116C.7792 SOLAR ENERGY INCENTIVE PROGRAM.

(a)The utility subject to section 116C.779 shall operate a program to provide solar energy production incentives for solar energy systems of no more than a total nameplate capacity of 20 kilowatts direct current. The program shall be operated for eight consecutive calendar years commencing in 2014. $5,000,000 shall be allocated in each of the first four years, $15,000,000 in the fifth year, $10,000,000 in each of the sixth and seventh years, and $5,000,000 in the eighth year from funds withheld from transfer to the renewable development account under section 116C.779, subdivision 1, paragraphs (b) and (e), and placed in a separate account for the purpose of the solar production incentive program. The solar system must be sized to less than 120 percent of the customer's on-site annual energy consumption when combined with other distributed generation resources and subscriptions provided under section 216B.1641 associated with the premise. The production incentive must be paid for ten years commencing with the commissioning of the system. The utility must file a plan to operate the program with the commissioner of commerce. The utility may not operate the program until it is approved by the commissioner. Any plan approved by the commissioner of commerce must:

(1) not provide an increased incentive scale over prior years unless the commissioner demonstrates that changes in the market for solar energy facilities requires an increase;

(2) be consistent with the public interest;

(3) include Renewable Energy Credit assignment to the utility for the life of the project.

(b) If in any year of this program there are insufficient qualified owners who have applied for and met the requirements of the program, or if payments under the program are less than the projected payments for projects, any resulting balance of the annual allocation at the end of each year shall not be collected from the customers of the utility or, if they have already been collected, shall be returned to the customers. Any balance from annual allocations prior to the adoption of this section will not be collected from customers.

Comment [JFF1]: *John Farrell:* 120% limit applies to on-site and community subscriptions, which makes no sense at all when we're using the value of solar to price grid exported energy. 120% shouldn't apply to any electricity priced at the value of solar because that IS by definition a fair price.

Comment [JFF2]: *John Farrell:* Utility gets the credit if the customer gets an incentive, switching 30 years of legal understanding that customers own the credit

216B.164 COGENERATION AND SMALL POWER PRODUCTION.

Subd. 10.**Alternative tariff; compensation for resource value.**

(a) A public utility may apply for commission approval for an alternative tariff that compensates customers through a bill credit mechanism for the value to the utility, its customers, and society for operating distributed solar photovoltaic resources interconnected to the utility system and operated by customers primarily for meeting their own energy needs.

(b) If approved, the alternative tariff shall apply to customers' interconnections occurring after the date of approval. The alternative tariff is in lieu of the applicable rate under subdivisions 3 and 3a.

(c) The commission shall after notice and opportunity for public comment approve the alternative tariff provided the utility has demonstrated the alternative tariff:

(1) appropriately applies the methodology established by the department and approved by the commission under this subdivision;

(2) includes a mechanism to allow recovery of the cost to serve customers receiving the alternative tariff rate;

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

(4) credits the customer for all electricity generated by the solar photovoltaic device at the distributed solar value rate established under this subdivision;

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

(6) complies with the size limits specified in subdivision 3a;

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

(8) complies with the standby charge requirements in subdivision 3a, paragraph (b).

(d) The commission shall not require the utilty to add any amount, including but not limited to incentives, subsidies, and adders to the alternative tariff calculated under the methodology established under paragraph (f).

Comment [JFF3]: *John Farrell:* No residential adder for community solar to make it easier to get residential customers or low-income folks

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

(ef) The department must establish the distributed solar value methodology in paragraph (c), clause (1), no later than January 31, 2014. The department must submit the methodology to the commission for approval. The commission must approve, modify with the consent of the department, or disapprove the methodology within 60 days of its submission. When developing the distributed solar value methodology, the department shall consult stakeholders with experience and expertise in power systems, solar energy, and electric utility ratemaking regarding the proposed methodology, underlying assumptions, and preliminary data.

(~~f~~g) The distributed solar value methodology established by the department must, at a minimum, account for the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value. The department may, based on known and measurable evidence of the cost or benefit of solar operation to the utility, incorporate other values into the methodology, including credit for locally

manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, ~~or other factors~~.

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

(~~h~~i) The utility shall recalculate the alternative tariff on an annual cycle, and shall file the recalculated alternative tariff with the commission for approval.

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

~~(j) The commission may not authorize a utility to charge an alternative tariff rate that is lower than the utility's applicable retail rate until three years after the commission approves an alternative tariff for the utility.~~

(k) A utility must enter into a contract with an owner of a solar photovoltaic device receiving an alternative tariff rate under this section that has a term of at least 20 years, unless a shorter term is agreed to by the parties.

(l) An owner of a solar photovoltaic device receiving an alternative tariff rate under this section must be paid the same rate per kilowatt-hour generated each year for the term of the contract.

216B.1691 RENEWABLE ENERGY OBJECTIVES.

Subd. 2f.**Solar energy standard.**

(a) In addition to the requirements of subdivisions 2a and 2b, each public utility shall generate or procure sufficient electricity generated by solar energy to serve its retail electricity customers in Minnesota so that by the end of 2020, at least 1.5 percent of the utility's total retail electric sales to retail customers in Minnesota is generated by solar energy.

(b) For a public utility with more than 200,000 retail electric customers, at least ten percent of the 1.5 percent goal must be met by solar energy generated by or procured from solar photovoltaic devices with a nameplate capacity of ~~20~~ 40 kilowatts or less. Any generation for which a subscriber of a community solar garden receives a credit on their bill under section 216B.1641 shall count toward the requirement of this section, provided that the subscriber's share of the community solar garden is 40 kw or less. If a subscriber has shared in more than one community solar garden, each subscription shall be treated separately for the purposes of this paragraph.

216B.1641 COMMUNITY SOLAR GARDEN.

Comment [JFF4]: *John Farrell:* No more leeway for the Public Utilities Commission on value of solar factors, even if they make economic sense

Comment [JFF5]: *John Farrell:* Community solar would count toward the state's small solar carve out intended to diversify the size and scale of individual solar projects

(a) The public utility subject to section 116C.779 shall file by September 30, 2013, a plan with the commission to operate a community solar garden program which shall begin operations within 90 days after commission approval of the plan. Other public utilities may file an application at their election. The community solar garden program must be designed to offset the energy use of not less than five subscribers in each community solar garden facility of which no single subscriber has more than a 40 percent interest. The owner of the community solar garden may be a public utility or any other entity or organization that contracts to sell the output from the community solar garden to the utility under section 216B.164. There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations.

(b) A solar garden is a facility that generates electricity by means of a ground-mounted or roof-mounted solar photovoltaic device whereby subscribers receive a bill credit for the electricity generated in proportion to the size of their subscription. The solar garden must have a nameplate capacity of no more than one megawatt. For the purpose of determining the size of a solar garden, two or more solar gardens shall be combined and counted as a single solar garden if they are on the same or adjacent property, regardless of ownership, and where any such solar garden is constructed after July 2019. Each subscription shall be sized to represent at least 200 watts of the community solar garden's generating capacity and to supply, when combined with other distributed generation resources serving the premises, no more than 120 percent of the average annual consumption of electricity by each subscriber at the premises to which the subscription is attributed.

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

(d) The public utility must purchase from the community solar garden all energy generated by the solar garden. The purchase shall be at the rate calculated under section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate. A solar garden is eligible for any incentive programs offered under either section 116C.7792 or section 216C.415. A subscriber's portion of the purchase shall be provided by a credit on the subscriber's bill.

(e) The commission may approve, disapprove, or modify a community solar garden program. Any plan approved by the commission must:

(1) ~~reasonably~~ allow for the creation~~, financing~~, and accessibility of community solar gardens at a reasonable cost to customers of the utility;

(2) establish uniform standards, fees, and processes for the interconnection of community solar garden facilities that allow the utility to recover reasonable interconnection costs for each community solar garden;

(3) not apply different requirements to utility and nonutility community solar garden facilities;

Comment [JFF6]: *John Farrell:* This is particularly pernicious, preventing developers from aggregating projects to reduce the impact of interconnection fees and instead making them apply separately for each project.

Comment [JFF7]: *John Farrell:* A shot at non-utility ownership, because Xcel doesn't have to be concerned with financing of utility-owned projects

Comment [JFF8]: *John Farrell:* Backdoor way to limit CSG program capacity, as this replaces "reasonably" with "reasonable cost," Xcel's entire argument against community solar (see every Xcel filing in docket 13-867)

(4) be consistent with the public interest;

(5) identify the information that must be provided to potential subscribers to ensure fair disclosure of future costs and benefits of subscriptions;

(6) include a program implementation schedule;

(7) identify all proposed rules, fees, and charges; and

(8) identify the means by which the program will be promoted.

(f) Notwithstanding any other law, neither the manager of nor the subscribers to a community solar garden facility shall be considered a utility solely as a result of their participation in the community solar garden facility.

(g) Within 180 days of commission approval of a plan under this section, a utility shall begin crediting subscriber accounts for each community solar garden facility in its service territory, and shall file with the commissioner of commerce a description of its crediting system.

(h) For the purposes of this section, the following terms have the meanings given:

(1) "subscriber" means a retail customer of a utility who owns one or more subscriptions of a community solar garden facility interconnected with that utility; and

(2) "subscription" means a contract between a subscriber and the owner of a solar garden.