

HOUSE OF REPRESENTATIVES

EIGHTY-EIGHTH SESSION

H. F. No. 956

02/25/2013 Authored by Hortman and Morgan

The bill was read for the first time and referred to the Committee on Energy Policy

03/18/2013 Adoption of Report: Pass as Amended and re-referred to the Committee on Commerce and Consumer Protection Finance and Policy

04/02/2013 Adoption of Report: Pass as Amended and re-referred to the Committee on Ways and Means

05/03/2013 Adoption of Report: Pass as Amended and Read Second Time

1.1 A bill for an act
 1.2 relating to energy; amending various provisions related to utilities; modifying
 1.3 provisions governing cogeneration and small power production; establishing a
 1.4 value of solar rate and related regulations; permitting community solar generating
 1.5 facilities; creating various renewable energy incentives; requiring studies;
 1.6 extending sunsets; making technical corrections; appropriating money; amending
 1.7 Minnesota Statutes 2012, sections 16C.144, subdivision 2; 116C.779, subdivision
 1.8 3; 216B.02, subdivision 4; 216B.03; 216B.16, subdivision 7b, by adding a
 1.9 subdivision; 216B.1635; 216B.164, subdivisions 3, 4, 6, by adding subdivisions;
 1.10 216B.1691, subdivisions 1, 2a, 2e, by adding a subdivision; 216B.1692,
 1.11 subdivisions 1, 8, by adding a subdivision; 216B.1695, subdivision 5, by adding a
 1.12 subdivision; 216B.23, subdivision 1a; 216B.241, subdivisions 1e, 5c; 216B.2411,
 1.13 subdivision 3; 216B.40; 216C.436, subdivisions 7, 8; Laws 2005, chapter 97,
 1.14 article 10, section 3; proposing coding for new law in Minnesota Statutes,
 1.15 chapters 216B; 216C; repealing Minnesota Statutes 2012, section 216B.1637.

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

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

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

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

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

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

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

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

2.10 (6) the qualified provider gives a sufficient bond in accordance with section
2.11 574.26 to the commissioner for the faithful implementation and installation of the utility
2.12 cost-savings measures.

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

2.14 Subd. 3. **Initiative for Renewable Energy and the Environment.** (a)
2.15 Notwithstanding subdivision 1, paragraph (g), beginning July 1, 2009, and each July 1
2.16 through 2011, and on July 1, 2013, and July 1, 2014, \$5,000,000 must be allocated from the
2.17 renewable development account to fund a grant to the Board of Regents of the University
2.18 of Minnesota for the Initiative for Renewable Energy and the Environment for the purposes
2.19 described in paragraph (b). The Initiative for Renewable Energy and the Environment
2.20 must set aside at least 15 percent of the funds received annually under the grant for
2.21 qualified projects conducted at a rural campus or experiment station. Any set-aside funds
2.22 not awarded to a rural campus or experiment station at the end of the fiscal year revert
2.23 back to the Initiative for Renewable Energy and the Environment for its exclusive use.
2.24 This subdivision does not create an obligation to contribute funds to the account.

2.25 (b) Activities funded under this grant may include, but are not limited to:

2.26 (1) environmentally sound production of energy from a renewable energy source,
2.27 including biomass and agricultural crops;

2.28 (2) environmentally sound production of hydrogen from biomass and any other
2.29 renewable energy source for energy storage and energy utilization;

2.30 (3) development of energy conservation and efficient energy utilization technologies;

2.31 (4) energy storage technologies; and

2.32 (5) analysis of policy options to facilitate adoption of technologies that use or
2.33 produce low-carbon renewable energy.

2.34 (c) For the purposes of this subdivision:

3.1 (1) "biomass" means plant and animal material, agricultural and forest residues,
3.2 mixed municipal solid waste, and sludge from wastewater treatment; and

3.3 (2) "renewable energy source" means hydro, wind, solar, biomass, and geothermal
3.4 energy, and microorganisms used as an energy source.

3.5 (d) Beginning January 15 of 2010, and each year thereafter, the director of the
3.6 Initiative for Renewable Energy and the Environment at the University of Minnesota shall
3.7 submit a report to the chair and ranking minority members of the senate and house of
3.8 representatives committees with primary jurisdiction over energy finance describing the
3.9 activities conducted during the previous year funded under this subdivision.

3.10 Sec. 3. Minnesota Statutes 2012, section 216B.02, subdivision 4, is amended to read:

3.11 Subd. 4. **Public utility.** "Public utility" means persons, corporations, or other legal
3.12 entities, their lessees, trustees, and receivers, now or hereafter operating, maintaining,
3.13 or controlling in this state equipment or facilities for furnishing at retail natural,
3.14 manufactured, or mixed gas or electric service to or for the public or engaged in the
3.15 production and retail sale thereof but does not include (1) a municipality or a cooperative
3.16 electric association, organized under the provisions of chapter 308A, producing or
3.17 furnishing natural, manufactured, or mixed gas or electric service; (2) a retail seller of
3.18 compressed natural gas used as a vehicular fuel which purchases the gas from a public
3.19 utility; or (3) a retail seller of electricity used to recharge a battery that powers an electric
3.20 vehicle, as defined in section 169.011, subdivision 26a, and that is not otherwise a public
3.21 utility under this chapter. Except as otherwise provided, the provisions of this chapter shall
3.22 not be applicable to any sale of natural, manufactured, or mixed gas or electricity by a
3.23 public utility to another public utility for resale. In addition, the provisions of this chapter
3.24 shall not apply to a public utility whose total natural gas business consists of supplying
3.25 natural, manufactured, or mixed gas to not more than 650 customers within a city pursuant
3.26 to a franchise granted by the city, provided a resolution of the city council requesting
3.27 exemption from regulation is filed with the commission. The city council may rescind
3.28 the resolution requesting exemption at any time, and, upon the filing of the rescinding
3.29 resolution with the commission, the provisions of this chapter shall apply to the public
3.30 utility. No person shall be deemed to be a public utility if it furnishes its services only to
3.31 tenants or cooperative or condominium owners in buildings owned, leased, or operated
3.32 by such person. No person shall be deemed to be a public utility if it furnishes service
3.33 to occupants of a manufactured home or trailer park owned, leased, or operated by such
3.34 person. No person shall be deemed to be a public utility if it produces or furnishes service
3.35 to less than 25 persons. No person shall be deemed to be a public utility solely as a result

4.1 of the person furnishing consumers with electricity or heat generated from wind or solar
4.2 generating equipment located on the consumer's property, provided the equipment is
4.3 owned or operated by an entity other than the consumer.

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

4.5 **216B.03 REASONABLE RATE.**

4.6 Every rate made, demanded, or received by any public utility, or by any two or
4.7 more public utilities jointly, shall be just and reasonable. Rates shall not be unreasonably
4.8 preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable,
4.9 and consistent in application to a class of consumers. To the maximum reasonable extent,
4.10 the commission shall set rates to encourage energy conservation and renewable energy use
4.11 and to further the goals of sections 216B.164, 216B.241, ~~and~~ 216C.05, and 216C.412. Any
4.12 doubt as to reasonableness should be resolved in favor of the consumer. For rate-making
4.13 purposes a public utility may treat two or more municipalities served by it as a single class
4.14 wherever the populations are comparable in size or the conditions of service are similar.

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

4.17 Subd. 6e. **Solar energy production incentive.** (a) Except as otherwise provided in
4.18 this subdivision, all assessments authorized by section 216C.412 incurred in connection
4.19 with the solar energy production incentive shall be recognized and included by the
4.20 commission in the determination of just and reasonable rates as if the expenses were
4.21 directly made or incurred by the utility in furnishing utility service.

4.22 (b) The commission shall not include expenses for the solar energy production
4.23 incentive in determining just and reasonable electric rates for retail electric service provided
4.24 to customers receiving the low-income electric rate discount authorized by subdivision 14.

4.25 Sec. 6. Minnesota Statutes 2012, section 216B.16, subdivision 7b, is amended to read:

4.26 Subd. 7b. **Transmission cost adjustment.** (a) Notwithstanding any other provision
4.27 of this chapter, the commission may approve a tariff mechanism for the automatic annual
4.28 adjustment of charges for the Minnesota jurisdictional costs net of associated revenues of:

4.29 (i) new transmission facilities that have been separately filed and reviewed and
4.30 approved by the commission under section 216B.243 or are certified as a priority project
4.31 or deemed to be a priority transmission project under section 216B.2425; ~~and~~

4.32 (ii) new transmission facilities approved by the regulatory commission of the state
4.33 in which the new transmission facilities are to be constructed, to the extent approval

5.1 is required by the laws of that state, and determined by the Midwest Independent
 5.2 Transmission System Operator to benefit the utility or integrated transmission system; and
 5.3 (iii) charges incurred by a utility under a federally approved tariff that accrue
 5.4 from other transmission owners' regionally planned transmission projects that have been
 5.5 determined by the Midwest Independent Transmission System Operator to benefit the
 5.6 utility, as provided for under a federally approved tariff or integrated transmission system.

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

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

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

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

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

5.25 ~~(4)~~ (5) provides a current return on construction work in progress, provided that
 5.26 recovery from Minnesota retail customers for the allowance for funds used during
 5.27 construction is not sought through any other mechanism;

5.28 ~~(5)~~ (6) allows for recovery of other expenses if shown to promote a least-cost project
 5.29 option or is otherwise in the public interest;

5.30 ~~(6)~~ (7) allocates project costs appropriately between wholesale and retail customers;

5.31 ~~(7)~~ (8) provides a mechanism for recovery above cost, if necessary to improve the
 5.32 overall economics of the project or projects or is otherwise in the public interest; and

5.33 ~~(8)~~ (9) terminates recovery once costs have been fully recovered or have otherwise
 5.34 been reflected in the utility's general rates.

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

- 6.1 (1) a description of and context for the facilities included for recovery;
- 6.2 (2) a schedule for implementation of applicable projects;
- 6.3 (3) the utility's costs for these projects;
- 6.4 (4) a description of the utility's efforts to ensure the lowest costs to ratepayers for
- 6.5 the project; and
- 6.6 (5) calculations to establish that the rate adjustment is consistent with the terms
- 6.7 of the tariff established in paragraph (b).

6.8 (d) Upon receiving a filing for a rate adjustment pursuant to the tariff established in

6.9 paragraph (b), the commission shall approve the annual rate adjustments provided that,

6.10 after notice and comment, the costs included for recovery through the tariff were or are

6.11 expected to be prudently incurred and achieve transmission system improvements at the

6.12 lowest feasible and prudent cost to ratepayers.

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

6.14 **216B.1635 RECOVERY OF GAS UTILITY INFRASTRUCTURE COSTS.**

6.15 Subdivision 1. **Definitions.** (a) "Gas utility" means a public utility as defined in

6.16 section 216B.02, subdivision 4, that furnishes natural gas service to retail customers.

6.17 (b) "Gas utility infrastructure costs" or "GUIC" means costs incurred in gas utility

6.18 projects that:

6.19 (1) do not serve to increase revenues by directly connecting the infrastructure

6.20 replacement to new customers;

6.21 (2) are in service but were not included in the gas utility's rate base in its most

6.22 recent general rate case; ~~and,~~ or are planned to be in service during the period covered

6.23 by the report submitted under subdivision 2, but in no case longer than the one-year

6.24 forecast period in the report; and

6.25 (3) ~~replace or modify existing infrastructure if the replacement or modification does~~

6.26 ~~not constitute a betterment, unless the betterment is required by a political subdivision,~~

6.27 ~~as evidenced by specific documentation from the government entity requiring the~~

6.28 ~~replacement or modification of infrastructure~~ do not constitute a betterment, unless the

6.29 betterment is based on requirements by a political subdivision or a federal or state agency,

6.30 as evidenced by specific documentation, an order, or other similar requirement from the

6.31 government entity requiring the replacement or modification of infrastructure.

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

6.33 (1) replacement of natural gas facilities located in the public right-of-way required

6.34 by the construction or improvement of a highway, road, street, public building, or other

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

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

7.6 Subd. 2. **Gas infrastructure filing.** ~~(a) The commission may approve a gas utility's~~
7.7 ~~petition for a rate schedule~~ A public utility submitting a petition to recover GUIC gas
7.8 infrastructure costs under this section. ~~A gas utility may~~ must submit to the commission,
7.9 the department, and interested parties a gas infrastructure project plan report and a petition
7.10 the commission to recover a rate of return, income taxes on the rate of return, incremental
7.11 property taxes, plus incremental depreciation expense associated with GUIC for rate
7.12 recovery of only incremental costs associated with projects under subdivision 1, paragraph
7.13 (c). The report and petition must be made at least 150 days in advance of implementation
7.14 of the rate schedule, provided that the rate schedule will not be implemented until the
7.15 petition is approved by the commission pursuant to subdivision 5. The report must be
7.16 for a forecast period of one year.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

9.5 Subd. 5. **Commission action.** Upon receiving a gas utility report and petition for
9.6 cost recovery under subdivision 2, the commission may approve the annual GUIC rate
9.7 adjustments provided that, after notice and comment, the commission determines that the
9.8 costs included for recovery through the rate schedule are prudently incurred and achieve
9.9 gas facility improvements at the lowest reasonable and prudent cost to ratepayers.

9.10 Subd. 6. **Rate of return.** The return on investment for the rate adjustment shall be
9.11 at the level approved by the commission in the public utility's most recently completed
9.12 general rate case, unless the commission determines that a different rate of return is in
9.13 the public interest.

9.14 Subd. 3 7. **Commission authority; rules.** The commission may issue orders and
9.15 adopt rules necessary to implement and administer this section.

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

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

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

9.23 (c) "Capacity" means the number of megawatts alternating current (AC) at the point
9.24 of interconnection between a solar photovoltaic device and a utility's electric system.

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

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

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

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

- 10.1 (h) "Distributed generation" means a facility that:
 10.2 (1) has a capacity of ten megawatts or less;
 10.3 (2) is interconnected with a utility's distribution system, over which the commission
 10.4 has jurisdiction; and
 10.5 (3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel,
 10.6 and may include waste heat, cogeneration, or fuel cell technology.
- 10.7 (i) "High-efficiency distributed generation" means a distributed energy facility
 10.8 that has a minimum efficiency of 40 percent, as calculated under section 272.0211,
 10.9 subdivision 1.
- 10.10 (j) "Net metered facility" means an electric generation facility constructed for the
 10.11 purpose of offsetting energy use through the use of renewable energy or high-efficiency
 10.12 distributed generation sources.
- 10.13 (k) "Renewable energy" has the meaning given in section 216B.2411, subdivision 2.
- 10.14 (l) "Standby charge" means a charge imposed by an electric utility upon a distributed
 10.15 generation facility for the recovery of fixed costs necessary to make electricity service
 10.16 available to the distributed generation facility.

10.17 Sec. 9. Minnesota Statutes 2012, section 216B.164, subdivision 3, is amended to read:

10.18 Subd. 3. **Purchases; small facilities.** (a) For a qualifying facility having less than
 10.19 40-kilowatt capacity if interconnected with a cooperative association or municipal utility,
 10.20 or less than a 1,000-kilowatt capacity if interconnected with a public utility, the customer
 10.21 shall be billed for the net energy supplied by the utility according to the applicable
 10.22 rate schedule for sales to that class of customer. In the case of net input into the utility
 10.23 system by a qualifying facility having less than 40-kilowatt capacity if interconnected
 10.24 with a cooperative association or municipal utility, or less than a 1,000-kilowatt capacity
 10.25 if interconnected with a public utility, compensation to the customer shall be at a per
 10.26 kilowatt-hour rate determined under paragraph (b) or (c).

10.27 (b) In setting rates, the commission shall consider the fixed distribution costs to the
 10.28 utility not otherwise accounted for in the basic monthly charge and shall ensure that the
 10.29 costs charged to the qualifying facility are not discriminatory in relation to the costs
 10.30 charged to other customers of the utility. The commission shall set the rates for net
 10.31 input into the utility system based on avoided costs as defined in the Code of Federal
 10.32 Regulations, title 18, section 292.101, paragraph (b)(6), the factors listed in Code of
 10.33 Federal Regulations, title 18, section 292.304, and all other relevant factors.

10.34 (c) Notwithstanding any provision in this chapter to the contrary, a qualifying facility
 10.35 having less than 40-kilowatt capacity if interconnected with a cooperative association or

11.1 municipal utility, or less than a 1,000-kilowatt capacity if interconnected with a public
11.2 utility, may elect that the compensation for net input by the qualifying facility into the
11.3 utility system shall be at the average retail utility energy rate. "Average retail utility energy
11.4 rate" is defined as the average of the retail energy rates, exclusive of special rates based
11.5 on income, age, or energy conservation, according to the applicable rate schedule of the
11.6 utility for sales to that class of customer.

11.7 (d) If the qualifying facility is interconnected with a nongenerating utility which has
11.8 a sole source contract with a municipal power agency or a generation and transmission
11.9 utility, the nongenerating utility may elect to treat its purchase of any net input under this
11.10 subdivision as being made on behalf of its supplier and shall be reimbursed by its supplier
11.11 for any additional costs incurred in making the purchase. Qualifying facilities having less
11.12 than 40-kilowatt capacity if interconnected with a cooperative association or municipal
11.13 utility, or less than a 1,000-kilowatt capacity if interconnected with a public utility, may, at
11.14 the customer's option, elect to be governed by the provisions of subdivision 4.

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

11.16 Subd. 4. **Purchases; wheeling; costs.** (a) Except as otherwise provided in paragraph
11.17 (c), this subdivision shall apply to all qualifying facilities having 40-kilowatt capacity
11.18 or more if interconnected with a cooperative association or municipal utility, and a
11.19 1,000-kilowatt capacity or more if interconnected with a public utility, as well as qualifying
11.20 facilities as defined in subdivision 3 which elect to be governed by its provisions.

11.21 (b) The utility to which the qualifying facility is interconnected shall purchase all
11.22 energy and capacity made available by the qualifying facility. The qualifying facility shall
11.23 be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as
11.24 set by the commission, or as determined through competitive bidding approved by the
11.25 commission. The full avoided capacity and energy costs to be paid a qualifying facility
11.26 that generates electric power by means of a renewable energy source are the utility's least
11.27 cost renewable energy facility or the bid of a competing supplier of a least cost renewable
11.28 energy facility, whichever is lower, unless the commission's resource plan order, under
11.29 section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet
11.30 the identified capacity need is not in the public interest.

11.31 (c) For all qualifying facilities having 30-kilowatt capacity or more, the utility
11.32 shall, at the qualifying facility's or the utility's request, provide wheeling or exchange
11.33 agreements wherever practicable to sell the qualifying facility's output to any other
11.34 Minnesota utility having generation expansion anticipated or planned for the ensuing ten
11.35 years. The commission shall establish the methods and procedures to insure that except

12.1 for reasonable wheeling charges and line losses, the qualifying facility receives the full
12.2 avoided energy and capacity costs of the utility ultimately receiving the output.

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

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

12.6 Subd. 4a. **Aggregation of meters.** (a) For the purpose of measuring electricity
12.7 under subdivision 3, a public utility must aggregate for billing purposes a customer's
12.8 designated meter with one or more aggregated meters if a customer requests that it do so.
12.9 Any aggregation of meters must be governed under this section.

12.10 (b) A customer must give at least 60 days' notice to the public utility prior to a
12.11 request that additional meters be included in meter aggregation. The specific meters must
12.12 be identified at the time of the request. In the event that more than one meter is identified,
12.13 the customer must designate the rank order for the aggregated meters to which the net
12.14 metered credits are to be applied. At least 60 days prior to the beginning of the next
12.15 annual billing period, a customer may amend the rank order of the aggregated meters,
12.16 subject to the provisions of this subdivision.

12.17 (c) The aggregation of meters applies only to charges that use kilowatt-hours as the
12.18 billing determinant. All other charges applicable to each meter account must be billed to
12.19 the customer.

12.20 (d) If the net metered facility supplies more electricity to the public utility than
12.21 the energy usage recorded by the customer's designated and aggregated meters during a
12.22 monthly billing period, the public utility must apply credits to the customer's next monthly
12.23 bill for the excess kilowatt-hours. The public utility must first apply the kilowatt-hour
12.24 credit to the charges for the designated meter and then to the charges for the aggregated
12.25 meters in the rank order specified by the customer.

12.26 (e) With the commission's prior approval, a public utility may charge a customer
12.27 requesting to aggregate meters a reasonable fee to cover the administrative costs incurred
12.28 as a result of implementing the provisions of this subdivision, pursuant to a tariff approved
12.29 by the commission.

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

12.32 Subd. 4b. **Limiting cumulative generation prohibited.** The commission
12.33 is prohibited from limiting the cumulative generation of qualifying facilities under
12.34 subdivision 3 to less than five percent of a public utility's average annual retail electricity

13.1 sales as measured over the previous three calendar years. After the cumulative limit
 13.2 of five percent has been reached, a public utility's obligation to offer net metering to
 13.3 additional customers may be limited by the commission if it determines doing so is in the
 13.4 public interest. The commission may limit additional net metering obligations under
 13.5 this subdivision only after providing notice and opportunity for public comment. In
 13.6 determining whether to limit additional net metering obligations under this subdivision,
 13.7 the commission shall consider:

- 13.8 (1) the environmental and other public policy benefits of net metered facilities;
 13.9 (2) the impact of net metered facilities on electricity rates for customers without
 13.10 net metered systems;
 13.11 (3) the effects of net metering on the reliability of the electric system;
 13.12 (4) technical advances or technical concerns; and
 13.13 (5) other statutory obligations imposed on the commission or on a utility.

13.14 The commission may limit additional net metering obligations under clauses (2) to (4) only
 13.15 if it determines that additional net metering obligations would cause significant rate impact,
 13.16 require significant measures to address reliability, or raise significant technical issues.

13.17 Sec. 13. Minnesota Statutes 2012, section 216B.164, subdivision 6, is amended to read:

13.18 Subd. 6. **Rules and uniform contract.** (a) The commission shall promulgate rules
 13.19 to implement the provisions of this section. The commission shall also establish a uniform
 13.20 statewide form of contract for use between utilities and a qualifying facility having less
 13.21 than ~~40-kilowatt~~ 1,000-kilowatt capacity.

13.22 (b) The commission shall require the qualifying facility to provide the utility with
 13.23 reasonable access to the premises and equipment of the qualifying facility if the particular
 13.24 configuration of the qualifying facility precludes disconnection or testing of the qualifying
 13.25 facility from the utility side of the interconnection with the utility remaining responsible
 13.26 for its personnel.

13.27 (c) The uniform statewide form of contract shall be applied to all new and existing
 13.28 interconnections established between a utility and a qualifying facility having less than
 13.29 ~~40-kilowatt~~ 1,000-kilowatt capacity, except that existing contracts may remain in force
 13.30 until written notice of election that the uniform statewide contract form applies is given
 13.31 by either party to the other, with the notice being of the shortest time period permitted
 13.32 under the existing contract for termination of the existing contract by either party, but
 13.33 not less than ten nor longer than 30 days.

14.1 Sec. 14. Minnesota Statutes 2012, section 216B.164, is amended by adding a
14.2 subdivision to read:

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

14.8 (b) For the purposes of this subdivision:

14.9 (1) "energy storage device" means a device capable of storing up to 3.5
14.10 megawatt-hours of previously generated energy and releasing that energy for use at a
14.11 later time; and

14.12 (2) "public building" means a building or facility financed wholly or in part with
14.13 public funds, including facilities financed by the Public Facilities Authority.

14.14 Sec. 15. [216B.164] VALUE OF SOLAR RATE.

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

14.18 Subd. 2. **Applicability.** (a) Beginning January 1, 2014, this section shall apply to
14.19 public utilities selling electricity at retail in Minnesota.

14.20 (b) Notwithstanding section 216B.164, an owner of a solar photovoltaic device may,
14.21 with respect to the purchase price credited by a utility to an owner of a solar photovoltaic
14.22 device, elect to be governed under this section or section 216B.164. All other provisions
14.23 of section 216B.164, except those in subdivision 3 and subdivision 4, paragraphs (a)
14.24 to (c), shall apply to an owner of a solar photovoltaic device electing to be governed
14.25 under this section.

14.26 (c) This section does not apply to a utility that owns a solar photovoltaic device.

14.27 (d) An owner of a solar photovoltaic device governed under the net metering
14.28 provisions of section 216B.164 prior to the effective date of the commission order issued
14.29 under subdivision 9 and who elects to be governed under this section with respect to the
14.30 purchase price credited by a utility must provide written notice of that election to the
14.31 utility. The utility shall begin crediting the value of solar rate most recently approved by
14.32 the commission to the owner of the solar photovoltaic device on the first day of the first
14.33 month that begins at least 30 days after receipt of the notice.

14.34 (e) This section does not apply to a solar photovoltaic device whose capacity
14.35 exceeds two megawatts.

15.1 Subd. 3. **Standby charge prohibited.** A utility may not apply a standby charge to
15.2 a solar photovoltaic device governed under this section.

15.3 Subd. 4. **Standard contract.** The commission shall establish a statewide uniform
15.4 form of contract that must be used by a purchasing utility and an owner of a solar
15.5 photovoltaic device who elects to be governed under this section. The term of a contract
15.6 entered into under this section must be no less than 20 years. The agreement must provide
15.7 for credit of the value of solar rate as approved by the commission under this section,
15.8 and must require the transfer of all renewable energy credits associated with the energy
15.9 generated by the solar photovoltaic device to the purchasing utility.

15.10 Subd. 5. **Credits.** The utility interconnected to a solar photovoltaic device whose
15.11 owner elects to be governed under this section shall purchase, throughout the term of the
15.12 contract, all energy and capacity made available by the owner of the solar photovoltaic
15.13 device. All credits must be made at the value of solar rate approved by the commission
15.14 under this section.

15.15 Subd. 6. **Value of solar rate; guidance document.** (a) By December 1, 2013, and
15.16 each December 1 thereafter through 2048, the Department of Commerce shall develop
15.17 a value of solar guidance document that contains step-by-step procedures that a utility
15.18 subject to this section must use to calculate the utility's value of solar rate. The guidance
15.19 document must specify a method a utility must use to calculate the value of all the
15.20 components listed in paragraph (b), and may include formulas, discount rates, and other
15.21 provisions governing how the value of solar rate must be calculated.

15.22 (b) The value of solar rate is expressed on a per kilowatt-hour basis, and consists of
15.23 the following components:

15.24 (1) line loss savings equal to the value of the average amount of electricity lost
15.25 through transmission and distribution when electricity is generated by the utility's nonsolar
15.26 photovoltaic generators;

15.27 (2) transmission and distribution capacity savings equal to the value of delaying
15.28 the need for capital investment in a utility's transmission and distribution system by
15.29 contracting to purchase energy from solar photovoltaic devices;

15.30 (3) energy savings equal to the reduction in a utility's wholesale energy purchases
15.31 and costs, based on the time of day the energy would have been generated, realized as a
15.32 result of energy purchases from solar photovoltaic devices;

15.33 (4) generation capacity savings equal to the value of the benefit of the capacity
15.34 added to the utility's system by solar photovoltaic devices;

15.35 (5) fuel price hedge value equal to the value of eliminating price uncertainty
15.36 associated with the utility's purchases of fuel for electricity generation; and

16.1 (6) environmental benefits equal to the premium retail customers are willing to pay
16.2 to consume energy produced from renewable resources.

16.3 (c) The department may, based on known and measurable evidence of the economic
16.4 development benefits of solar electricity generation, including the net increase in local
16.5 employment and taxes generated from the manufacture, assembly, installation, operation,
16.6 and maintenance of solar photovoltaic devices, or other factors, incorporate additional
16.7 amounts into the value of solar rate.

16.8 (d) The value of solar rate is equal to the present value of the future revenue streams
16.9 of the value components calculated in paragraphs (b) and (c) over the useful life of a
16.10 solar photovoltaic device.

16.11 (e) Prior to preparing the value of solar guidance document, the Department of
16.12 Commerce shall obtain comments and recommendations from utilities, ratepayers, and
16.13 other interested parties regarding the content of the value of solar guidance document.

16.14 (f) By January 1, 2015, and every January 1 thereafter through 2049, the
16.15 commissioner shall make a determination as to whether the value of solar guidance
16.16 document developed under this subdivision needs to be revised. In making that
16.17 determination, the commissioner shall solicit comments and recommendations from
16.18 interested parties in the same manner as required under paragraph (e). After considering
16.19 the comments and recommendations, the commissioner may revise the value of solar
16.20 guidance document.

16.21 Subd. 7. **Utilities to offer tariff.** By April 1, 2014, and each April 1 thereafter
16.22 through 2049, a utility subject to this section shall file with the commission a value of
16.23 solar tariff based on its calculation of the utility's value of solar rate that is consistent with
16.24 the department's value of solar guidance document developed in subdivision 6. A utility
16.25 must include in its filing its method of calculation for each component listed in subdivision
16.26 6, paragraph (b). A utility filing a value of solar rate that differs from the value of solar
16.27 rate filed by the utility for the previous year shall submit to the commission the reasons
16.28 for and the methods it used to calculate the differences.

16.29 Subd. 8. **Value of solar rate; billing.** Notwithstanding section 216B.164, an owner
16.30 of a solar photovoltaic device who elects to receive the value of solar rate for electricity
16.31 generated by the solar photovoltaic device that is sold to a utility must be:

16.32 (1) charged by the utility the applicable rate schedule for sales to that class of
16.33 customer for all electricity consumed by the customer;

16.34 (2) credited the value of solar rate by the utility for all electricity generated by the
16.35 solar photovoltaic device;

17.1 (3) provided by the utility with a monthly bill that contains, in addition to the
17.2 amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized
17.3 by the owner for that month and on a year-to-date basis. In the event that the customer
17.4 has a positive balance after the 12-month cycle ending on the last day of February, that
17.5 balance will be eliminated and the credit cycle will restart the following billing period
17.6 beginning March 1; and

17.7 (4) provided by the utility with a meter that allows for the separate calculation of the
17.8 amount of electricity consumed and generated at the property.

17.9 Subd. 9. **Commission review; approval.** (a) By July 1, 2014, and each July
17.10 1 thereafter through 2049, the commission shall review the filing submitted under
17.11 subdivision 7 and any comments on the filing made by the department or other interested
17.12 parties, and approve or modify each utility's value of solar tariff. The commission may,
17.13 at its discretion, solicit additional comments, information, and recommendations from
17.14 utilities, the department, and other interested parties.

17.15 (b) By July 1, 2014, and each January 1 thereafter through 2049, the commission
17.16 shall, by order, direct all electric utilities subject to this section to begin crediting the value
17.17 of solar rate most recently approved by the commission to:

17.18 (1) owners of solar photovoltaic devices who sign a standard contract under this
17.19 section on or after the first day of the first month following the effective date of the
17.20 order; and

17.21 (2) owners of solar photovoltaic devices who were governed under the net metering
17.22 provisions of section 216B.164 prior to the effective date of the order and who elect to
17.23 be governed under this section with respect to the purchase price credited by a utility by
17.24 complying with the provisions of subdivision 2, paragraph (d).

17.25 (c) In no case shall the commission approve a value of solar rate under this section
17.26 that is lower than the applicable retail rate of the subject utility.

17.27 **Sec. 16. [216B.1651] DEFINITIONS.**

17.28 Subdivision 1. **Scope.** For the purposes of sections 216B.1651 to 216B.1654, the
17.29 following definitions have the meanings given.

17.30 Subd. 2. **Community solar generating facility.** "Community solar generating
17.31 facility" means a facility:

17.32 (1) that generates electricity by means of a solar photovoltaic device that has a
17.33 capacity of less than two megawatts direct current nameplate;

17.34 (2) that is interconnected with a utility's distribution system under the jurisdiction
17.35 of the commission;

18.1 (3) that is located in the electric service area of the utility with which it is
18.2 interconnected;

18.3 (4) whose subscribers purchase, under long-term contract with the community solar
18.4 generating facility, the right to consume the electricity generated from a specified portion
18.5 of the facility's generating capacity;

18.6 (5) that is not owned by a utility; and

18.7 (6) that has at least two subscribers.

18.8 Subd. 3. **Facility manager.** "Facility manager" means an entity that manages a
18.9 community solar generating facility for the benefit of subscribers and may, in addition,
18.10 develop, construct, own, or operate the community solar generating facility. A facility
18.11 manager may not be a utility, but may be:

18.12 (1) a person whose sole purpose is to beneficially own and operate a community
18.13 solar generating facility;

18.14 (2) a Minnesota nonprofit corporation organized under chapter 317A;

18.15 (3) a Minnesota cooperative association organized under chapter 308A or 308B;

18.16 (4) a Minnesota political subdivision or local government, including but not limited
18.17 to a county, statutory or home rule charter city, town, school district, public or private
18.18 higher education institution, or any other local or regional governmental organization such
18.19 as a board, commission, or association; or

18.20 (5) a tribal council.

18.21 Subd. 4. **Renewable energy credit.** "Renewable energy credit" has the meaning
18.22 given in section 216B.1691, subdivision 1, paragraph (d).

18.23 Subd. 5. **Solar photovoltaic device.** "Solar photovoltaic device" has the meaning
18.24 given in section 216C.06, subdivision 16.

18.25 Subd. 6. **Subscriber.** "Subscriber" means a retail customer of a utility who owns
18.26 one or more subscriptions of a community solar generating facility interconnected with
18.27 that utility. A facility manager may be a subscriber.

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

18.33 Subd. 8. **Utility.** "Utility" means a public utility as defined in section 216B.02,
18.34 subdivision 4.

18.35 Sec. 17. **[216B.1652] SUBSCRIPTIONS.**

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

19.5 Subd. 2. **Size.** (a) A subscription must be a portion of the community solar generating
19.6 facility's nameplate capacity sized so as to produce no more than 120 percent of the annual
19.7 average amount of electricity consumed over the previous three years at the site where the
19.8 subscriber's meter is located. If the site is newly constructed, the subscription must be sized
19.9 based on 120 percent of the average annual amount of electricity consumed by a facility of
19.10 similar size and type in the utility's service area, as determined by the facility manager.

19.11 (b) A subscriber may not own one or more subscriptions whose total capacity
19.12 exceeds the maximum capacity allowed for a qualifying facility subject to section
19.13 216B.164, subdivision 3.

19.14 (c) A facility manager may not own subscriptions whose total capacity exceeds the
19.15 maximum subscription size allowed under paragraph (a) plus ten percent of the remaining
19.16 available nameplate capacity in the community solar generating facility, subject to the
19.17 limit in paragraph (b).

19.18 (d) The maximum subscription size for a subscriber consuming electricity generated
19.19 from an eligible energy technology, as defined in section 216B.1691, subdivision 1, at any
19.20 time during the term of the subscriber's subscription, is the maximum subscription size
19.21 allowed under paragraph (a) minus the nameplate capacity of the eligible energy technology
19.22 device providing electricity to the subscriber, subject to the limit in paragraph (b).

19.23 Subd. 3. **Certification.** Prior to the sale of a subscription, a facility manager
19.24 must provide certification to the subscriber signed by the facility manager under penalty
19.25 of perjury:

19.26 (1) identifying the rate of insolation at the community solar generating facility;

19.27 (2) certifying that the solar photovoltaic devices employed by the community solar
19.28 generating facility to generate electricity have an electrical energy degradation rate of no
19.29 more than 0.5 percent annually; and

19.30 (3) certifying that the community solar generating facility is in full compliance with
19.31 all applicable federal and state utility, securities, and tax laws.

19.32 Subd. 4. **On-site subscriber.** A subscriber who owns the property on which
19.33 a community solar generating facility is located has no more rights with respect to
19.34 subscription size or price than any other subscriber.

20.1 Subd. 5. **Subscription prices.** The price for a subscription to a community solar
20.2 generating facility is not subject to regulation by the commission and is negotiated
20.3 between the prospective subscriber and the facility manager.

20.4 Subd. 6. **Subscription transfer.** A subscriber that terminates the contract between
20.5 the subscriber and the community solar generating facility must transfer the subscription
20.6 to a person eligible to be a subscriber or to the facility manager at a price negotiated
20.7 by both parties.

20.8 Subd. 7. **New subscribers.** Within 30 days of the execution of a contract between the
20.9 community solar generating facility and a new subscriber, the facility manager shall submit
20.10 the following information to the utility serving the community solar generating facility:

20.11 (1) the new subscriber's name, address, number of meters, and utility customer
20.12 account; and

20.13 (2) the share of the community solar generating facility's nameplate capacity owned
20.14 by the new subscriber.

20.15 Subd. 8. **Meter change.** A subscriber that moves to a different property served by
20.16 the community solar generating facility from the property at which the subscriber resided
20.17 at the time the contract between the subscriber and the community solar generating facility
20.18 was executed, or that changes the number of meters attached to the subscriber's account,
20.19 must notify the facility manager within 30 days of the change.

20.20 Subd. 9. **Renewable energy credits.** (a) Notwithstanding any other law, a
20.21 subscriber owns the renewable energy credits associated with the electricity allocated to
20.22 the subscriber's subscription. A utility or facility manager may purchase renewable energy
20.23 credits under a contract with a subscriber.

20.24 (b) Renewable energy credits may not be assigned to a utility as a condition of entering
20.25 into a contract or an interconnection agreement with a community solar generating facility.

20.26 Subd. 10. **Disputes.** The dispute resolution provisions available under section
20.27 216B.164 shall be used to resolve disputes between a facility manager and the utility
20.28 serving the community solar generating facility.

20.29 **Sec. 18. [216B.1653] DISPOSITION OF ELECTRICITY GENERATED.**

20.30 Subdivision 1. **Allocation.** (a) The total amount of electricity available for allocation
20.31 to all subscribers of a community solar generating facility shall be determined by a
20.32 production meter installed by the utility.

20.33 (b) The total amount of electricity available to a subscriber shall be the total amount
20.34 of electricity available for allocation to all subscribers of a community solar generating

21.1 facility prorated by a subscriber's subscription size in relation to the nameplate capacity of
 21.2 the community solar generating facility.

21.3 (c) A subscriber may not resell electricity governed by the subscriber's contract
 21.4 with a community solar generating facility.

21.5 (d) All electricity generated by a community solar generating facility that is not
 21.6 allocated to or consumed by subscribers must be sold to the utility interconnected with
 21.7 the community solar generating facility.

21.8 Subd. 2. **Utility purchases.** The utility to which the community solar generating
 21.9 facility is interconnected shall purchase all electricity generated by the community solar
 21.10 generating facility that is not consumed by subscribers. The price paid to the community
 21.11 solar generating facility by the utility is governed by section 216B.164 or any law that
 21.12 governs the price a utility must pay to purchase electricity from a solar photovoltaic device.

21.13 Subd. 3. **Interconnection.** The commission shall establish uniform fees for the
 21.14 interconnection of a community solar generating facility with a utility.

21.15 Subd. 4. **Nonutility status.** Notwithstanding section 216B.02, a community solar
 21.16 generating facility is not a public utility.

21.17 Sec. 19. **[216B.1654] BILLING.**

21.18 Subdivision 1. **Billing procedure.** A subscriber to a community solar generating
 21.19 facility must be:

21.20 (1) charged by the utility interconnected with the community solar generating
 21.21 facility the utility's applicable rate schedule for sales to that class of customer for all
 21.22 electricity consumed by the subscriber;

21.23 (2) paid by the utility the maximum rate allowable under section 216B.164, or
 21.24 any other law that may govern the price a utility must pay to purchase electricity from
 21.25 a solar photovoltaic device, for a portion of all electricity the utility purchases from
 21.26 the community solar generating facility that is equal to the ratio of the subscriber's
 21.27 subscription to the nameplate capacity of the community solar generating facility;

21.28 (3) provided by the utility with a monthly bill that contains, in addition to the
 21.29 amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized by
 21.30 the owner for that month and on a year-to-date basis; and

21.31 (4) provided by the utility with a meter that allows for the separate calculation of the
 21.32 amount of electricity consumed and generated at the property.

21.33 Subd. 2. **Billing system.** The commission shall, by January 1, 2014, establish a
 21.34 uniform administrative system to credit the utility accounts of subscribers to a community
 21.35 solar generating facility. In determining the uniform administrative system, the

22.1 commission shall solicit comments and recommendations from utilities, ratepayers, and
22.2 other interested parties, and shall review commercially available administrative systems
22.3 and administrative systems used in jurisdictions where entities similar to community
22.4 solar generating facilities are operating.

22.5 Subd. 3. **Commission proceeding; rate adjustment.** By September 1, 2014, the
22.6 commission shall initiate a proceeding to examine whether the rate paid by a utility to
22.7 purchase energy from a community solar generating facility under section 216B.1653,
22.8 subdivision 2, should be adjusted to reflect the actual fixed costs incurred by a utility to
22.9 provide service to a community solar generating facility.

22.10 Sec. 20. Minnesota Statutes 2012, section 216B.1691, subdivision 1, is amended to read:

22.11 Subdivision 1. **Definitions.** (a) Unless otherwise specified in law, "eligible energy
22.12 technology" means an energy technology that generates electricity from the following
22.13 renewable energy sources:

22.14 (1) solar;

22.15 (2) wind;

22.16 (3) hydroelectric with a capacity of less than 100 megawatts;

22.17 (4) hydrogen, provided that after January 1, 2010, the hydrogen must be generated
22.18 from the resources listed in this paragraph; or

22.19 (5) biomass, which includes, without limitation, landfill gas; an anaerobic digester
22.20 system; the predominantly organic components of wastewater effluent, sludge, or related
22.21 by-products from publicly owned treatment works, but not including incineration of
22.22 wastewater sludge to produce electricity; and an energy recovery facility used to capture
22.23 the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal
22.24 solid waste as a primary fuel.

22.25 (b) "Electric utility" means a public utility providing electric service, a generation
22.26 and transmission cooperative electric association, a municipal power agency, or a power
22.27 district.

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

23.1 (d) "Renewable energy credit" means a certificate of proof, issued through the
 23.2 accounting system approved by the commission under subdivision 4, attesting that one
 23.3 unit of electricity was generated and delivered by an eligible energy technology, and
 23.4 including all renewable and environmental attributes associated with the production of
 23.5 electricity from the eligible energy technology.

23.6 Sec. 21. Minnesota Statutes 2012, section 216B.1691, subdivision 2a, is amended to
 23.7 read:

23.8 Subd. 2a. **Eligible energy technology standard.** (a) Except as provided in
 23.9 paragraph (b), each electric utility shall generate or procure sufficient electricity generated
 23.10 by an eligible energy technology to provide its retail customers in Minnesota, or the
 23.11 retail customers of a distribution utility to which the electric utility provides wholesale
 23.12 electric service, so that at least the following standard percentages of the electric utility's
 23.13 total retail electric sales to retail customers in Minnesota are generated by eligible energy
 23.14 technologies by the end of the year indicated:

23.15	(1)	2012	12 percent
23.16	(2)	2016	17 percent
23.17	(3)	2020	20 percent
23.18	(4)	2025	25 percent.

23.19 (b) An electric utility that owned a nuclear generating facility as of January 1, 2007,
 23.20 must meet the requirements of this paragraph rather than paragraph (a). An electric utility
 23.21 subject to this paragraph must generate or procure sufficient electricity generated by
 23.22 an eligible energy technology to provide its retail customers in Minnesota or the retail
 23.23 customer of a distribution utility to which the electric utility provides wholesale electric
 23.24 service so that at least the following percentages of the electric utility's total retail electric
 23.25 sales to retail customers in Minnesota are generated by eligible energy technologies by the
 23.26 end of the year indicated:

23.27	(1)	2010	15 percent
23.28	(2)	2012	18 percent
23.29	(3)	2016	25 percent
23.30	(4)	2020	30 percent.

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

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

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

24.5 Sec. 22. Minnesota Statutes 2012, section 216B.1691, subdivision 2e, is amended to
 24.6 read:

24.7 Subd. 2e. **Rate impact of standard compliance; report.** Each electric utility must
 24.8 submit to the commission and the legislative committees with primary jurisdiction over
 24.9 energy policy a report containing an estimation of the rate impact of activities of the
 24.10 electric utility necessary to comply with this section. In consultation with the Department
 24.11 of Commerce, the commission shall determine a uniform reporting system to ensure that
 24.12 individual utility reports are consistent and comparable, and shall, by order, require each
 24.13 electric utility subject to this section to use that reporting system. The rate impact estimate
 24.14 must be for wholesale rates and, if the electric utility makes retail sales, the estimate
 24.15 shall also be for the impact on the electric utility's retail rates. Those activities include,
 24.16 without limitation, energy purchases, generation facility acquisition and construction, and
 24.17 transmission improvements. An initial report must be submitted within 150 days of May
 24.18 28, 2011. After the initial report, a report must be updated and submitted as part of each
 24.19 integrated resource plan or plan modification filed by the electric utility under section
 24.20 216B.2422. The reporting obligation of an electric utility under this subdivision expires
 24.21 December 31, 2025, for an electric utility subject to subdivision 2a, paragraph (a), and
 24.22 December 31, 2020, for an electric utility subject to subdivision 2a, paragraph (b).

24.23 Sec. 23. Minnesota Statutes 2012, section 216B.1691, is amended by adding a
 24.24 subdivision to read:

24.25 **Subd. 2f. Solar energy standard.** (a) In addition to the requirements of subdivision
 24.26 2a, each public utility shall generate or procure sufficient electricity generated by solar
 24.27 energy to serve its retail electricity customers in Minnesota so that at least the following
 24.28 standard percentages of the utility's total retail electric sales to retail customers in
 24.29 Minnesota are generated by solar energy by the end of the year indicated:

- 24.30 (1) 2016 0.5 percent
- 24.31 (2) 2020 2.0 percent
- 24.32 (3) 2025 4.0 percent

24.33 (b) The solar energy standard established in this subdivision is subject to all the
 24.34 provisions of this section governing a utility's standard obligation under subdivision 2a.

25.1 (c) It is an energy goal of the state of Minnesota that by 2030, ten percent of the
25.2 retail electric sales in Minnesota be generated by solar energy.

25.3 Sec. 24. Minnesota Statutes 2012, section 216B.1692, subdivision 1, is amended to read:

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

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

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

25.12 (3) result in the existing plant either:

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

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

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

25.21 (b) Notwithstanding paragraph (a), a project may be approved for the emission
25.22 reduction rate rider allowed in this section if the project is to be installed on existing
25.23 large electric generating power plants, as defined in section 216B.2421, subdivision 2,
25.24 clause (1), that are located outside the state and are needed to comply with state or federal
25.25 air quality standards, but only if the project has received an advance determination of
25.26 prudence from the commission under section 216B.1695.

25.27 Sec. 25. Minnesota Statutes 2012, section 216B.1692, is amended by adding a
25.28 subdivision to read:

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

25.31 Sec. 26. Minnesota Statutes 2012, section 216B.1692, subdivision 8, is amended to read:

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

26.4 Sec. 27. Minnesota Statutes 2012, section 216B.1695, subdivision 5, is amended to read:

26.5 Subd. 5. **Cost recovery.** The utility may begin recovery of costs that have been
26.6 incurred by the utility in connection with implementation of the project in the next rate
26.7 case following an advance determination of prudence or in a rider approved under section
26.8 216B.1692. The commission shall review the costs incurred by the utility for the project.
26.9 The utility must show that the project costs are reasonable and necessary, and demonstrate
26.10 its efforts to ensure the lowest reasonable project costs. Notwithstanding the commission's
26.11 prior determination of prudence, it may accept, modify, or reject any of the project costs.
26.12 The commission may determine whether to require an allowance for funds used during
26.13 construction offset.

26.14 Sec. 28. Minnesota Statutes 2012, section 216B.1695, is amended by adding a
26.15 subdivision to read:

26.16 Subd. 5a. **Rate of return.** The return on investment in the rider shall be at the level
26.17 approved by the commission in the public utility's most recently completed general rate
26.18 case, unless the commission determines that a different rate of return is in the public interest.

26.19 Sec. 29. Minnesota Statutes 2012, section 216B.23, subdivision 1a, is amended to read:

26.20 Subd. 1a. **Authority to issue refund.** (a) On determining that a public utility has
26.21 charged a rate in violation of this chapter, a commission rule, or a commission order, the
26.22 commission, after conducting a proceeding, may require the public utility to refund to its
26.23 customers, in a manner approved by the commission, any revenues the commission finds
26.24 were collected as a result of the unlawful conduct. Any refund authorized by this section
26.25 is permitted in addition to any remedies authorized by section 216B.16 or any other law
26.26 governing rates. Exercising authority under this section does not preclude the commission
26.27 from pursuing penalties under sections 216B.57 to 216B.61 for the same conduct.

26.28 (b) This section must not be construed as allowing:

26.29 (1) retroactive ratemaking;

26.30 (2) refunds based on claims that prior or current approved rates have been unjust,
26.31 unreasonable, unreasonably preferential, discriminatory, insufficient, inequitable, or
26.32 inconsistent in application to a class of customers; or

27.1 (3) refunds based on claims that approved rates have not encouraged energy
27.2 conservation or renewable energy use, or have not furthered the goals of section 216B.164,
27.3 216B.241, ~~or 216C.05~~, or 216C.412.

27.4 (c) A refund under this subdivision does not apply to revenues collected more than
27.5 six years before the date of the notice of the commission proceeding required under this
27.6 subdivision.

27.7 Sec. 30. Minnesota Statutes 2012, section 216B.241, subdivision 1e, is amended to read:

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

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

27.21 (c) The commissioner, as part of the assessment authorized under paragraph (a),
27.22 shall annually assess \$500,000 per fiscal year for a grant to the partnership created in
27.23 section 216C.385, subdivision 2. The grant must be used to exercise the powers and
27.24 perform the duties specified in section 216C.385, subdivision 3.

27.25 (d) By February 15, 2014, and each February 15 thereafter, the commissioner shall
27.26 report to the chairs and ranking minority members of the committees of the legislature
27.27 with primary jurisdiction over energy policy and energy finance on the assessments made
27.28 under this subdivision for the previous calendar year and the use of the assessment. The
27.29 report must clearly describe the activities supported by the assessment and the parties
27.30 that engaged in those activities.

27.31 Sec. 31. Minnesota Statutes 2012, section 216B.241, subdivision 5c, is amended to read:

27.32 Subd. 5c. **Large solar electric generating plant.** (a) For the purpose of this
27.33 subdivision:

28.1 (1) "project" means a solar electric generation project consisting of arrays of solar
28.2 photovoltaic cells with a capacity of up to two megawatts located on the site of a closed
28.3 landfill in Olmsted County owned by the Minnesota Pollution Control Agency; and

28.4 (2) "cooperative electric association" means a generation and transmission
28.5 cooperative electric association that has a member distribution cooperative association to
28.6 which it provides wholesale electric service in whose service territory a project is located.

28.7 (b) A cooperative electric association may elect to count all of its purchases of
28.8 electric energy from a project toward only one of the following:

28.9 (1) its energy-savings goal under subdivision 1c; or

28.10 (2) its ~~energy objective~~ or solar energy standard under section 216B.1691,
28.11 subdivision 2f.

28.12 (c) A cooperative electric association may include in its conservation plan purchases
28.13 of electric energy from a project. The cost-effectiveness of project purchases may be
28.14 determined by a different standard than for other energy conservation improvements
28.15 under this section if the commissioner determines that doing so is in the public interest
28.16 in order to encourage solar energy. The kilowatt hours of solar energy purchased by a
28.17 cooperative electric association from a project may count for up to 33 percent of its one
28.18 percent savings goal under subdivision 1c or up to 22 percent of its 1.5 percent savings
28.19 goal under that subdivision. Expenditures made by a cooperative association for the
28.20 purchase of energy from a project may not be used to meet the revenue expenditure
28.21 requirements of subdivisions 1a and 1b.

28.22 Sec. 32. Minnesota Statutes 2012, section 216B.2411, subdivision 3, is amended to read:

28.23 Subd. 3. **Other provisions.** (a) Electricity generated by a facility constructed with
28.24 funds provided under this section and using an eligible renewable energy source may be
28.25 counted toward the renewable energy objectives in section 216B.1691, subject to the
28.26 provisions of that section, except as provided in paragraph (c).

28.27 (b) Two or more entities may pool resources under this section to provide assistance
28.28 jointly to proposed eligible renewable energy projects. The entities shall negotiate and
28.29 agree among themselves for allocation of benefits associated with a project, such as the
28.30 ability to count energy generated by a project toward a utility's renewable energy objectives
28.31 under section 216B.1691, except as provided in paragraph (c). The entities shall provide a
28.32 summary of the allocation of benefits to the commissioner. A utility may spend funds under
28.33 this section for projects in Minnesota that are outside the service territory of the utility.

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

29.4 Sec. 33. Minnesota Statutes 2012, section 216B.40, is amended to read:

29.5 **216B.40 EXCLUSIVE SERVICE RIGHT; SERVICE EXTENSION.**

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

29.14 Sec. 34. **[216C.412] SOLAR ENERGY PRODUCTION INCENTIVE.**

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

29.17 Subd. 2. **Incentive payment.** (a) Incentive payments may be made under this
 29.18 section only to an owner of a solar photovoltaic device who has:

29.19 (1) submitted to the public utility to which the solar photovoltaic device is
 29.20 interconnected, on a form prescribed by the public utility, an application to receive the
 29.21 incentive; and

29.22 (2) received from the public utility in writing a determination that the solar
 29.23 photovoltaic device qualifies for the incentive.

29.24 (b) A public utility shall make incentive payments under this section on a first-come,
 29.25 first-served basis. A public utility is not required to make aggregate incentive payments
 29.26 under this section in any one calendar year that exceed 1.33 percent of the public utility's
 29.27 gross operating revenues from retail sales of electric service provided to Minnesota
 29.28 customers during the previous calendar year.

29.29 (c) A public utility that owns a solar photovoltaic device is not eligible to receive
 29.30 incentive payments under this section.

29.31 (d) A solar photovoltaic device whose capacity exceeds two megawatts is ineligible
 29.32 to receive incentive payments under this section.

30.1 Subd. 3. **Eligibility window; payment duration.** (a) Payments may be made under
 30.2 this section only for electricity generated from a solar photovoltaic device that first begins
 30.3 generating electricity after January 1, 2014, through December 31, 2049.

30.4 (b) Payment of the incentive begins and runs consecutively from the date the solar
 30.5 photovoltaic device begins generating electricity.

30.6 (c) A public utility paying an incentive under this section must enter into a contract
 30.7 with an owner of a solar photovoltaic system under which the public utility agrees to make
 30.8 incentive payments for a period of 20 years.

30.9 (d) No payment may be made under this section for electricity generated after
 30.10 December 31, 2049.

30.11 Subd. 4. **Amount of payment.** (a) An incentive payment is based on the number of
 30.12 kilowatt hours of electricity generated. The per-kilowatt-hour amount of the payment for
 30.13 each category of qualified solar photovoltaic device listed below is equal to the applicable
 30.14 reference price specified in this subdivision minus:

30.15 (1) the value of solar rate approved by the commissioner under section 216B.1641,
 30.16 for owners of solar photovoltaic devices that have elected to have the public utility's
 30.17 purchase price for electricity governed by that section; or

30.18 (2) the rate a public utility pays an owner of a solar photovoltaic device for excess
 30.19 electricity generation under section 216B.164, for owners of solar photovoltaic devices
 30.20 that have elected to have the public utility's purchase price for electricity governed by
 30.21 that section.

<u>Nameplate Capacity</u>	<u>Reference Price</u>
<u>Residential</u>	<u>20.4 cents per kilowatt-hour</u>
<u>Nonresidential:</u>	
<u>Under 25 kilowatts</u>	<u>18.1 cents per kilowatt-hour</u>
<u>Rooftop, 25 kilowatts to 2</u> <u>megawatts</u>	<u>15.9 cents per kilowatt-hour</u>
<u>Ground-mounted, 25 kilowatts to</u> <u>2 megawatts</u>	<u>13.6 cents per kilowatt-hour</u>

30.30 (b) By January 1, 2015, and every January 1 thereafter through 2049, the
 30.31 commissioner shall make a determination as to whether the reference price needs to be
 30.32 adjusted in order to achieve the solar energy standard established in section 216B.1691,
 30.33 subdivision 2f, at the lowest level of incentive payments. In making the determination,
 30.34 the commissioner shall solicit comments and recommendations from public utilities,
 30.35 ratepayers, and other interested parties regarding the calculation of the reference price.
 30.36 After considering the comments and recommendations, the commissioner may adjust
 30.37 the reference price.

31.1 (c) For the purposes of this subdivision, "reference price" means the lowest
31.2 per-kilowatt price for electricity generated by a qualified solar photovoltaic system the
31.3 commissioner determines is sufficient to provide an economic incentive that will result
31.4 in the development of aggregate capacity in this state to meet the solar energy standard
31.5 established in section 216B.1691, subdivision 2f.

31.6 Subd. 5. **Dispute resolution.** Disputes between an owner of a solar photovoltaic
31.7 device and a public utility paying an incentive under this section shall be resolved by
31.8 the commissioner of commerce.

31.9 **Sec. 35. [216C.413] DEFINITIONS.**

31.10 For the purposes of sections 216C.412 to 216C.417, the following terms have the
31.11 meanings given.

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

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

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

31.21 (3) that are manufactured in Minnesota:

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

31.23 or

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

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

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

31.33 **Sec. 36. [216C.414] "MADE IN MINNESOTA" PRODUCTION INCENTIVE**
31.34 **ACCOUNT.**

32.1 Subdivision 1. **Account establishment; management.** A "Made in Minnesota"
 32.2 production incentive account is established as a separate account in the special revenue
 32.3 fund in the state treasury. The commissioner shall credit to the account the amounts
 32.4 collected under this section and appropriations and transfers to the account. Earnings, such
 32.5 as interest, dividends, and any other earnings arising from account assets, must be credited
 32.6 to the account. Funds remaining in the account at the end of a fiscal year are not canceled
 32.7 to the general fund but remain in the account. The commissioner shall manage the account.

32.8 Subd. 2. **Purpose.** The purpose of the account is to pay the "Made in Minnesota"
 32.9 production incentive to owners of qualified solar photovoltaic devices, including related
 32.10 administrative costs, under section 216C.417.

32.11 Subd. 3. **Transfer.** The public utility that contributes to the account established
 32.12 under section 116C.779 shall transfer from that account up to \$5,000,000 annually to
 32.13 the commissioner of commerce for deposit in the account established in subdivision 1
 32.14 for the purpose of paying the "Made in Minnesota" production incentive to owners of
 32.15 solar photovoltaic devices that qualify under section 216C.417. The commissioner of
 32.16 commerce shall request funds to be transferred by the public utility only to the extent
 32.17 necessary to fully fund the annual aggregate "Made in Minnesota" incentives paid to
 32.18 owners of solar photovoltaic devices.

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

32.23 Sec. 37. **[216C.415] "MADE IN MINNESOTA" SOLAR ENERGY**
 32.24 **PRODUCTION INCENTIVE; QUALIFICATION.**

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

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

32.31 (2) documentation that the solar photovoltaic module meets all the required
 32.32 applicable parts of the "Made in Minnesota" definition in section 216C.413, including
 32.33 evidence of the UL 1703 right to mark for all solar photovoltaic modules seeking to
 32.34 qualify as "Made in Minnesota";

33.1 (3) any additional nonproprietary information requested by the commissioner
 33.2 of commerce; and

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

33.6 Subd. 2. **Certification.** If the commissioner determines that a manufacturer's solar
 33.7 photovoltaic module meets the definition of "Made in Minnesota" in section 216C.413, the
 33.8 commissioner shall issue the manufacturer a "Made in Minnesota" certificate containing
 33.9 the name and model numbers of the certified solar photovoltaic modules and the date of
 33.10 certification. The commissioner must issue or deny the issuance of a certificate within 90
 33.11 days of receipt of a completed application. A copy of the certificate must be provided to
 33.12 each purchaser of the solar photovoltaic module.

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

33.17 Sec. 38. **[216C.416] "MADE IN MINNESOTA" SOLAR ENERGY**
 33.18 **PRODUCTION INCENTIVE.**

33.19 Subdivision 1. **Setting incentive.** Within 90 days of a module being certified as
 33.20 "Made in Minnesota," the commissioner of commerce shall set a solar energy production
 33.21 incentive amount for that solar photovoltaic module for the purpose of the incentive
 33.22 payment under section 216C.417. The incentive is a performance-based financial
 33.23 incentive expressed as a per kilowatt-hour amount. The amount shall be used for incentive
 33.24 applications approved in the year to which the incentive amount is applicable for the
 33.25 ten-year duration of the incentive payments. An incentive amount must be calculated for
 33.26 each module for each calendar year, through 2023.

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

33.31 (1) an estimate of the installed cost per kilowatt-direct current, based on the cost data
 33.32 supplied by the manufacturer in the application submitted under section 216C.415, and an
 33.33 estimate of the average installation cost based on a representative sample of Minnesota
 33.34 solar photovoltaic installed projects;

33.35 (2) the average insolation rate in Minnesota;

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

34.3 (4) the rate paid by utilities to owners of solar photovoltaic modules under section
 34.4 216B.164 or other law;

34.5 (5) applicable federal tax incentives for installing solar photovoltaic modules; and

34.6 (6) the estimated levelized cost per kilowatt-hour generated.

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

34.15 Subd. 3. **Metering of production.** A utility or association must, at the expense of a
 34.16 customer, provide a meter to measure the production of a solar photovoltaic module
 34.17 system that is approved to receive incentive payments. The utility or association must
 34.18 furnish the commissioner with information sufficient for the commissioner to determine
 34.19 the incentive payment. The information must be provided on a calendar year basis by no
 34.20 later than March 1. The commissioner shall provide an association or utility with forms to
 34.21 use to provide the production information. A customer must attest to the accuracy of the
 34.22 production information.

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

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

34.28 Sec. 39. **[216C.417] "MADE IN MINNESOTA" SOLAR ENERGY**
 34.29 **PRODUCTION INCENTIVE; PAYMENT.**

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

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

35.1 (2) has received a "Made in Minnesota" certificate under section 216C.415 for
35.2 the module; and

35.3 (3) has installed on residential or commercial property solar photovoltaic modules
35.4 that are generating electricity and has received a "Made in Minnesota" certificate under
35.5 section 216C.415.

35.6 Subd. 2. **Application process.** Applications for an incentive payment must be
35.7 received by the commissioner between January 1 and February 28. The commissioner
35.8 shall by a random method approve the number of applications the commissioner
35.9 reasonably determines will exhaust the funds available for payment for the ten-year period
35.10 of incentive payments. Applications for residential and commercial installations shall be
35.11 separately randomly approved. The random method adopted by the commissioner must
35.12 allow for the commissioner to achieve statewide geographic distribution of the kilowatt
35.13 hours of payment if there are sufficient applications to achieve that distribution.

35.14 Subd. 3. **Commissioner approval of incentive application.** The commissioner
35.15 must approve an application for an incentive for an owner to be eligible for incentive
35.16 payments. The commissioner must not approve an application in a calendar year if the
35.17 commissioner determines there will not be sufficient funding available to pay an incentive
35.18 to the applicant for any portion of the ten-year duration of payment. The commissioner
35.19 shall annually establish a cap on the cumulative capacity for a program year based on
35.20 funds available and historic average installation costs. Receipt of an incentive is not
35.21 an entitlement and payment need only be made from available funds in the "Made in
35.22 Minnesota" solar production incentive account.

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

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

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

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

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

35.35 Subd. 5. **Allocation of payments.** (a) If there are sufficient applications,
35.36 approximately 50 percent of the incentive payment shall be for owners of eligible solar

36.1 photovoltaic modules installed on residential property, and approximately 50 percent shall
 36.2 be for owners of eligible solar photovoltaic modules installed on commercial property.

36.3 (b) The commissioner shall endeavor to geographically distribute incentives paid
 36.4 under this section to owners of solar photovoltaic modules installed throughout the state.

36.5 (c) For purposes of this subdivision:

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

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

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

36.17 Sec. 40. Minnesota Statutes 2012, section 216C.436, subdivision 7, is amended to read:

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

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

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

36.24 If the implementing entity is an authority, the local government that authorized
 36.25 the authority to act as implementing entity shall impose and collect special assessments
 36.26 necessary to pay debt service on bonds issued by the implementing entity under subdivision
 36.27 8, and shall transfer all collections of the assessments upon receipt to the authority.

36.28 Sec. 41. Minnesota Statutes 2012, section 216C.436, subdivision 8, is amended to read:

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

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

37.1 (c) No holder of bonds issued under this subdivision may compel any exercise of the
37.2 taxing power of the implementing entity that issued the bonds to pay principal or interest
37.3 on the bonds, and if the implementing entity is an authority, no holder of the bonds may
37.4 compel any exercise of the taxing power of the local government. Bonds issued under
37.5 this subdivision are not a debt or obligation of the issuer or any local government that
37.6 issued them, nor is the payment of the bonds enforceable out of any money other than the
37.7 revenue pledged to the payment of the bonds.

37.8 Sec. 42. Laws 2005, chapter 97, article 10, section 3, is amended to read:

37.9 Sec. 3. **SUNSET.**

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

37.11 Sec. 43. **STUDY OF POTENTIAL FOR SOLAR ENERGY INSTALLATIONS**
37.12 **ON PUBLIC BUILDINGS.**

37.13 (a) The commissioner of commerce shall contract with an independent consultant
37.14 selected through a request for proposal process to produce a report analyzing the potential
37.15 for electricity generation resulting from the installation of solar photovoltaic devices on
37.16 and adjacent to public buildings in this state. The study must:

37.17 (1) determine, for buildings identified under the process initiated in Laws 2001,
37.18 chapter 212, article 1, section 3, commonly referred to as the B3 program, the amount
37.19 of space available for the installation of solar photovoltaic devices and the maximum
37.20 solar electricity generation potential; and

37.21 (2) utilize existing data on energy efficiency potential developed under the B3
37.22 program and determine how investments in energy efficiency for these buildings could
37.23 be combined with solar photovoltaic systems to enhance a building's overall energy
37.24 efficiency. The analysis must include a schedule for installing solar photovoltaic systems
37.25 on public buildings at a rate of four percent of available space per year and must prioritize
37.26 installations that result in the largest benefits with the shortest payback periods.

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

37.30 (c) The commissioner of commerce shall assess an amount necessary under
37.31 Minnesota Statutes, section 216B.241, subdivision 1e, in addition to the assessment
37.32 already authorized under that subdivision, for the purpose of completing the study
37.33 described in this section.

38.1 Sec. 44. **TRANSMISSION FOR FUTURE RENEWABLE ENERGY STANDARD.**

38.2 (a) The commission shall order all Minnesota electric utilities, as defined in
38.3 Minnesota Statutes, section 216B.1691, subdivision 1, paragraph (b), and all transmission
38.4 companies, as defined in Minnesota Statutes, section 216B.02, to study and develop plans
38.5 for the transmission network enhancements necessary to support increasing the renewable
38.6 energy standard established in Minnesota Statutes, section 216B.1691, subdivision 2a, to
38.7 40 percent by 2030, while maintaining system reliability.

38.8 (b) The Minnesota electric utilities and transmission companies must complete the
38.9 study work under the direction of the commissioner of commerce. Prior to the start of the
38.10 study, the commissioner shall appoint a technical review committee consisting of up to
38.11 15 individuals with experience and expertise in electric transmission system engineering,
38.12 electric power systems operations, and renewable energy generation technology to review
38.13 the study's proposed methods and assumptions, ongoing work, and preliminary results.

38.14 (c) As part of the planning process, the Minnesota electric utilities and transmission
38.15 companies must incorporate and build upon the analyses that have previously been done
38.16 or that are in progress including but not limited to the 2006 Minnesota Wind Integration
38.17 Study and ongoing work to address geographically dispersed development plans, the
38.18 2007 Minnesota Transmission for Renewable Energy Standard Study, the 2008 and
38.19 2009 Statewide Studies of Dispersed Renewable Generation, the 2009 Minnesota RES
38.20 Update, Corridor, and Capacity Validation Studies, the 2010 Regional Generation Outlet
38.21 Study, the 2011 Multi Value Project Portfolio Study, and recent and ongoing Midwest
38.22 Independent Transmission System Operator transmission expansion planning work. The
38.23 utilities and transmission companies shall collaborate with the Midwest Independent
38.24 Transmission System Operator to optimize and integrate, to the extent possible,
38.25 Minnesota's transmission plans with other regional considerations and to encourage the
38.26 Midwest Independent Transmission System Operator to incorporate Minnesota's planning
38.27 work into its transmission expansion future planning.

38.28 (d) The study must be completed and submitted to the Minnesota Public Utilities
38.29 Commission by December 1, 2013. The report shall include a description of the analyses
38.30 that have been conducted and the results, including:

38.31 (1) a conceptual plan for transmission necessary for generation interconnection and
38.32 delivery and for access to regional geographic diversity and regional supply and demand
38.33 side flexibility; and

38.34 (2) identification and development of potential solutions to any critical issues
38.35 encountered to support increasing the renewable energy standard to 40 percent by 2030

39.1 while maintaining system reliability, as well as potential impacts and barriers of increasing
39.2 the renewable energy standard to 45 percent and 50 percent.

39.3 **Sec. 45. SOLAR INTERCONNECTION STUDY.**

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

39.14 **Sec. 46. VALUE OF ON-SITE ENERGY STORAGE STUDY.**

39.15 (a) The commissioner of commerce shall contract with an independent consultant
39.16 selected through a request for proposal process to produce a report analyzing the potential
39.17 costs and benefits of installing utility-managed, grid-connected energy storage devices in
39.18 residential and commercial buildings in this state. The study must:

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

39.22 (2) examine the interaction of energy storage devices with on-site solar photovoltaic
39.23 devices; and

39.24 (3) analyze existing barriers to the installation of on-site energy storage devices by
39.25 utilities, and examine strategies and design potential economic incentives to overcome
39.26 those barriers.

39.27 (b) The commissioner of commerce shall assess an amount necessary under
39.28 Minnesota Statutes, section 216B.241, subdivision 1e, in addition to the assessment
39.29 already authorized under that subdivision, for the purpose of completing the study
39.30 described in this section.

39.31 (c) By January 1, 2014, the commissioner of commerce shall submit the study to
39.32 the chairs and ranking minority members of the legislative committees with jurisdiction
39.33 over energy policy and finance.

40.1 Sec. 47. **VALUE OF SOLAR THERMAL STUDY.**

40.2 (a) The commissioner of commerce shall contract with an independent consultant
40.3 selected through a request for proposal process to produce a report analyzing the potential
40.4 costs and benefits of expanding the installation of solar thermal projects, as defined in
40.5 Minnesota Statutes, section 216B.2411, subdivision 2, in residential and commercial
40.6 buildings in this state. The study must examine the potential for solar thermal projects
40.7 to reduce heating and cooling costs for individual customers and to reduce costs at the
40.8 utility level as well. The study must also analyze existing barriers to the installation of
40.9 on-site energy storage devices by utilities and examine strategies and design potential
40.10 economic incentives to overcome those barriers. By January 1, 2014, the commissioner
40.11 of commerce shall submit the study to the chairs and ranking minority members of the
40.12 legislative committees with jurisdiction over energy policy and finance.

40.13 (b) The commissioner of commerce shall assess an amount necessary under
40.14 Minnesota Statutes, section 216B.241, subdivision 1e, in addition to the assessment
40.15 already authorized under that subdivision, for the purpose of completing the study
40.16 described in this section.

40.17 Sec. 48. **SEVERABILITY.**

40.18 If any provision of this act is found to be unconstitutional and void, the remaining
40.19 provisions of this act are valid.

40.20 Sec. 49. **APPROPRIATIONS.**

40.21 (a) \$212,000 in fiscal year 2014 and \$100,000 in fiscal year 2015 are appropriated
40.22 from the general fund to the commissioner of commerce for the purpose of carrying out
40.23 the activities required in this act. It is assumed that an amount equal to this appropriation
40.24 will be assessed by the commissioner of commerce under Minnesota Statutes, section
40.25 216B.62, and deposited in the general fund. The base for this appropriation is \$80,000 in
40.26 fiscal year 2016 and \$82,000 in fiscal year 2017.

40.27 (b) \$436,000 in fiscal year 2014 and \$226,000 in fiscal year 2015 are appropriated
40.28 from the general fund from the assessments on utilities to the Public Utilities Commission
40.29 for the purpose of carrying out the activities required in this act. It is assumed that
40.30 an amount equal to this appropriation will be assessed by the commission under
40.31 Minnesota Statutes, section 216B.62, and deposited in the general fund. The base for this
40.32 appropriation is \$51,000 in fiscal year 2016 and \$28,000 in fiscal year 2017.

40.33 Sec. 50. **REPEALER.**

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

41.2 Sec. 51. **EFFECTIVE DATE.**

41.3 Sections 1 to 50 are effective the day following final enactment.

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

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