authorized 32.21 32.22 to manufacture and apply the UL 1703 certification mark to solar photovoltaic modules by 32.23 Underwriters Laboratory (UL), CSA International, Intertek, or an equivalent UL-approved independent certification agency; 32.24 32.25 (2) that bear UL 1703 certification marks from UL, CSA International, Intertek, or an equivalent UL-approved independent certification agency, which must be physically 32.26 applied to the modules at a manufacturing facility described in clause (1); and 32.27 (3) that are manufactured in Minnesota: 32.28 (i) by manufacturing processes that must include tabbing, stringing, and lamination; 32.29 32.30 or (ii) by interconnecting low-voltage direct current photovoltaic elements that produce 32.31 the final useful photovoltaic output of the modules. 32.32 A solar photovoltaic module that is manufactured by attaching microinverters, direct 32.33 32.34 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 32.35

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

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

Sec. 38. [216C.414] "MADE IN MINNESOTA" PRODUCTION INCENTIVE ACCOUNT.

Subdivision 1. Account establishment; management. A "Made in Minnesota" production incentive account is established as a separate account in the special revenue fund in the state treasury. The commissioner shall credit to the account the amounts collected 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 are not canceled to the general fund but remain in the account. The commissioner shall manage the account.

Subd. 2. **Purpose.** The purpose of the account is to pay the "Made in Minnesota" production incentive to owners of qualified solar photovoltaic devices, including related administrative costs, under section 216C.413.

Subd. 3. Transfer. The public utility that contributes to the account established under section 116C.779 shall transfer from that account up to \$5,000,000 annually to the commissioner of commerce for deposit in the account established in subdivision 1 for the purpose of paying the "Made in Minnesota" production incentive to owners of solar photovoltaic devices that qualify under section 216C.413. The commissioner of commerce shall request funds to be transferred by the public utility only to the extent necessary to fully fund the annual aggregate "Made in Minnesota" incentives paid to owners of solar photovoltaic devices.

Subd. 4. **Appropriation.** An amount sufficient to pay the "Made in Minnesota" production incentive under this section is annually appropriated from the account established under this section to the commissioner of commerce for the purposes of this section.

Sec. 39. [216C.415] "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 of commerce on a form prescribed by the commissioner. The application must contain:

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34.1	(1) a technical description of the solar photovoltaic module and the processes used
34.2	to manufacture it, excluding proprietary details;
34.3	(2) documentation that the solar photovoltaic module meets all the required
34.4	applicable parts of the "Made in Minnesota" definition in section 216C.411, including
34.5	evidence of the UL 1703 right to mark for all solar photovoltaic modules seeking to
34.6	qualify as "Made in Minnesota";
34.7	(3) any additional nonproprietary information requested by the commissioner
34.8	of commerce; and
34.9	(4) certification signed by the chief executive officer of the manufacturing company
34.10	attesting to the truthfulness of the contents of the application and supporting materials
34.11	under penalty of perjury.
34.12	Subd. 2. Certification. If the commissioner determines that a manufacturer's solar
34.13	photovoltaic module meets the definition of "Made in Minnesota" in section 216C.411, the
34.14	commissioner shall issue the manufacturer a "Made in Minnesota" certificate containing
34.15	the name and model numbers of the certified solar photovoltaic modules and the date of
34.16	certification. The commissioner must issue or deny the issuance of a certificate within 90
34.17	days of receipt of a completed application. A copy of the certificate must be provided to
34.18	each purchaser of the solar photovoltaic module.
34.19	Subd. 3. Revocation of certification. The commissioner may revoke a certification
34.20	of a module as "Made in Minnesota" if the commissioner finds that the module no longer
34.21	meets the requirements to be certified. The revocation does not affect incentive payments
34.22	awarded prior to the revocation.
34.23	Sec. 40. [216C.416] "MADE IN MINNESOTA" SOLAR ENERGY
34.24	PRODUCTION INCENTIVE.
34.25	Subdivision 1. Setting incentive. Within 90 days of a module being certified as
34.26	"Made in Minnesota," the commissioner of commerce shall set a solar energy production
34.27	incentive amount for that solar photovoltaic module for the purpose of the incentive
34.28	payment under section 216C.415. The incentive is a performance-based financial
34.29	incentive expressed as a per kilowatt-hour amount. The amount shall be used for incentive
34.30	applications approved in the year to which the incentive amount is applicable for the
34.31	ten-year duration of the incentive payments. An incentive amount must be calculated for
34.32	each module for each calendar year, through 2023.
34.33	Subd. 2. Criteria for determining incentive amount. (a) The commissioner shall
34.34	set the incentive payment amount by determining the average amount of incentive payment

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required to allow an average owner of installed solar photovoltaic modules a reasonable 35.1 35.2 return on their investment. In setting the incentive amount the commissioner shall consider: (1) an estimate of the installed cost per kilowatt-direct current, based on the cost data 35.3 supplied by the manufacturer in the application submitted under section 216C.413, and an 35.4 estimate of the average installation cost based on a representative sample of Minnesota 35.5 solar photovoltaic installed projects; 35.6 (2) the average insolation rate in Minnesota; 35.7 (3) an estimate of the decline in the generation efficiency of the solar photovoltaic 35.8 modules over time; 35.9 (4) the rate paid by utilities to owners of solar photovoltaic modules under section 35.10 35.11 216B.164 or other law; (5) applicable federal tax incentives for installing solar photovoltaic modules; and 35.12 (6) the estimated levelized cost per kilowatt-hour generated. 35.13 (b) The commissioner shall annually, for incentive applications received in a year, 35.14 35.15 revise each incentive amount based on the factors in paragraph (a), clauses (1) to (6), general market conditions, and the availability of other incentives. In no case shall the 35.16 "Made in Minnesota" incentive amount result in the "Made in Minnesota" incentives paid 35.17 exceeding 40 percent, net of average applicable taxes on the ten-year incentive payments, 35.18 of the average historic installation cost per kilowatt. The commissioner may exceed the 40 35.19 percent cap if the commissioner determines it is necessary to fully expend funds available 35.20 for incentive payments in a particular year. 35.21 Subd. 3. **Metering of production.** A utility or association must, at the expense of a 35.22 35.23 customer, provide a meter to measure the production of a solar photovoltaic module system that is approved to receive incentive payments. The utility or association must 35.24 furnish the commissioner with information sufficient for the commissioner to determine 35.25 35.26 the incentive payment. The information must be provided on a calendar year basis by no later than March 1. The commissioner shall provide an association or utility with forms to 35.27 use to provide the production information. A customer must attest to the accuracy of the 35.28 production information. 35.29 Subd. 4. Payment due date. Payments must be made no later than July 1 following 35.30 the year of production. 35.31 Subd. 5. Renewable energy credits. Renewable energy credits associated with 35.32 energy provided to a utility or association for which an incentive payment is made belong 35.33 to the utility or association. 35.34

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Sec. 41. [216C.417] "MADE IN MINNESOTA" SOLAR ENERGY 36.1 PRODUCTION INCENTIVE; PAYMENT. 36.2 Subdivision 1. **Incentive payment.** Incentive payments may be made under this 36.3 section only to an owner of grid-connected solar photovoltaic modules with a total 36.4 nameplate capacity below 40-kilowatts direct current who: 36.5 (1) has submitted to the commissioner, on a form established by the commissioner, 36.6 an application to receive the incentive that has been approved by the commissioner; 36.7 (2) has received a "Made in Minnesota" certificate under section 216C.413 for 36.8 the module; and 36.9 (3) has installed on residential or commercial property solar photovoltaic modules 36.10 that are generating electricity and has received a "Made in Minnesota" certificate under 36.11 36.12 section 216C.413. Subd. 2. **Application process.** Applications for an incentive payment must be 36.13 received by the commissioner between January 1 and February 28. The commissioner 36.14 36.15 shall by a random method approve the number of applications the commissioner reasonably determines will exhaust the funds available for payment for the ten-year period 36.16 of incentive payments. Applications for residential and commercial installations shall be 36.17 separately randomly approved. The random method adopted by the commissioner must 36.18 allow for the commissioner to achieve statewide geographic distribution of the kilowatt 36.19 hours of payment if there are sufficient applications to achieve that distribution. 36.20 Subd. 3. Commissioner approval of incentive application. The commissioner 36.21 must approve an application for an incentive for an owner to be eligible for incentive 36.22 36.23 payments. The commissioner must not approve an application in a calendar year if the commissioner determines there will not be sufficient funding available to pay an incentive 36.24 to the applicant for any portion of the ten-year duration of payment. The commissioner 36.25 shall annually establish a cap on the cumulative capacity for a program year based on 36.26 funds available and historic average installation costs. Receipt of an incentive is not 36.27 an entitlement and payment need only be made from available funds in the "Made in 36.28 36.29 Minnesota" solar production incentive account. Subd. 4. Eligibility window; payment duration. (a) Payments may be made under 36.30 this section only for electricity generated from new solar photovoltaic module installations 36.31 that are commissioned between January 1, 2014, and December 31, 2023. 36.32 (b) The payment eligibility window of the incentive begins and runs consecutively 36.33 from the date the solar system is commissioned. 36.34

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(c) An owner of solar photovoltaic modules may receive payments under this
section for a particular module for a period of ten years provided that sufficient funds are
available in the account.
(d) No payment may be made under this section for electricity generated after
December 31, 2033.
(e) An owner of solar photovoltaic modules may not first begin to receive payments
under this section after December 31, 2024.
Subd. 5. Allocation of payments. (a) If there are sufficient applications,
approximately 50 percent of the incentive payment shall be for owners of eligible solar
photovoltaic modules installed on residential property, and approximately 50 percent shall
be for owners of eligible solar photovoltaic modules installed on commercial property.
(b) The commissioner shall endeavor to geographically distribute incentives paid
under this section to owners of solar photovoltaic modules installed throughout the state.
(c) 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. 6. 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.
Sec. 42. Minnesota Statutes 2012, section 216C.436, subdivision 7, is amended to read:
Subd. 7. Repayment. An implementing entity that finances an energy improvement
under this section must:
(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

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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. 43. 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. 44. Laws 2005, chapter 97, article 10, section 3, is amended to read:
- 38.17 Sec. 3. SUNSET.

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

Sec. 45. STUDY OF POTENTIAL FOR SOLAR ENERGY INSTALLATIONS ON PUBLIC BUILDINGS.

- (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 for electricity generation resulting from the installation of solar photovoltaic devices on and adjacent to public buildings in this state. The study must:
- (1) determine, for buildings identified under the process initiated in Laws 2001, chapter 212, article 1, section 3, commonly referred to as the B3 program, the amount of space available for the installation of solar photovoltaic devices and the maximum solar electricity generation potential; and
- (2) utilize existing data on energy efficiency potential developed under the B3 program and determine how investments in energy efficiency for these buildings could be combined with solar photovoltaic systems to enhance a building's overall energy efficiency. The analysis must include a schedule for installing solar photovoltaic systems

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on public buildings at a rate of four percent of available space per year and must prioritize installations that result in the largest benefits with the shortest payback periods.

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(b) By January 1, 2014, the commissioner of commerce shall submit a copy of the report to the chairs and ranking minority members of the legislative committees with primary jurisdiction over energy policy and state government finance.

Sec. 46. TRANSMISSION FOR FUTURE RENEWABLE ENERGY STANDARD.

The commission shall order all Minnesota electric utilities, as defined in Minnesota Statutes, section 216B.1691, subdivision 1, paragraph (b), and all transmission companies, as defined in Minnesota Statutes, section 216B.02, to study and develop plans for the transmission network enhancements necessary to support increasing the renewable energy standard established in Minnesota Statutes, section 216B.1691, subdivision 2a, to 40 percent by 2030, while maintaining system reliability.

The Minnesota electric utilities and transmission companies 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 and transmission companies 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 and transmission companies 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, 2013. The report shall include a description of the analyses that have been conducted and the results, including:

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(1) a conceptual plan for transmission necessary for generation interconnection and delivery and for 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 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.

Sec. 47. SOLAR INTERCONNECTION STUDY.

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Each public utility, cooperative association, and municipal utility selling electricity shall, by November 1, 2013, provide to the commissioner of commerce an assessment of the capacity available on its electric distribution system for interconnecting solar photovoltaic devices installed on or adjacent to nonresidential buildings in the utility's service area. For each such potential interconnection point, the utility must calculate the maximum capacity of solar photovoltaic devices that could be installed on or adjacent to nearby nonresidential buildings, the amount of available capacity that could be installed without upgrading the utility's distribution system, and the cost of the upgrade necessary to accommodate the installation of the maximum capacity and lesser amounts. The assessment must be in map format, must be updated annually, and must be made available to the public.

Sec. 48. VALUE OF ON-SITE ENERGY STORAGE STUDY.

- (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, grid-connected energy storage devices in residential and commercial buildings in this state. The study must:
- (1) estimate the potential value of on-site energy storage devices 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 devices with on-site solar photovoltaic devices; and
- (3) analyze existing barriers to the installation of on-site energy storage devices by utilities, and examine strategies and design potential economic incentives to overcome those barriers.
- 40.32 (b) The commissioner of commerce shall assess an amount necessary under

 40.33 Minnesota Statutes, section 216B.241, subdivision 1e, for the purpose of completing the

 40.34 study described in this section.

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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.

Sec. 49. VALUE OF SOLAR THERMAL STUDY.

- (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 costs at the utility level as well. The study must also analyze existing barriers to the installation of on-site energy storage devices by utilities and examine strategies and design potential economic incentives 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 necessary under

 Minnesota Statutes, section 216B.241, subdivision 1e, for the purpose of completing the study described in this section.

41.19 Sec. 50. **SEVERABILITY.**

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- If any provision of this act is found to be unconstitutional and void, the remaining provisions of this act are valid.
- 41.22 **EFFECTIVE DATE.** This section is effective the day following final enactment.

41.23 Sec. 51. **REPEALER.**

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

41.25 Sec. 52. EFFECTIVE DATE.

Sections 1 to 51 are effective the day following final enactment."

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