Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: April 9, 2015 ..... ** Agenda Item **#5**

Company: Xcel Energy (Xcel or the Company)

Docket No. **E-002/M-14-1057**

In the Matter of a Petition by Xcel Energy for Approval of an Amendment to an Electric Service Agreement with Terning Seeds

Issues: Should the Commission approve the Electric Service Agreement (ESA) between Xcel and Terning Seeds?

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Relevant Documents

Xcel petition ..... December 22, 2014
DOC comments ..... February 27, 2015
Xcel comments ..... February 27, 2015
Xcel reply comments ..... March 9, 2015
Xcel ESA Amendment No. 2 ..... March 13, 2015

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Statement of the issue

Should the Commission approve the Electric Service Agreement (ESA) between Xcel and Terning Seeds?

Background

On December 22, 2014, Xcel filed its ESA and Amendment No. 1 with Terning Seeds for 96 kW (AC) of solar generation. The ESA is intended to allow Terning Seeds to use a new statutory provision that expands net metering up to 1,000 kW for qualifying facilities. While the statute allows the expansion, there are not rules or tariffs in place under which customers can take the service.

In its Notice of Comment Period, the Commission expanded the service list for this docket, provided an extension of the comment period, and broadened the issues.[1] Specifically, the Commission sought additional comments on whether its decision in the Terning Seeds ESA docket might or might not be applied to other customers seeking to expand net metering under the same statutory provision prior to the establishment of rules and tariffs.

On February 27, 2015, the Department of Commerce (DOC) filed comments recommending: (1) approval of the ESA with certain modifications, and (2) the use of the Terning Seeds ESA as a template for future agreements between Xcel and its customers, pending the outcome of rulemaking and the establishment of tariffs.

On February 27, 2015, Xcel filed comments agreeing that the Terning Seeds ESA could be applied to other similarly situated customers and used as a template until rulemaking is completed and a final tariff is approved.

On March 9, 2015, Xcel filed reply comments in response to the DOC. On March 13, 2015, Xcel filed comments and Amendment No. 2.

Introduction

Minn. Stat. §216B.164 was amended in 2013 to allow the use of net metering by facilities up to 1,000 kW if connected to a public utility. While the statue provides for expanded net metering, Xcel does not have an approved tariff providing the details and support to offer net metering for solar PV systems at or above 40 kW.[2]

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[1] See the notice issued in the current docket, on January 27, 2015.

[2] As background, Xcel filed a proposed tariff and net metering contract on July 31, 2013, incorporating the provisions in the new statute. However, because the Company included provisions unrelated to the legislation (such as REC ownership) that a number of commenters objected to the proposed tariff and contract were not approved as a whole by the Commission (see Order issued January 27, 2014, in Docket

There is rulemaking underway to incorporate the statutory changes, including changes to the Uniform Statewide Contract. The Commission approved the draft proposed rules on December 29, 2014.[3] However, Xcel's has customers, such as Terning Seeds, who would like to apply the statute and implement net metering projects above 40 kW now.

There are three issues for the Commission to consider:

1. Whether to approve the ESA as proposed or to further amend it.

2. Whether to require compensation to be paid to the customer as of the date of interconnection.

3. Whether to encourage other utilities to use the ESA with Terning Seeds as a template prior to completion of the cogeneration and small power production rules and Uniform Statewide Contract.

Positions of the Parties

Xcel Energy (Xcel) initial petition

In order to provide service under the expanded net metering provision in the new statute, Xcel worked with Terning Seeds to draft a custom contract. It used two documents as guidance: (1) the existing tariffed ESA found in Section 7 of Xcel's tariffs, and (2) the draft language for a Uniform Statewide Contract currently included in the proposed rules.[4]

At the time the petition was filed, the customer wanted to connect the PV system to the Company's network before the end of 2014 so that he could receive tax credits for the 2014 tax year. At the same time, the Section 10 interconnection agreement was signed and the Company was working with the customer to install the meter and connect the system in 2014.[5]

Xcel indicated that even though connected, the customer will not receive compensation from the Company for energy exported until the amended ESA is approved by the Commission. In

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No. E-002/M-13-642). On April 10, 2014, the Commission issued a second Order in the 13-642 docket clarifying that since Xcel's tariff as a whole was not approved, the Commission was not taking any other action on the proposed tariff and net metering contract at that time.

[3] STATEMENT OF NEED AND REASONABLENESS, *In the Matter of Possible Amendments to Rules Governing Cogeneration and Small Power Production*, Minnesota Rules, Chapter 7835, in Docket No. E-999/R-13-729, issued December 29, 2014.

[4] The proposed ESA for Terning Seeds is in the Company's initial filing, Attachment A. The draft version of the proposed rules, including the Uniform Statewide Contract, is included as Attachment B to the Company's initial filing.

[5] The production meter was installed on December 23, 2014 and the customer began exporting energy.

comments filed on March 13, 2015, Xcel indicated that the ESA, specifically Amendment No. 2, would become effective as soon as it is approved by the Commission and the parties have signed it or on some other date determined by the Commission. Unless the Commission directs otherwise, Terning Seeds will receive compensation for energy exported to the Company as set forth in the amended ESA, beginning with the effective date of the ESA.

In response to the Commission's notice, the Company also indicated that the proposed ESA could reasonably be applied to other similarly situated customers. It did not oppose treating the ESA as the basis for a template until a final tariff is approved. It indicated that creating a template could aid in setting expectations for customers who seek a net metering arrangement for distributed generation on a premise with a single system 40 kW or larger, but less than 1 MW, in the interim period prior to the resolution of the Commission's rulemaking and approval of the Company's tariff in compliance with rules.

Department of Commerce (DOC)

The DOC noted that prior to the date of the ESA between the parties Terning Seeds took service under the General Service Rate (Code A14), Sheet 5-26. Terning Seeds will take service under the following three tariffs:

- General Service Rate (Code A-14, Sheet 5-26)
- Purchase and Sale Billing Service, (Code A-51, avoided cost rate, Sheet 9-3)
- Standby Service Rider (Sheet 5-101)[6]

The DOC proposed three changes to the ESA:

- Item 2, on pages 4-5 of Attachment A to the Company's Petition, should be modified to note that Terning Seeds has elected to receive service under the A-51 tariff rather than the Time of Day A-52 tariff.[7]
- Item 13, on page 6 of Attachment A to the Company's Petition, should be modified to note that Xcel has agreed to pay Terning Seeds for all energy exported to Xcel subsequent to the interconnection, on or about December 19, 2014.[8]

[6] Xcel explained that its current Standby Service tariff only allows the Company to impose the Standby Service if a customer's generator is above 100 kW (AC). The customer's generator is 96 kW (AC) or about 105 (DC). However, service under the Standby tariff has been mutually agreed to and the customer has requested to be served under this tariff. Xcel does not believe allowing the provision of standby service in this case is contrary to public interest. Therefore, the proposed amended ESA allows standby service consistent with the provisions of tariff except for the capacity cap. The DOC did not object to this offering.

[7] On March 13, 2015, Xcel filed Amendment No. 2 to the ESA with the modification of service.

[8] Per Xcel's NON-PUBLIC response to DOC IR No. 1.

- Clarifying the terms of compensation, Item 4.1 in the ESA, as described on page 5 of Attachment A to the Company's Petition, to read:

> 4.1. ~~Credit to the QF's account with the Utility.~~ Kilowatt hour energy credit to the QF's account with the utility, carries forward and applied to subsequent energy bills, and trued up annually.

With these changes, the DOC concluded that the ESA would be consistent with the public interest. First, the proposed ESA would not negatively affect operating costs and rate levels because the customer will receive service at tariffed rates and be reimbursed for energy supplied to Xcel at the avoided cost rate on an annual basis. Approval of the ESA will not impact the Company's revenues and other ratepayers will not be negatively affected by approval of the ESA.

Second, the DOC concluded that the price is reasonable. In addition to the customer being able to receive payment for annual net input into the Xcel system at the avoided cost rate, the customer will pay for net energy supplied by Xcel according to the applicable tariffed rate and will receive standby service.

Third, the DOC believes approval of the proposal would not impair effective regulation, since all rates are tariffed and any future amendments to the ESA would be brought to the Commission for approval.

Lastly, in response to the Commission notice, the DOC concluded that it could be appropriate for the Commission's decision on this amended ESA to be used as a template for future agreements between Xcel and its customers. However, the DOC indicated that use of the template should be considered an interim measure pending the results of the rulemaking in Docket No. E-999/R-13-729.

Xcel Energy (Xcel) reply comments

In response to the DOC comments, Xcel filed Amendment No. 2 to the ESA reflecting the customer's election to receive service under the A-51 tariff rather than the A-52 tariff. It also indicated that the credit received by the customer would be a "dollar-based" credit and argued that the DOC's proposed language for Item 4.1 in the ESA does not provide the needed clarification of "annual net input."

Xcel argued that DG customers, who receive net metering, receive a dollar-based bill credit for their production. Specifically, net metering bill credits are based on generated kWh, applied to a dollar rate, resulting in a dollar-based credit. The quantity of kWh generation is not "banked" to roll forward to future bills, and therefore requires no annual true up. Instead, the dollar-based credit is applied to monthly to bills and, after offsets by on-bill costs, any positive net balance rolls forward as a dollar credit on future bills.

DOC stated that customers would receive payment for the "annual net input into the Xcel system at the avoided cost rate." However, Xcel noted there is no annual input at an avoided cost rate, due to the impact of differentiated seasonal avoided cost. In practice, "annual net input" is not "banked" and credited on an annual basis, because there is no approved rate to account for net input on an annual basis. Instead, customers receive the applicable seasonal avoided cost rate applied to any net input each month. This will be a unique annual avoided cost rate, the calculation of which is based on the customer's unique seasonal production and usage patterns.

For this reason, Xcel does not believe the DOC's proposed change to Item 4.1 provides the needed clarification of the process as described above. If further clarification is needed, Xcel proposed the following modification to Item 4.1:

1. Monthly Dollar Credit to the QF's account with the Utility.

Staff discussion

Xcel's proposed ESA and Amendments

The DOC recommended three changes to Xcel's proposed ESA and Amendment No. 1, as initially filed. Xcel addressed the DOC's first concern by filing an amendment to the ESA (i.e. Amendment No. 2).[9]

The DOC's second concern is that Terning Seeds should be compensated for all energy exported to Xcel as of the date of interconnection. Xcel argued that Minn. Stat. §216B.164 is silent on the issue of whether the Commission is prohibited from authorizing compensation to the customer for all energy exported to the Company, including energy exported to the Company prior to the date of the Commission's approval in the current docket. In contrast, Xcel indicated that the ESA only becomes effective when approved by the Commission and signed by the parties. Xcel acknowledged that if the Commission's Order provides that compensation should be paid as of the date of interconnection, the Company will follow the directive.

As noted, the statutory amendment expanding net metering up to 1,000 kW has been in place since 2013. While utilities have the responsibility to file all of their rates and practices in tariff, they also have the responsibility to comply with statute.[10] Staff therefore recommends that the

[9] The Amendment No. 2 was executed by parties prior to the DOC comments and simply reflects the customer's decision to take service under Rate Code A51 rather than A52.

[10] In Docket E, G-999/CI-09-970, the Commission initiated a proceeding to ensure that utilities' statutory obligations were fully reflected in tariff. In that docket, Xcel confirmed that while its tariffs had not yet been updated, it had already updated its business practices:

> On August 24, 2009, the Commission opened the above-referenced Docket and issued a Notice requiring all Minnesota regulated utilities to review their tariffs specifically related to changes to

Commission require Xcel to compensate the customer for exported energy as of the date of interconnection.

Although Xcel was unable to provide service under this new provision of the statute until now,[11] staff believes it is in the public interest to allow the customer to be compensated for exported energy as of the date of interconnection. The Company indicated its agreement with such a directive, and stated "such a Commission order would be consistent with a way to implement the new state statute, and the parties likely would have agreed to such an approach in their proposed Amendment if they believed that the Commission would be inclined to support such payment."

The third change proposed by the DOC related to options for customer compensation but the DOC revision did not receive support from the Company. The disagreement relates to the interpretation of one of the new provisions to the cogeneration and small power production statute (Subdivision 3a), which states:

> ….. a customer with a net metered facility having a capacity of 40 kilowatts or greater but less than 1,000 kilowatts that is interconnected to a public utility *may elect to be compensated for the customer's net input into the utility system in the form of a kilowatt-hour credit on the customer's energy bill carried forward and applied to subsequent energy bills.* Any net input supplied by the customer into the utility system that exceeds energy supplied to the customer by the utility during a calendar year must be compensated at the applicable rate. (Italics added.)

Xcel objected to the DOC's revisions, which would allow for a monthly roll over kWh credit that is not dollar-based. The DOC reads Subdivision 3a to require the option of compensation for a net credit in the form of a kWh credit on the customer's monthly bill that is not dollar-based but

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> Minn. Stat. §216B.096, Minn. Stat. §216B.0976, Minn. Stat. §216B.098, and Minn. Rules Chapter 7820.3700-4000.
>
> We note that, although we had not previously modified our Electric and Natural Gas tariffs to reflect all recent legislative and Minnesota rule changes as they became effective, we had updated our business processes. (Xcel comments filed September 11, 2009, in 09-970.)

Staff acknowledges that the mandates at issue in Docket 09-970 were customer protections, potentially simpler to implement than changes to a net metering contract. Utilities must strike a balance between timely implementing new statutes and taking sufficient time to fully implement logistics of implementation. Staff believes that it is appropriate in this case for Xcel to submit an electric service agreement even though the Commission's rulemaking is not complete and the Company does not yet have an approved tariff that incorporates the increase in the net metering threshold. The approach particular to a given statute will vary depending on the magnitude of the statutory change, whether rulemaking might be required, and other factors.

[11] Xcel filed its petition seeking approval of the ESA under which it could provide such service on December 22, 2014.

is a kWh energy credit that can be rolled over for use in the next month. If there is a balance of kWh at the end of the year, Xcel is required to purchase the net remaining kWh from the customer at the avoided cost rate for that class of customer.

Xcel presented a different interpretation of Subdivision 3a, as described above and in the Company's March 9 comments (i.e. that there is no kWh generation banked and rolled forward to future monthly bills; the only credit to roll forward is generated kWh applied to a dollar rate resulting in a dollar-based credit).

Given this disagreement and the fact that this issue has also been raised as part of the rulemaking, the Commission has the following options. It could interpret the relevant part of the statute addressing kWh compensation as part of its decision in this docket, and if appropriate, require Xcel to refile a revised ESA (or file a 3rd Amendment) that reflects the Commission's interpretation.[12] Staff notes that Xcel has raised the kWh net credit compensation issue in its comments in the rulemaking docket (13-729),[13] the final rules for which have not been approved. A concern with making the interpretation now is that other utilities and stakeholders are involved in the rulemaking process, but not in the instant docket. In addition, the revised ESA would need to be signed by the customer, potentially delaying the effective date of the ESA and the start of compensation to the customer. This may not be a problem if the Commission requires payment for exported energy as of the date of interconnection.

Another option is for the Commission to approve the proposed ESA with no additional amendments but require Xcel to offer the final version of the Uniform Statewide Contract to the customer once it has been approved as part of the rulemaking.[14] Under this second option, until final rules are in place, the customer will take service under the proposed ESA, including Amendments Nos. 1 and 2, with no further revisions. The Commission should make clear that no finding is being made in this docket regarding arguments raised by Xcel surrounding the interpretation of statute to allow for a kWh credit that is dollar-based or the appropriate rate for a kWh credit should one be allowed that is dollar-based (i.e. retail rate or avoided cost rate).

At the meeting on April 9, the Commission may wish to provide parties with an opportunity to respond to these options.

Whether the Commission should encourage other utilities to use the ESA with Terning Seeds as a template prior to completion of the cogeneration and small power production rules and Uniform Statewide Contract

[12] Attachment B to these briefing papers is an example of language that might be used in a revised ESA to allow for a kWh energy credit that is not dollar-based.
[13] See Xcel comments filed on February 4, 2015, in Docket 13-729, p. 3.
[14] Staff understands that the final rules will be approved within four months.

Staff asked whether the Terning Seeds ESA might act as a template for other ESAs during the transition before final rules are in place. On reflection, staff believes the ESA could provide one potentially reasonable model during the transition period. However, formal adoption of the ESA as a template could be problematic because the rulemaking process is not yet complete and there may be additional changes to the final rules and the Uniform Statewide Contract. It might be premature to adopt a template based solely on the Terning Seeds case. It is possible that the ESA and the discussion in the docket may provide direction for utilities with customers seeking to implement projects with capacities higher than that provided for by existing tariffs. However, staff concludes that the Commission should not adopt or endorse the proposed ESA as a template at this time.

Additional requests from customers ready to utilize the statute and implement net metered projects above 40 kW

Xcel's filing in the current docket was made on December 22, 2014. Staff has received informal calls from other individuals interested in a net metering contract similar to Terning Seeds' (that is, for larger net metering facilities). The Commission may wish to ask Xcel if it has been contacted by individuals interested in an interim contract, when those individuals contacted Xcel, and what action Xcel has taken to accommodate them.

Decision Alternatives

Approval of the proposed ESA and Amendments

1. Approve the ESA and Amendments Nos. 1 and 2 on an interim basis pending the results of the rulemaking in Docket No. 13-729. Require Xcel to offer service to Terning Seeds under the terms of the final rules and the Uniform Statewide Contract (in 13-729), once rules and tariffs have been adopted.

2. Require Xcel to revise and refile the proposed ESA and Amendments Nos. 1 and 2 so that the ESA with amendments provides the customer with the option for monthly compensation in the form of a kWh credit on the customer's bill that can be carried forward in the form of a kWh credit, as opposed to a dollar credit, and applied to subsequent bills. Require Xcel to file the revised ESA reflecting the Commission's decision within 15 days of the Commission's Order in this matter.

3. Approve the ESA and Amendments Nos. 1 and 2, including the additional modification by Xcel intended to clarify that forms of compensation for net credit include a monthly dollar credit based on generated kWh applied to a dollar credit resulting in a dollar-based credit but do not include a monthly kWh energy net credit.

4. Deny the proposed ESA and Amendments Nos. 1 and 2.

Effective date for compensation

5. Require Xcel to compensate the customer for energy exported to Xcel's system as of the date of interconnection of the customer's generating facility.

6. Require Xcel to compensate the customer for energy exported to Xcel's system as of the date the ESA and Amendments Nos. 1 and 2 are approved by the Commission and signed by the parties.

Attachment A

Minn. Stat. 216B.164.

216B.164 COGENERATION AND SMALL POWER PRODUCTION.

Subdivision 1. **Scope and purpose.** This section shall at all times be construed in accordance with its intent to give the maximum possible encouragement to cogeneration and small power production consistent with protection of the ratepayers and the public.

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

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

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

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

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

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

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

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

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

(1) has a capacity of ten megawatts or less;

(2) is interconnected with a utility's distribution system, over which the commission has jurisdiction; and

(3) generates electricity from natural gas, renewable fuel, or a similarly clean fuel, and may include waste heat, cogeneration, or fuel cell technology.

(i) "High-efficiency distributed generation" means a distributed energy facility that has a minimum efficiency of 40 percent, as calculated under section 272.0211, subdivision 1.

(j) "Net metered facility" means an electric generation facility constructed for the purpose of offsetting energy use through the use of renewable energy or high-efficiency distributed generation sources.

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

(l) "Standby charge" means a charge imposed by an electric utility upon a distributed generation facility for the recovery of costs for the provision of standby services, as provided for in a utility's tariffs approved by the commission, necessary to make electricity service available to the distributed generation facility.

Subd. 3. **Purchases; small facilities.** (a) This paragraph applies to cooperative electric associations and municipal utilities. For a qualifying facility having less than 40-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having less than40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c) or (d).

(b) This paragraph applies to public utilities. For a qualifying facility having less than 1,000-kilowattcapacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having: (1) more than 40-kilowatt but less than 1,000-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c); or (2) less than 40-kilowattcapacity, compensation to the customer shall be at a per-kilowatt rate determined under paragraph (d).

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

(d) Notwithstanding any provision in this chapter to the contrary, a qualifying facility having less than40-kilowatt capacity may elect that the compensation for net input by the qualifying facility into the utility system shall be at the average retail utility energy rate. "Average retail utility energy rate" is defined as the average of the retail energy rates, exclusive of special rates based on income, age, or energy conservation, according to the applicable rate schedule of the utility for sales to that class of customer.

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

Subd. 3a. **Net metered facility.** (a) Except for customers receiving a value of solar rate under subdivision 10, a customer with a net metered facility having a capacity of 40 kilowatts or greater but less than1,000 kilowatts that is interconnected to a public utility may elect to be compensated for the customer's net input into the utility system in the form of a kilowatt-hour credit on the customer's energy bill carried forward and applied to subsequent energy bills. Any net input supplied by the customer into the utility system that exceeds energy supplied to the customer by the utility during a calendar year must be compensated at the applicable rate. (b) A public utility may not impose a standby charge on a net metered or qualifying facility:

(1) of 100 kilowatts or less capacity; or
(2) of more than 100 kilowatts capacity, except in accordance with an order of the commission establishing the allowable costs to be recovered through standby charges.

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

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

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

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

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

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

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

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

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

Subd. 4b. **Limiting cumulative generation.** The commission may limit the cumulative generation of net metered facilities under subdivisions 3 and 3a. A public utility may request the commission to limit the cumulative generation of net metered facilities under subdivisions 3 and 3a upon a showing that such generation has reached four percent of the public utility's annual retail electricity sales. The commission may limit additional net metering obligations under this subdivision only after providing notice and opportunity for public comment. In determining whether to limit additional net metering obligations under this subdivision, the commission shall consider:

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

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

Subd. 4c. **Individual system capacity limits.** (a) A public utility that provides retail electric service may require customers with a facility of 40-kilowatt capacity or more and participating in net metering and net billing to limit the total generation capacity of individual distributed generation systems by either:

(1) for wind generation systems, limiting the total generation system capacity kilowatt alternating current to 120 percent of the customer's on-site maximum electric demand; or
(2) for solar photovoltaic and other distributed generation, limiting the total generation system annual energy production kilowatt hours alternating current to 120 percent of the customer's on-site annual electric energy consumption.

(b) Limits under paragraph (a) must be based on standard 15-minute intervals, measured during the previous 12 calendar months, or on a reasonable estimate of the average monthly maximum demand or average annual consumption if the customer has either:

(i) less than 12 calendar months of actual electric usage; or
(ii) no demand metering available.

Subd. 5. **Dispute; resolution.** In the event of disputes between an electric utility and a qualifying facility, either party may request a determination of the issue by the commission. In any such determination, the burden of proof shall be on the utility. The commission in its order resolving each such dispute shall require payments to the prevailing party of the prevailing party's costs, disbursements, and reasonable attorneys' fees, except that the qualifying facility will be required to pay the costs, disbursements, and attorneys' fees of the utility only if the commission finds that the claims of the qualifying facility in the dispute have been made in bad faith, or are a sham, or are frivolous.

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

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

(c) The uniform statewide form of contract shall be applied to all new and existing interconnections established between a utility and a net metered or qualifying facility having less than 40-kilowatt capacity, except that existing contracts may remain in force until terminated by mutual agreement between both parties.

Subd. 7. [Repealed, 1994 c 465 art 1 s 27]

Subd. 8. **Interconnection required; obligation for costs.** (a) Utilities shall be required to interconnect with a qualifying facility that offers to provide available energy or capacity and that satisfies the requirements of this section.

(b) Nothing contained in this section shall be construed to excuse the qualifying facility from any obligation for costs of interconnection and wheeling in excess of those normally incurred by the utility for customers with similar load characteristics who are not cogenerators or small power producers, or from any fixed charges normally assessed such nongenerating customers.

Subd. 9. **Municipal electric utility.** For purposes of this section only, except subdivision 5, and with respect to municipal electric utilities only, the term "commission" means the governing body of each municipal electric utility that adopts and has in effect rules implementing this section which are consistent with the rules adopted by the Minnesota Public Utilities Commission under subdivision 6. As used in this

subdivision, the governing body of a municipal electric utility means the city council of that municipality; except that, if another board, commission, or body is empowered by law or resolution of the city councilor by its charter to establish and regulate rates and days for the distribution of electric energy within the service area of the city, that board, commission, or body shall be considered the governing body of the municipal electric utility.

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

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

(i) 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.

History: *1981 c 237 s 1; 1983 c 301 s 166-171; 1984 c 640 s 32; 1991 c 315 s 1; 1993 c 356 s 1; 1996c 305 art 2 s 38; 2013 c 85 art 9 s 1-10; 2013 c 125 art 1 s 39; 2013 c 132 s 1*

Attachment B

Example of language upon which a revised ESA could be based to allow for a kWh energy credit that is not dollar-based:

2. The Utility will compensate the QF by either: (1) buying electricity from the QF under the current rate schedule filed with the Commission; or (2) applying a credit in the form of a kilowatt credit on the customer's energy bill carried forward and applied to subsequent energy bills with an annual true-up at the avoided cost rate for that class of customer. If the QF has at least 40 kilowatt capacity but less than 1,000 kilowatt capacity, the QF elects the rate schedule category or the kilowatt hour credit hereinafter indicated:

____ a. kilowatt hour energy credit on the customer's energy bill, carried forward and applied to subsequent energy bills, with an annual true-up; or

____ b. Simultaneous purchase and sale billing rate under the A51 Tariff; or

_____ c. Time-of- day purchase rates under the A52 Tariff. (This option is only available where the electric service provided by Utility to QF at the same site is billed in accordance with the appropriate time of day retail electric rate).

The Utility will compute the charges and payments for purchases and sales for each billing period. Any monthly net credit to the QF under b or c above will made under one of the following options as chosen by the QF:

____ 1. Monthly dollar credit to the QF's account with the Utility.

____ 2. Paid by check to the QF within 15 days of the billing date.