Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: November 21, 2016..**Agenda Item #_5_

Company: Minnesota Valley Cooperative Light & Power Association

Docket Number: **E-123/CG-16-241**

In the Matter of a Complaint of Larry Fagen against Minnesota Valley Cooperative Light & Power Association.

Issues: Can a cooperative electric association require a customer to be compensated via the "kWh carry forward" method under Minn. Stat. §216B.164 Subd. 3(f)?

If a customer installed a solar system prior to July 1, 2015 and expanded it after July 1, 2015, is all, part, or none of the combined system subject to the 2015 amendments to Minn. Stat. §216B.164?

Is Minnesota Valley Cooperative Light & Power Association's minimum bill discriminatory against customers with distributed generation?

If the Commission finds in favor of Mr. Fagen on any of the issues, what are the appropriate remedies?

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Relevant Documents

Larry Fagen, Amended Complaint ....March 28, 2016
Minnesota Valley Cooperative Light & Power Association, Initial Response ....April 21, 2016
Sam Villella, Comments ....May 17, 2016
Minnesota Valley Cooperative, Response to Information Requests ....May 26, 2016
Energy Freedom Coalition of America, Comments ....June 6, 2016
Public Comments ....June 14, 2016
Department of Commerce, Comments ....August 5, 2016
Minnesota Center for Environmental Advocacy and the Sierra Club, Comments ..August 5, 2016
Fresh Energy and the Environmental Law and Policy Center, Comments ....August 5, 2016
Larry Fagen, Comments ....August 5, 2016
Larry Fagen – MN Valley September 2016 Newsletter ....September 15, 2016

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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Statement of the Issues

Can a cooperative electric association *require* a customer to be compensated via the "kWh carry forward" method under Minn. Stat. §216B.164 Subd. 3(f)?

If a customer installed a solar system prior to July 1, 2015 and expanded it after July 1, 2015, is all, part, or none of the combined system subject to the 2015 amendments to Minn. Stat. §216B.164?

Is Minnesota Valley Cooperative Light & Power Association's minimum bill discriminatory against customers with distributed generation?

If the Commission finds in favor of Mr. Fagen on any issues, what are the appropriate remedies?

1 | Background

In March 2016, Mr. Fagen asked the Commission for dispute resolution under Minn. Stat. §216B.164, subd. 5, against his utility, Minnesota Valley Cooperative Light & Power Association (Minnesota Valley, MN Valley, or the Co-op). His primary allegation is that Minnesota Valley improperly applied 2015 amendments to Minn. Stat. §216B.164[1] to his solar PV system. Minnesota Valley denied the allegations.

Statutory Changes:

In 2015, the following provisions were added to Minn. Stat. §216B.164, Cogeneration and Small Power Production. These provisions apply to cooperative electric associations and municipal utilities.

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. A cooperative electric association or municipal utility may charge an additional fee to recover the fixed costs not already paid for by the customer through the customer's existing billing arrangement. Any additional charge by the utility must be reasonable and appropriate for that class of customer based on the most recent cost of service study. The cost of service study must be made available for review by a customer of the utility upon request. In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c), ~~or~~ (d), or (f).

. . . . .

(f) A customer with a qualifying facility or net metered facility having a capacity below 40 kilowatts that is interconnected to a cooperative electric association or a municipal 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 kilowatt-hour credits carried forward by the customer cancel at the end of the calendar year with no additional compensation.

Under *1Sp2015 c 1 art 3 s 21*: This section is effective July 1, 2015, and applies to customers installing net metered systems after that day.

[1] The full text of Minn. Stat. §216B.164 (with 2015 amendments in redline) is included as Appendix A.

Effect of the kWh carry-forward method of compensation

A kWh carry-forward method applies any net input from a small QF forward as a kWh offset on the next bill, in effect compensating the QF at the retail energy rate in effect at the time of the next bill. The level of compensation would be similar, but not identical, to the average retail utility energy rate (ARUER). The ARUER is based on a calculation using class consumption and revenues from the previous calendar year, which could be higher or lower than the current energy rate.

But more importantly, the statute goes on to provide that kWh credits carried forward cancel at the end of the calendar year with **no additional compensation**. This has the effect of limiting compensation to the QF to a maximum of its total annual consumption. In practice by requiring cancellation to occur at the end of a calendar year, many solar PV QF customers would be limited to less than 100% of consumption because there may not be enough consumption in the last 2-3 months of the year to offset the higher solar production in the summer months. That is not the case with the ARUER method, which gives a dollar amount bill credit or check payment each month, and does not cancel out.

Therefore, many small QF customers, including Mr. Fagen, would choose the ARUER method that has been in the statute and rules since 1983, rather than the new 2015 provision for electing a kWh carry-forward method. And conversely, some cooperative and municipal utilities may prefer the kWh carry-forward method. The major issue in this dispute is whether it is the QF customer or the cooperative who gets to specify what option is chosen.

Brief Factual Background:

In December of 2012, Mr. Fagen installed a 9.2 kW solar PV system. According to Mr. Fagen, the solar installer designed and built the system so that it could be expanded later. In November 2015, Mr. Fagen began the process of expanding his system to 18.3 kW. The expansion was completed on January 4, 2016, and on January 15 the Co-op installed a new production meter to track the generation of the full system.

Mr. Fagen and the Co-op had several conversations in the ensuing weeks. Mr. Fagen's account of the discussions can be found on pages 3-5 of his Amended Complaint, and Minnesota Valley's account can be found on pages 1-4 of its April 21, 2015 Response to Information Requests. Staff does not detail these accounts here, except to highlight two points of agreement:

- First, the parties agree that the contract provided to Mr. Fagen by the cooperative only allowed one compensation option, the "kWh carryforward" method. This is the subject of Section 2 of the Briefing Papers.
- Second, Mr. Fagen eventually signed the contract.

They also discussed a $650 annual fee. Mr. Fagen claimed the Co-op told him he would be subject to a $650 annual fee if he were to pursue an alternative compensation option (i.e. other than the kWh carry-forward method). Minnesota Valley responded that it was not threatening to charge him a $650 fee, but merely explaining that the Co-op Board decided to make the kWh carryforward compensation method mandatory *in lieu of* developing a fixed cost recovery fee under the recent amendment to Minn. Stat. §216B.164 subd. 3(a). According to Minnesota Valley, the $650 amount was a rough estimate of what Mr. Fagen's fee would have been had it decided to implement a fixed fee.

Scope of the briefing papers:

The issue of the $650 fee was also discussed in several parties' comments.[2] However, because Minnesota Valley does not have a fixed fee under Minn. Stat. §216B.164 subd. 3(a), and such fees for those cooperatives who do are currently under review in Docket 16-512, Staff does not address this fee issue further in these Briefing Papers.

2 | Claim 1: Interpretation of Minn. Stat. §216B.164 Subd. 3(f)

The main issue in this complaint is the interpretation of a recent statutory change. In 2015, a new net metering compensation option was added to §216B.164 Subd. 3:

> 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 than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c), ~~or~~ (d), or (f).
> […]
> (f) A customer with a qualifying facility or net metered facility having a capacity below 40 kilowatts that is interconnected to a cooperative electric association or a municipal 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 kilowatt-hour credits carried forward by the customer cancel at the end of the calendar year with no additional compensation.

The contract provided by MN Valley to Mr. Fagen *required* him to take compensation under paragraph (f). Mr. Fagen argued this violates the statute, which gives the customer the right to select the method of compensation. MN Valley claimed it was permissible to require this compensation option. Several other parties also commented on this claim.

2.1 Mr. Fagen's position

By *requiring* him to take compensation for excess generation under the "kWh carry forward" method, Mr. Fagen argued MN Valley violated his right to choose another compensation option—namely, under Minn. Stat. § 216B.164, subd. (c) or (d). Mr. Fagen highlighted the language of the new paragraph:

> (f) ***A customer with a qualifying facility or net metered facility*** having a capacity below 40 kilowatts that is interconnected to a cooperative electric association or a municipal 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 kilowatt-hour credits carried forward by the customer cancel at the end of the calendar year with no additional compensation.

[2] *See, e.g.*: pages 6-9 of the Minnesota Center for Environmental Advocacy and the Sierra Club's August 5th, 2016 Comments.

According to Mr. Fagen, paragraphs (c), (d), and (f):

> illustrate that the party that chooses the compensation option for excess net input into the system is not the utility, but is instead the customer who owns the qualifying facility. After all, subdivision 3(a) uses the word "or," subdivision 3(d) says "the qualifying facility… may elect," and subdivision 3(f) also says "a customer with a qualifying facility or net metered facility … may elect." The statute clearly places the choice in the hands of the customer.
> Contrary to the statute, MN Valley's contract did not provide the customer with any opportunity to choose between the three options for excess generation. In addition to this, when Larry inquired into whether other options were available the utility threatened to apply "a large fee" to any other billing arrangement and that he would be unable to receive any credit for his system's first month of generation.[3]

Mr. Fagen also pointed to Minn. Rule 7835.4012 Subp. 1, which states:

> **Facilities with less than 40 kilowatt capacity.** A qualifying facility with less than 40 kilowatt capacity has the option to be compensated at the average retail utility energy rate, the simultaneous purchase and sale billing rate, or the time-of-day billing rate.

Mr. Fagen argued that the "has the option" language "illustrates that the Commission has historically interpreted Minn. Stat. § 216B.164 to include a customer election, because the Commission created this law in response to the original legislation." Thus, Mr. Fagen "should not be automatically entered into the rollover program, and should instead, be given the option to select any method of payment of his excess generation that is plainly an option under the statute."[4]

2.2 Minnesota Valley's response

Minnesota Valley denied that it violated Mr. Fagen's right to choose another compensation option. The Co-op made three main arguments. First, it noted that subd. 3(a) does not indicate that the choice of compensation is at the customer's option:

> [T]he plain language of Minn. Stat. § 216B.164, subd. 3(a) does not provide that the customer has the unilateral right to elect which method of compensation to receive, which is the reading that Mr. Fagen suggests. At issue is the last sentence of that subdivision of Section 216B.164, which provides, "In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, ***compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c), (d), or (f).***" Minn. Stat. §216B.164, subd. (3)(a) (emphasis added).
>
> […] Although the Minnesota Legislature certainly could have done so, it did not draft the foregoing sentence of Subdivision 3(a) of Section 216B.164 in a way that signals that the decision as to which subparagraph to proceed is left solely to the net metering customer to choose.
>
> Mr. Fagen argues that he should have been given the unilateral choice of receiving compensation for net input into the Cooperative's electric system under paragraphs (c), (d), or (f) of Subdivision 3 because two of those paragraphs, (d) and (f), contain the phrase "may elect." […] The inherent flaw in the argument Mr. Fagen advances, however, is that it necessarily requires that customer choice be read into paragraph 3(a), which would be

[3] Minnesota Solar Energy Industries Project (representing Larry Fagen), Amended Complaint, at page 6.
[4] Id., at page 7.

> improper. *See Larson v. State*, 790 N.W.2d 700, 703 (Minn. 2010) (holding "[s]tatutory words and phrases must be construed according to the rules of grammar and common usage," and noting that a phrase contained in a remedial clause of a statute could not be read into the preceding triggering clause of the statute). Moreover, paragraph 3(c) does not contain the same "may elect" phrase, further suggesting the initial determination as to which of those three particular subparagraphs to proceed is not left exclusively to the customer to decide.[5]

Minnesota Valley also argued that Subdivisions 3(d) and 3(f) are not mutually exclusive:

> Nevertheless, even construing the statutory language at issue in the manner that the Complaint suggests, the Cooperative denies that it violated Mr. Fagen's right to elect to receive compensation under of paragraphs 3(c) or 3(d). As noted above, paragraph 3(c) does not reference customer election at all. And, while paragraph 3(d) does reference customer election, the Cooperative disputes that Mr. Fagen was denied the average retail rate of compensation outlined in that section. The Cooperative respectfully submits that paragraphs 3(d) and (3)(f) are not mutually exclusive. Indeed, paragraph 3(d) describes a ***rate*** of compensation, i.e., "average retail utility energy rate," whereas paragraph 3(f) describes a ***method*** of compensation, i.e., a bill credit "in the form of a kilowatt-hour credit carried forward on the customer's energy bill carried forward and applied to subsequent energy bills." The effective rate of compensation, however, remains the "average retail utility energy rate" under paragraph 3(f), because for every 1 kW of power that Mr. Fagen inputs into the Cooperative's system in a month where his generation exceeds his usage, he will receive the credit of 1 kW of power that would otherwise be charged to him at the retail rate in a subsequent month where his usage exceeds his generation.

Finally, Minnesota Valley also pointed out that the Rule cited in the complaint—Minn. Rule 7835.4012 Subp. 1—applies to investor-owned utilities, not cooperatives.

2.3 Party comments

Each of the parties that filed comments—i.e. the Department of Commerce, the Energy Freedom Coalition of America (EFCA), Fresh Energy and the Environmental Law and Policy Center (Fresh Energy), and the Minnesota Center for Environmental Advocacy and the Sierra Club (MCEA)—supported Mr. Fagen.

Several parties took issue with Minnesota Valley's claim that subd. 3(a) does not indicate that the choice of compensation is at the customer's option. EFCA claimed Minnesota Valley's position "finds ambiguity where there is none."[6] The Department argued that "the Statutes and Rules are clear that the customer, not the cooperative, may elect the method of compensation for net input from their QF."[7] Fresh Energy argued that in "all other provisions in 216B.164 or rules where a compensation choice is offered, the statute and rules are consistent that the choice is at customer's election. Tellingly, there is no instance where statute or rules give the compensation option to utilities and, moreover, there is nothing in the 2015 amendment that suggests that the choice for compensation options has shifted to the utility."[8] EFCA argued that "the statute's use of the phrase, '[n]otwithstanding any provision of this chapter to the

[5] Minnesota Valley Cooperative Light & Power Association, April 21, 2016 response to PUC Information Requests, at pages 4-5.
[6] Energy Freedom Coalition of America, Comments, at page 1.
[7] Department of Commerce, Comments, at page 5.
[8] Fresh Energy and the Environmental Law and Policy Center, Comments, at page 5 (footnote omitted).

contrary,' indicates that even if other language in the statute may seem to indicate otherwise, the qualifying facility customer" may choose compensation under subd. 3(d).[9]

The parties also disagreed with Minnesota Valley's claim that Subdivisions 3(d) and 3(f) are not mutually exclusive. On page 3 of his August 5th comments, Mr. Fagen argued "paragraph (c) and paragraph (d) are in conflict with each other. A customer cannot be billed at the avoided cost rate and the average retail rate. From a logical perspective the "or" cannot apply inclusively to paragraphs (c) and (d), so it also should not apply to paragraphs (d) and (f)." EFCA agreed, adding:

> [I]nterpreting paragraph 3(f) as merely an explanation of or an equivalent concept to the average retail utility energy rate described in paragraph 3(d) would violate another principle of statutory construction. Paragraph 3(a) of Minn. Stat. § 216B.164 states that a qualifying facility customer "shall be compensated at a per-kilowatt-hour rate determined under paragraph (c), (d), *or* (f)."8 "The word 'or' is a disjunctive and ordinarily refers to different things as alternatives"9 – it is not used to list different descriptions of the same concept, as Minnesota Valley would have this Commission believe.[10]

Parties also argued that Minnesota Valley's own statements and actions also suggest the provisions are mutually exclusive. MCEA claimed the Coop's argument "directly contradicts" its earlier statement "that the carry-forward method was used 'in lieu of' simply compensating the customers at the average retail rate and recovering fixed costs not otherwise paid for. […] [T]he cooperative informed Mr. Fagen that the two methods were indeed mutually exclusive: either use carry-forward billing or use average retail rate with an annual fee for fixed costs."[11] EFCA also noted that Minnesota Valley's own contract indicates that the decision is at the customer's election, quoting section 2 of the "Agreements" section: "The Utility will credit kilowatt-hours *or* buy electricity from the QF. The *QF has selected* the credit or payment schedule category hereinafter indicated (select one)."

2.4 Party recommendations

Decision options 1-3 address Claim 1. Per Minnesota Valley's recommendation, **Decision Option 1** would dismiss Claim 1 and find that Minnesota Valley's contract did not violate Mr. Fagen's right to choose a compensation method other than the kWh carry forward method.

Decision Option 2 would find the Minnesota Valley violated Mr. Fagen's right to choose a compensation method other than the kWh carry forward method. In addition to Mr. Fagen, this option was also supported by the Department, EFCA, Fresh Energy/ELPC, MCEA/Sierra Club, and Sam Villella. In addition, **Decision Option 3** would deem the existing contract void and cancelled and require Minnesota Valley to present a new contract that includes an option to select compensation under Minn. Stat. § 216B.164, subd3(d). This finding was recommended by Mr. Fagen.

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[9] Energy Freedom Coalition of America, Comments, at page 2.
[10] Id., at page 3.
[11] Minnesota Center for Environmental Advocacy and the Sierra Club, Comments, at page 6.

2.5 Staff comment

While Staff agrees with Minnesota Valley that the rule cited in the initial complaint does not apply to cooperative utilities, there is a nearly identical rule that does apply to cooperatives. This rule makes it clear that the QF customer chooses the rate method. Minn. Rule, Part 7835.3200 Subp. 1 states:

> **Qualifying facilities with 100 kilowatt capacity or less.** For qualifying facilities with capacity of 100 kilowatts or less, standard purchase rates apply. The utility must make available three types of standard rates, [the Average Retail Utility Energy Rate, the Simultaneous Purchase and Sale Billing Rate, and the Time-of-Day Purchase Rate]. The qualifying facility with a capacity of 100 kilowatts or less must choose interconnection under one of these rates, and must specify its choice in the written contract required in part 7835.2000. Any net credit to the qualifying facility must, at its option, be credited to its account with the utility or returned by check within 15 days of the billing date.
> [Emphasis added]

In theory a *rate* for compensation could be distinguished from a *method* of compensation as stated by Minnesota Valley; however, Minn. Stat. §216B.164, subd. (3)(a) does not make such a distinction. Rather, it sets out the "kWh carry-forward" under (f) as a separate per kWh compensation option, distinct from the standard avoided cost option under (c) and the "average retail energy rate" option under (d):

> In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c), (d), or (f). [Emphasis added]

In 2013, amendments to Minn. Stat. § 216B.164 were enacted which expanded the availability of net metering to facilities between 40 and 1,000 kWh interconnected with public utilities, and added a kWh carry-forward option:

> 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 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. [Emphasis added]

In its rulemaking proceeding in Docket 13-729 to implement 2013 statutory changes, the Commission interpreted the "may elect" language to mean that the customer chooses the compensation method.

Minn. Rules, Part 7835.4017 states:

> Subp. 1. **Kilowatt-hour credit. A customer with a net metered facility can elect** to be compensated for net input into the utility's system in the form of a kilowatt-hour credit on the customer's bill subject to Minnesota Statutes, section 216B.164, subdivision 3a, . . .
> [Emphasis added]

3 | Is an Expansion a New Installation? (Claim 4)

The timing of the expansion of Mr. Fagen's solar system raises a second issue. The 2015 legislative amendments included the following statement on the effective date:

> **EFFECTIVE DATE.** This section is effective July 1, 2015, and applies to customers installing net metered systems after that day.

This language is relevant in this case, because Mr. Fagen installed a 9.2 kW PV system *before* the effective date and expanded it by 9.2 kW *after* the effective date. Thus, the Commission may want to determine what (if any) part of Mr. Fagen's total PV system is subject to the new legislation: all, none, or just the 9.2 kW added after the effective date.

Minnesota Valley claimed the new legislation applies to the entire installation. Mr. Fagen and other parties argued an expansion of an existing system should not be considered a new installation.

3.1 Larry Fagen's complaint

Mr. Fagen contended that the expansion of his existing PV system should not be considered a new installation under the 2015 amendments:

> We contend that no system was "installed" after July 1, 2015 and therefore the entire array is not subject to any fee or "roll-over" program. Larry *expanded* a pre-existing system that was originally designed to be increased. He did not "install" a new system under the statute.
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> Furthering this point is Minn. Stat. § 216B.164, subd. 1, which states "[t]his 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." Here, Larry's system is one of only a handful in MN Valley's service territory, and his expansion could easily be grandfathered into his original system's agreement without having any appreciable impact on other cooperative members. The Commission should interpret "installed" to apply only to systems that are started from scratch, and not to system expansions, because this is the best way to "give the maximum possible encouragement to cogeneration and small power production."[12]

At the very least, Mr. Fagen argued, the first 9.2 kW—which was installed in 2012—should not be entered into the kWh carry forward compensation or be subject to any fees.

3.2 Minnesota Valley's response

Minnesota Valley argued that the language of the effective date suggests applicability turns on customer status:

> Mr. Fagen's reading of the effective date language at issue is flawed because his reading turns on a distinction between old and new ***net metered systems,*** when the Minnesota Legislature specified that the amendments applicability actually turns on ***customer*** status. Indeed, as the

[12] Minnesota Solar Energy Industries Project (representing Larry Fagen), Amended Complaint, at page 10.

> Complaint notes, the amendments to Section 216B.164 were "effective July 1, 2015, and ***appl[y] to customers installing net metered systems after that day.***"[13]

The Co-op noted that the addition to Mr. Fagen's system required a new application, inspection, contract, and production meter.[14]

> Under these facts, the Cooperative maintains that Mr. Fagen constitutes a "customer" who installed a "net metered system" after July 1, 2015. Therefore, the amendments apply not only to the new net metered system that he installed in January 2016, but also his preexisting system installed in 2012. Based on legislation's plain language, Mr. Fagen is a "customer" to which the amendments apply for both his old and new net metered systems. Although the legislature could have specified that the amendments only apply to new ***net metered systems*** themselves installed after July 1, 2015, it did not. Rather, the legislature specified that the amendments applied to ***customers*** installing new net metered systems after that date. Therefore, the amendments apply not only to the new net metered system, but also Mr. Fagen's 2012 net metered system.
>
> The Cooperative notes that this reading makes sense from an administrative perspective, as well. If the amendments were read to apply based upon system installation rather than customer status, then utilities and customers alike would be left in the awkward position of having multiple contracts and billing arrangements in effect at one time.[15]

3.3 Party comments

Several parties took issue with Minnesota Valley's interpretation of the effective date. EFCA argued that "[e]xpanding an existing solar system is a different action from installing a new system, especially when the customer intends to expand the system when he first installs it, as was the case with Mr. Fagen." EFCA continued: "A finding that all or part of Mr. Fagen's solar system is subject to the new, less favorable amendments to Minn. Stat. §216B.164, would have the effect of discouraging and penalizing Mr. Fagen and his small solar power production system, contrary to the explicit legislative intent."[16] EFCA, Fresh Energy, and Sam Villella all recommended the Commission find that the new legislation does not apply to PV systems that were installed before July 1, 2015 and expanded after.

If the Commission were to find that the legislative amendments apply to the expanded portion of Mr. Fagen's system, the parties argued it should not also apply to the portion that was installed prior to the amendments. As Fresh Energy argued, "Retroactive application of the 2015 amendments would not only penalize customers who installed systems prior to those amendments, but allowing such retroactive policymaking undermines the stability and confidence that the industry and customers need to support investment in Minnesota."[17] Sam Villella—a Connexus customer—stated he worried his utility would subject him to fees if he were to expand his existing solar array. He urged the Commission "to rule on this issue so that my utility and I can have some guidance on whether this new legislation applies to expanded systems."[18]

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[13] Minnesota Valley Cooperative Light & Power Association, April 21, 2016 response to PUC Information Requests, at page 8.
[14] Before the expansion of his system, Mr. Fagen did not have a production meter (see ibid).
[15] Minnesota Valley Cooperative Light & Power Association, April 21, 2016 response to PUC Information Requests, at page 8.
[16] Energy Freedom Coalition of America, Comments, at page 5.
[17] Fresh Energy and the Environmental Law and Policy Center, Comments, at page 7.
[18] Sam Villella, Comments, at page 1.

3.4 Party recommendations

Decision options 4-6 address Claim 4. **Decision Option 4** would find the entirety of Mr. Fagen's system be subject to the 2015 amendments, as recommended by Minnesota Valley. **Decision Option 5** would find that none of the installation is subject to the amendments, as proposed by Larry Fagen, EFCA, Fresh Energy/ELPC, and Sam Villella. These parties' secondary position, that only the *new* portion of the system be subject to the amendments, is included as **Decision Option 6**.

3.5 Staff comment

The Commission does not need to reach this issue to resolve the specific circumstances of Mr. Fagen's dispute with Minnesota Valley if the Commission finds that the customer, not the utility, elects the compensation method. Mr. Fagen has stated he wants to be compensated for output from his whole system by the same method as he was originally compensated for his system before the expansion; therefore, whether the date of the expansion was pre- or post- June 30, 2015 is not a factor. Nor is the date of expansion relevant with respect to a DG fee because Minnesota Valley is not imposing such a fee.

The Commission does not generally make decisions or issue declaratory orders without a specific dispute before it for which a decision is necessary. The Commission has not yet undertaken a rulemaking in response to the 2015 amendments to Minn. Stat. §216B.164.

However, if the Commission finds that Minnesota Valley may mandate use of the kWh carry-forward method, then the issue of whether that method can apply to Mr. Fagen's whole system, or just the expansion which occurred after June 30, 2015, needs to be decided.

4 | Minimum Bill (Claim 5)

After submitting his complaint, Mr. Fagen noted that he began reviewing a "charge to meet minimum" on his subsequent bills. He stated he had never received this charge on a bill before then. Minnesota Valley explained that the charge is its minimum bill, a policy that has been in place since the 1970s and applies to all customers, not just those who own Distributed Generation (DG). Mr. Fagen argued the charge is discriminatory and appears to be charged in an arbitrary and capricious manner.

4.1 Minnesota Valley explanation

In its May 26, 2016 Response to Information Requests, Minnesota Valley explained the "charge to meet minimum" is a minimum transformer fee, which applies to all members and has been in place since before Minn. Stat. 216B.164 was originally adopted:

> The transformer minimum charge was implemented by Minnesota Valley in the 1970's when services such as grain drying and irrigation became commonplace on the Minnesota Valley system which required large transformers for low annual energy use services. For instance, the high energy demand dryer service would only be used for a few weeks a year and remain idle the remainder of the year, which would not allow Minnesota Valley to recover the true annual cost of this service through the energy it sold to this member. The cooperative, however, is required to pay for the depreciation, interest, taxes, insurance, operation, and maintenance each month for this high capacity service. The transformer minimum charge allows the cooperative

> to collect those costs for installations that do not provide enough energy use per month to pay for the fixed costs of this service.[19]

Minnesota Valley explained that the minimum charge only applies to customers with a transformer larger than 10 kVA; the larger the transformer, the larger the minimum charge.[20] Mr. Fagen has a 25 kVA transformer, which results in a $22.50 minimum bill, and the Co-op is not able to reduce the size transformer, as Mr. Fagen's higher peak demand over the past year was 23.25 kW (in January 2016). Further, when a customer's consumption falls below the minimum bill, the customer only pays the net of the difference; in other words, if Mr. Fagen consumed $20 worth of electricity, his charge to meet minimum would only be $2.50.[21]

Minnesota Valley's position, that its minimum bill is not discriminatory toward DG customers, is included as **Decision Option 8**.

4.2 Larry Fagen response

Mr. Fagen argued that the fee appears to be arbitrary and is discriminatory toward DG customers. While the Co-op provided a formula for the calculation of the minimum bill, the sample bill it provided in its May 26th filing did not follow the formula:

> On the bill that MN Valley supplied as evidence for their charge, they have a "Charge to Meet the Minimum" of $22.50 for an unknown customer. This would suggest that the transformer for the unknown customer is the same size as Larry's; it would be 25 KVA. But if you look at the demand reading for this unknown customer, they have their highest demand reading in October 2015. It is 46.52 KW. [...] But if they have a transformer big enough to meet their demand, then a transformer of this size would yield a Charge to Meet the Minimum of *at least* $54.38 ([46.25-10] * 1.5 = $54.38). The only way this makes sense is either MN Valley is 1) arbitrarily setting transformer sizes, putting their grid at risk, or 2) they are withholding information to adequately support the Charge's methodology.[22]

Mr. Fagen continued:

> What's most intriguing about the Charge is not that it is applied in an arbitrary fashion, but that apparently MN Valley has no idea how much their transformers cost to recover, which is what the Charge is supposed to be for.
>
> […] So Larry is being charged $22.50/month for a transformer that MN Valley cannot ascertain the cost of. Presumably a 25KVA transformer has similar, if not the same, maintenance costs as a 10KVA transformer. So the difference is just the transformer cost itself.[23]

Mr. Fagen also argued the minimum bill is discriminatory and violates the statutory preference for small power production. He noted the statute's stated intent to "give the maximum possible encouragement to

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[19] At pages 1-2.

[20] Specifically, customers are charged $1.50/month for each kVA over 10. So, in this case, Mr. Fagen has a 25 kVA transformer. This calculates into a $22.50/month minimum charge: (25 kVA – 10 kVA) x $1.50/kVA = 15 kVA x $1.50/kVA.

[21] This was the case for Mr. Fagen's April 8, 2016 bill, in which his net consumption was 13 kWh ($0.57), and his Charge to Meet Minimum was reduced by $0.57.

[22] Larry Fagen, Comments, at pages 8-9 (footnotes omitted).

[23] Id., at page 9.

cogeneration and small power production consistent with protection of the ratepayers and the public."[24] The minimum bill, on the other hand, negatively impacts the economics of a solar installation. For example, Mr. Fagen's minimum bill is the equivalent of forfeiting 244 kWh/month of sales to the Co-op at the Average Retail Utility Energy Rate.[25] Mr. Fagen also argued the charge is discriminatory:

> MN Valley boasts they have 5,250 members on their website. According to their answer to DOC's IR 7, only 406 of those customers are assessed the Charge on a yearly basis. So approximately 8% of their membership is assessed this fee.
>
> Contrast that with the solar customers assessed the charge and the difference is staggering. MN Valley has 3 single-phase customers that are assessed this Charge annually and one three-phase solar customer that is assessed the Charge annually. This may not seem like a significant number, but according to MN Valley's 2016 cogeneration report, they only have 6 solar customers. This means that 67% of MN Valley's solar customers are assessed the Charge. That means you're over 8 times as likely to be assessed the Charge to Meet the Minimum if you're a solar customer than if you're not.
>
> The Charge to Meet the Minimum is discriminatory against solar customers and impermissibly reduces the payable rates for energy purchased.[26]

Mr. Fagen would like to go back to his old billing arrangement in which he would purchase all of his electricity from the Co-op and be compensated for all his generation sold to the Co-op at the Average Retail Utility Energy Rate (and not be charged a minimum bill). This was the billing arrangement they had before Mr. Fagen expanded his solar installation. He argued that he proposed this to the Co-op, but did not receive a response.[27]

4.3 Department of Commerce response

The Department argued that Minnesota Valley's minimum bill was not discriminatory, because it is also applied to non-DG customers:

> In its further Response to a Department Information Request, the Cooperative stated that over the last 12 months, it has applied a minimum charge 2,342 times to 406 single-phase members, of which three have been DG systems (including Mr. Fagen).
>
> The minimum monthly charge referenced by the Complainant does not appear to be a DG charge. So long as costs charged to qualifying facilities by a cooperative is not discriminatory in relation to the costs charged to other customers of the utility, Minn. Stat. § 216B.01 exempts cooperatives from rate regulation except as otherwise provided. Minnesota Valley applies its minimum charge consistently across all of its single phase customers, and does not apply its minimum charge to only its distributed generation customers. Consequently, the Commission does not have regulatory authority over the minimum monthly charge charged under Minnesota Valley's Single Phase Tariff.[28]

[24] Minn. Stat. § 216B.164, subd. 1
[25] Mr. Fagen's comments incorrectly stated the amount at 2,439 kWh (at page 11).
[26] Larry Fagen, Comments, at pages 11-12 (footnote omitted).
[27] *See*: id., at pages 7 and 13.
[28] Department of Commerce, Comments, at page 7 (footnotes omitted).

4.4 Staff comment

Minimum bills have been a relatively common feature of traditional utility rates. A minimum bill is sometimes in the form of a fixed monthly charge which includes a certain amount of consumption; if the customer consumes fewer kWh than included in the minimum bill, she pays the full minimum regardless, akin to a high monthly customer charge. Minnesota Valley has a different form of minimum bill, which has been in effect for many years as part of its standard rates. Minnesota Valley's minimum bill varies by the size of the customer's transformer; it is somewhat more akin in effect to a demand charge. Minimum bills are traditionally utilized to help assure fixed cost recovery from customers who have highly variable use, such as seasonal cabin residents, snow-birds, and grain drying or other seasonal farm usage.

The application of the minimum bill is further complicated in this particular situation because of the method Minnesota Valley used in the past to compute bills for net metered customers, and appears to still be using for some legacy customers. Minnesota Valley has apparently changed its computation method for newer net-metered installations for which it has installed production meters. Mr. Fagen's bill was computed under the old method prior to the expansion of his system, so a minimum bill never kicked in. With the expansion of his system the Co-op installed a production meter and changed the computation method.

From what staff can gather from several of Mr. Fagen's bills and the Co-op's answer to information requests, Minnesota Valley in the past was not computing bills based on true netting of consumption; rather, it was done on essentially a "buy all, sell all" basis for purposes of determining whether a minimum bill should be charged. See, e.g. Mr. Fagen's July 9, 2015 bill (in the attachments to his August comments). Because this billing method credited all kWhs as being purchased from the utility, a minimum bill would be unlikely to kick-in. This approach may have been taken by the Co-op for ease of billing, but is not really net-metering as contemplated by the statutes and rules. However, by preventing the minimum bill from being applied, it may have been to Mr. Fagen's overall advantage, depending on other consumption patterns and factors.

In response to information requests, MN Valley said only 3 of its net-metered DG customers (and one three-phase DG customer) were charged the minimum bill last year. But, it also said only 3 of its 12 net metered customers are on the kWh carry forward method, with the rest presumably under the old arrangement. It is not clear to staff whether the difference is due to the kWh carry-forward method or to the installation of production meters, or both.

It is likely that minimum bill provisions kick-in much more often for residential net-metered customers, than for any other type of non-seasonal residential customers, due to the magnitude of the reduction in kWh purchased from the utility when self-generating. Whether a minimum bill is unduly discriminatory toward net-metered customers and/or unreasonably discourages cogeneration and small power production is a difficult issue, especially if the minimum bill was in effect prior to federal PURPA and state net-metering laws as it was for Minnesota Valley.

5 | Uniform Statewide Contract and 16-09 filing (Claims 2 and 3)

5.1 Larry Fagen's complaint

In claims 2 and 3, Mr. Fagen argued that contract provided by Minnesota Valley was not the uniform statewide contract and was not reported to the Commission in its annual small power production tariff filing (Docket16-09).

Mr. Fagen argued the Co-op violated his right to receive the uniform statewide contract (Minn. Rule 7835.9910). According to Mr. Fagen, "The statute and rules when read together make clear that the unaltered contract must be presented to the QF, if the system is under 40kW." [29] The contract provided by Minnesota Valley was not the uniform statewide contract, and Minnesota Valley has not filed a request with the Commission to implement a non-standard provision (per Minn. Rule 7350.9920).

MR. Fagen also noted that the Co-op did not inform the Commission that it intended to make the kWh carryforward method mandatory. Though Minnesota Valley has made several filings in Docket 16-09, the contract it filed did not have the kWh carryforward option pre-selected. Thus, Mr. Fagen "was aggrieved by the utility's failure to file this program, because he invested in a solar array with the intention of selecting another option under Minn. Stat. § 216B.164, subd. 3 that did not include a fee. Larry had no real notice of the 'roll-over' program or the potential for a retroactively applied fee, because the utility never had either of those options approved by the Commission."[30]

5.2 Minnesota Valley response

While Minnesota Valley agreed that the contract provided to Mr. Fagen was not the uniform statewide contract, the Co-op argued the contract "substantially conformed" to the uniform statewide contract. The Co-op noted that the uniform statewide contract does not offer the kWh carryforward option, as the contract has not been updated since the 2015 amendments. Thus, even though the statue gives co-ops the right to offer the kWh carryforward method, the uniform contract has not yet been updated to reflect this option.

With respect to Claim 3—that Minnesota Valley's 16-09 filing was inadequate—the Co-op argued:

> Neither Minn. Stat. § 216B.1611 nor the administrative rules that the Complaint cites require Minnesota Valley to disclose the use of a carry-forward bill credit compensation methodology authorized by Minn. Stat. § 216B.164, subd. 3(f) in its annual schedules. Compensating qualifying facilities using the carry-forward methodology is provided for in the statute itself and does not require separate Commission approval. Moreover, the carry-forward methodology is not a "fee" of any sort, but rather, a valid methodology for compensating qualifying facilities as recognized and authorized by the Minnesota Legislature.[31]

5.3 Larry Fagen response

Mr. Fagen took issue with Minnesota Valley's claim that its contract "substantially conformed" to the uniform statewide contract, arguing "Not only did MN Valley pre-select options, and insert its own

[29] Larry Fagen, Amended Complaint, at page 8.
[30] Id., at page 10.
[31] Minnesota Valley Cooperative Light & Power Association, April 21, 2016 response to PUC Information Requests, at page 7.

language surrounding the new amendment subdivision 3(f), they also failed to provide the other available options."[32] Mr. Fagen noted that the Average Retail Utility Energy Rate was not an option, but instead the contract offers a "wholesale power rate." In Mr. Fagen's words, "The wholesale power rate is not a statutorily authorized rate. It appears that they simply invented it, and inserted it into the statewide contract. It seems this was done in an effort to either 1) bypass the statute and statewide contract or 2) to make the carry forward program look more appealing in an effort to trick customers."[33]

5.4 Staff comment

The uniform statewide contract is contained in Minnesota Rules, Part 7835.9910. The contract has been amended to incorporate the 2013 statutory changes, but the Commission has not undertaken a rulemaking to incorporate the 2015 statutory changes. Even the Commission had commenced a rule-making immediately after passage of the 2015 amendments, it is unlikely that a final rule would be in place yet, and certainly there could not have been a rule change in place at the time Mr. Fagen's expanded system was in place.

Lack of a change to the rule does not excuse the utility from implementing the law. If the Commission finds that the QF customer has the right to choose his compensation method under the law, then MN Valley is not authorized to limit the option to the kWh carry-forward method in its contract.

6 | Remedy and Additional Actions

Minn. Stat. § 216B.164, subd. 5 states:

> **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.

Thus, in addition to a substantive determination, the Commission will also need to make a determination as to the appropriate remedy for the prevailing party.

6.1 If the Commission finds in favor of Minnesota Valley

If the Commission finds in favor of Minnesota Valley on all or some of the issues, the Commission could also require Mr. Fagen to pay the Co-op's "costs, disbursements, and reasonable attorneys' fees" if the Commission also finds that Mr. Fagen's claims were "made in bad faith, or are a sham, or are frivolous."

Minnesota Valley did not raise the issue of the claim being frivolous, and staff thinks it is quite clear that the it is not made in bad faith, a sham or frivolous, Staff did not include it as a decision option.

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[32] Larry Fagen, Comments, at page 4.

[33] Ibid.

6.2 If the Commission finds in favor of Mr. Fagen

If the Commission finds in favor of Mr. Fagen on some or all of the issues, it may also want to direct Minnesota Valley to pay Mr. Fagen's "costs, disbursements, and reasonable attorneys' fees." This option, which is included as **Decision Option 10**, was supported by Mr. Fagen, EFCA, FE/ELPC, and MCEA/the Sierra Club.

EFCA and Fresh Energy also recommended that the Commission require Minnesota Valley to offer all existing and all future qualifying facility customers a contract that allows the customer to choose among the statutory compensation rates. This option is included as **Decision Option 11**.

Mr. Fagen also requested that the Commission preclude Minnesota Valley "from implementing a retaliatory or retroactive fee against Larry in any subsequent agreement."[34] This request is included as **Decision Option 12**.

6.3 Staff comment

Parties did not directly address what remedies are appropriate with respect to re-calculating Mr. Fagen's bills if the Commission finds that he should have been able to choose net-metering with compensation under AURER and/or if the minimum bill was applied inappropriately.

With respect to net-metering, the Commission could require that MN Valley calculate new bills using the AURER beginning immediately, and re-calculate bills for January 2016 forward. The Commission could also require MN Valley to issue a check to Mr. Fagen for all of his "banked" kWh. A similar approach could be taken if the Commission finds the minimum bill was inappropriately applied.

The Commission may also want to determine whether these remedies should apply all other similarly situated customers of Minnesota Valley as in **Decision Option 13**.

[34] Larry Fagen, Comments, at page 13.

7 | Decision Options

Claim 1: Interpretation of Minn. Stat. §216B.164 Subd. 3(f)

1) Find that Minnesota Valley did not violate Mr. Fagen's right to choose a compensation method other than the "kWh carry forward" method, and dismiss Mr. Fagen's first claim *(Minnesota Valley)*; ***OR***

2) Find the Minnesota Valley violated Mr. Fagen's right to choose a compensation method other than the "kWh carry forward" method *(Larry Fagen, Department, EFCA, Fresh Energy/ELPC, MCEA/Sierra Club, and Sam Villella)*; ***AND***

3) Deem the signed contract between Mr. Fagen and MN Valley void and cancelled. Require Minnesota Valley to present a new contract that includes an option to select compensation under Minn. Stat. § 216B.164, subd. 3(d) *(Larry Fagen)*.

Claim 4: Is an Expansion a New Installation?

4) If a DG system was installed before July 1, 2015 and expanded after that date, *the entire system* shall be subject to the 2015 legislative amendments *(Minnesota Valley)*; ***OR***

5) If a DG system was installed before July 1, 2015 and expanded after that date, *no part of the system* shall be subject to the 2015 legislative amendments *(Larry Fagen, EFCA, Fresh Energy/ELPC, and Sam Villella)*; ***OR***

6) If a DG system was installed before July 1, 2015 and expanded after that date, *only the expanded portion of the system* shall be subject to the 2015 legislative amendments.

7) Find there is no need to reach this issue.

Claim 5: Minimum bill

8) Find that Minnesota Valley's minimum bill is not discriminatory toward net-metered QF customers (*Minnesota Valley, the Department*); ***OR***

9) Find the minimum bill as applied by Minnesota Valley to net-metered QF customers is unreasonably discriminatory and/or unreasonably discourages small power production.

Remedy and Additional Recommendations

10) Require Minnesota Valley to pay Mr. Fagen's costs, disbursements, and reasonable attorneys' fees as required by Minn. Stat. § 216B.164, subd. 5 for all Claims within 30 days of Mr. Fagen submitting a claim to the Co-op. *(Larry Fagen, Department, EFCA, Fresh Energy/ELPC, and MCEA/Sierra Club)*.

11) Require Minnesota Valley to offer all existing and all future qualifying facility customers a contract that allows the customer to choose among the statutory compensation rates *(EFCA, Fresh Energy/ELPC).*

12) Within 30 days of this Order, Minnesota Valley shall recalculate all of Mr. Fagen's 2016 bills as if he had been compensated under Minn. Stat. § 216B.164, subd. 3(d).

13) Within 30 days of this Order, Minnesota Valley shall recalculate the bills of all other customers who were put on the kWh carryforward method who did not specifically elect that method as if they had been compensated under Minn. Stat. § 216B.164, subd. 3(d).

14) Within 60 days of the date of this order, require Minnesota Valley to make a compliance filing demonstrating that it has complied with all the requirements of this Order.

Appendix A:

Minn. Stat. §216B.164 (2015 amendments in red and underlined)

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. A cooperative electric association or municipal utility may charge an additional fee to recover the fixed costs not already paid for by the customer through the customer's existing billing arrangement. Any additional charge by the utility must be reasonable and appropriate for that class of customer based on the most recent cost of service study. The cost of service study must be made available for review by a customer of the utility upon request. In the case of net input into the utility system by a qualifying facility having less than 40-kilowatt capacity, compensation to the customer shall be at a per kilowatt-hour rate determined under paragraph (c), ~~or~~ (d), or (f).

(b) This paragraph applies to public utilities. For a qualifying facility having less than 1,000-kilowatt capacity, the customer shall be billed for the net energy supplied by the utility according to the applicable rate schedule for sales to that class of customer. In the case of net input into the utility system by a qualifying facility having: (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-kilowatt capacity, compensation to the customer shall be at a per-kilowatt rate determined under paragraph (c) or (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 than 40-kilowatt capacity may elect that the compensation for net input by the qualifying facility into the utility system shall be at the average retail utility energy rate. "Average retail utility energy rate" is defined as the average of the retail energy rates, exclusive of special rates based on income, age, or energy conservation, according to the applicable rate schedule of the utility for sales to that class of customer.

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

(f) A customer with a qualifying facility or net metered facility having a capacity below 40 kilowatts that is interconnected to a cooperative electric association or a municipal 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 kilowatt-hour credits carried forward by the customer cancel at the end of the calendar year with no additional compensation.

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 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.

(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 3 and 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 council or 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.

1Sp2015 c 1 art 3 s 21: EFFECTIVE DATE.

This section is effective July 1, 2015, and applies to customers installing net metered systems after that day.