BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates

Docket 6690-UR-122

POST HEARING BRIEF OF RENEW WISCONSIN

INTRODUCTION

In this proceeding, RENEW Wisconsin (RENEW) seeks changes to Wisconsin Public Service Corporation's (WPSC) Parallel Generation – Net Energy Billing tariff (Pg-4) which, as proposed, is inconsistent with comparable net metering tariffs ordered for other investor-owned Wisconsin utilities and fails to ensure fair and lawful compensation for customer owned generation. RENEW respectfully requests that the commission order the following with respect to the Pg-4 tariff:

(1) Maintain the current 100 kW size cap, which was recently ordered by the Commission, and reject WPSC's unsupported proposal to limit the customer system size the customer's immediate or short-term expected load;

(2) Consistent with its orders for other investor owned utilities, require that WPSC use an annual, as opposed to monthly, netting period;

(3) Reject WPSC's proposal to limit net metering to energy-only customers who are not enrolled in a response rewards program;

(4) Reject WPSC's proposal to purchase net metered customers' excess electricity at a rate based on the MISO LMP, and instead require WPSC to pay its full avoided cost as required by PURPA.

BACKGROUND ON NET METERING

The Commission has required that electric utilities in Wisconsin provide "net metering" options for electric customers in this state for thirty years. *See Investigation on the Implementation of Cogeneration and Small Power Production Rates*, Dockets 5-ER-11, 5-ER-12, 5-ER-13, 1983 Wisc. PUC LEXIS 46, *7 (Wis. Pub. Serv. Comm'n June 21, 1983). The Commission has required net metering as an option for customers "in order to reduce the costs of interconnecting small customer-owned generation systems with the utility's" by allowing customers "to receive a credit for… excess energy without the expense of a second meter, which might have cost more than the receipts from the sale of the small amounts of surplus energy expected to be produced." *In re No. States Power Co.*, Dkt. 4220-UR-103, 1989 Wisc. PUC LEXIS 83, *30, 110 P.U.R. 4th 418 (Wis. Pub. Serv. Comm'n December 27, 1989). Net metering, or net energy billing[1], is a method of determining how much energy is purchased by a customer over the relevant time period. 16 U.S.C. § 2621(d)(11); Application of Wis. Pub. Serv. Corp. for Authority to Adjust Elec. and Natural Gas Rates, 6690-UR-120, Order at 48 (Wis. Pub. Serv. Comm'n., Jan. 13, 2011) (ERF #143675); *MidAmerican Energy Co.*, 94 F.E.R.C. ¶61,340,

[1] While these two terms have different meanings, they both apply to different parts of the same concept and often one is used to refer to the whole transaction. "Net energy billing" refers to the accounting of energy flows from one bill to the next so that they can "netted" over a relevant netting period so that, at the end of the relevant netting period, the amount owed by the customer or utility to the other can be calculated. "Net metering" refers to the service provided with a single meter that rotates forward and backward to record the net energy flow to or from the customer.

62,262 (March 28, 2001). While at any given point during the time period (i.e., a month or a year) the customer may be using more electricity than he or she is generating or generating more than he or she is using, the net of these electric flows over the billing cycle defines whether energy is purchased by the customer. *Id*. Positive flow from Wisconsin Public Service Corporation (WPSC) to the customer over the relevant period is a sale by WPSC to that customer, and a negative flow is a sale by the customer to WPSC.

In this rate case WPSC has proposed a Parallel Generation – Net Energy Billing tariff (Pg-4) that:

- Reduces the existing size cap on customer-owned net metered generating systems from 100 kW to 20 kW;
- Imposes a new requirement that customers size their systems to their expected load in order to be eligible for net metering;
- Imposes a new requirement that customers be served by one of WPSC's energy only rate schedules in order to be eligible for net metering;
- Continues its practice of netting generation and consumption on a monthly basis as opposed to an annual netting period as used by other major utilities in Wisconsin; and
- Purchases a net-metered customer's excess energy at a price equal to the annual average of short term locational marginal prices ("LMP") set by MISO.

See Direct-WPSC-Laursen-25 to 27; Ex.-WPSC-Laursen-1, Schedule 14, at 2-3. As proposed by WPSC, the Pg-4 tariff is highly regressive, runs counter to state and federal policies encouraging the deployment of customer-owned distributed generation systems, and will undoubtedly slow the already-waning growth of these systems in WPSC's service territory, resulting in the loss of good paying jobs for electricians and small energy system installers. As explained below, the Commission should modify the proposed the Pg-4 tariff to appropriately account for the myriad benefits of customer-owned distributed generation; remove discriminatory barriers to the development of small-scale renewable facilities; and ensure compensation that reflects WPSC's true avoided cost, not just marginal energy costs.

ARGUMENT

I. THE COMMISISON SHOULD REJECT WPSC'S PROPOSAL TO LOWER MAXIMUM SYSTEM SIZE UNDER THE Pg-4 TARIFF FROM 100 KW TO 20 KW AND TO REQUIRE CUSTOMERS TO SIZE THE SYSTEM TO MATCH THEIR LOAD.

WPSC has proposed two unsupported limitations on the size of a net-metered customer's renewable generating system as part of the Pg-4 tariff: First, WPSC seeks to reduce its current size cap for net-metered systems from 100 kW to 20 kW; and second, WPSC proposes to introduce a new requirement that customers size their systems to their expected load in order to be eligible for net metering. Both of these size restrictions are arbitrary, unsupported by the evidence in the record, and serve as a harsh disincentive on the expansion of distributed generation. Because WPSC has failed to satisfy the evidentiary requirements to justify a change to agency policies under Wisconsin law, the Commission must reject WPSC's proposed tariff changes. Moreover, even if WPSC had met its evidentiary burden, the Commission should reject the proposals anyway because they are bad policy.

A. <u>WPSC failed to provide any factual basis upon which the Commission could change its conclusion in Docket 6690-UR-120 to set the net metering tariff system size at 100 kW</u>.

In WPSC's last full rate case, the Commission increased the cap on net-metered facilities from 20 kW to 100 kW, largely based on evidence provided at hearing by Commission staff and RENEW. Final Decision, *Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates*, Docket No. 6690-UR-120 (Jan. 13, 2011) at 47-50. The result of this change, the Commission noted, would "accommodate small generator installations larger than the current 20 kW limit." *Id*. at 50. WPSC provided no new explanation, much less factual evidence in the record, that could justify a reversal of the Commission's prior decision in Docket 6690-UR-120 lifting the size cap to 100 kW.

There is still a need to accommodate installations between 20 kW and 100 kW. RENEW witness Michael Vickerman provided an example of a company called Applied Manufacturing Industries (AMI) that has the roof space for a 100 kW photovoltaic system and the demand to consume all of the electricity it can produce from a system of that size on an annual basis, and would be an ideal candidate for the Pg-4 tariff. Direct-RENEW-Vickerman-23 to 25. Under WPSC's current Pg-4 tariff, the company can obtain a credit (at the retail rate) for its energy produced over the course of the month, and it therefore has an incentive to build a 100 kW system. *Id*. However, it would be less economical for AMI to install 20 kW system, affecting its ability to control its energy costs, promote its sustainability efforts, and compete in a global marketplace. *Id*. And absent net metering, a system between 20 and 100 kW is uneconomical.

Moreover, the requirement to size a system to match the customer's expected load becomes unnecessary if WPSC prevails in its effort to set the buy-back rate at the avoided cost (or, for that matter, at any price less than the levelized cost of a solar PV system). In any situation where excess electricity is purchased by WPSC at less than the levelized cost of the renewable system, the invisible but strict hand of the market provides the strongest disincentive possible for a net-metered customer to attempt to oversize her system. As Mr. Vickerman testified, the average MISO LMP—which WPSC proposes to use as the "avoided cost" buyback rate—is about 3.25 cents/kWh, which is <u>less than</u> the levelized cost of solar photovoltaic systems. Direct-RENEW-Vickerman-12. Oversizing the connected generating system results in a net economic loss for each kWh generated but not used by the customer. In light of this economic penalty, there is no need for the Commission to add bureaucratic and arbitrary size limitations.

Mr. Laursen also suggests that the Commission's order in WEPCO's most recent rate case sets a "precedent" for reducing the cap from 100 kW to 20 kW. Direct-WPSC-Laursen-25.[2] This is simply incorrect; to the extent there is relevant precedent, it can be found in the Commission's orders in Docket Nos. 6690-UR-120, 4420-UR-117, and 3270-UR-117 (rate cases for WPSC, NSPW, and MGE, respectively) <u>increasing</u> the size cap for utility net-metering tariffs to 100 kW. Moreover, in the WEPCO case, the Commission merely <u>maintained</u> the 20 kW size cap that was already a part of that utility's net metering tariff. Here, if WPSC's proposal is followed, the Commission would be

[2] Mr. Laursen cites Docket 6630-UR-106; he likely means Docket 5-UR-106.

changing the existing size limitation by decreasing it—which the Commission has never done before. Furthermore, the Commission cited three factual considerations unique to WEPCO in Docket 5-UR-106: (a) WEPCO had presented evidence of an existing net-metered customer "who was abusing the tariff by installing a significantly larger system than the load he was using"; (b) WEPCO had presented testimony "that a 20 kW limit will help limit the impact of customer-owned generation on non-participating customers"; and (c) because "WEPCO is a much larger utility than some of the others in the state [including WPSC], there is more of a possibility of customers attempting to take advantage of this tariff." Order Denying RENEW Wisconsin's Request for Rehearing and Reconsideration, Docket 5-UR-106 (Feb. 11, 2013) at 3. While RENEW does not agree that even these facts justify a 20 kW size cap, here WPSC has presented no evidence of changed circumstances or unique considerations that might warrant a reduction in its cap on net-metered systems. The Commission cannot change the WPSC net metering tariff without a sufficient basis, which must be based on evidence in the record. Wis. Stat. § 227.57(6), (8). WPSC failed to make any such record in this case.

B. WPSC's claim that a size cap is needed to avoid "inequity" lacks evidence in the record.

It is black letter administrative law that orders of the Commission, even those that involve the exercise of agency discretion, must be based upon a rational analysis of the requisite factors and must be supported by evidence in the administrative record. *Wis. Ass'n of Mfrs. & Commerce, Inc. v. Pub. Serv. Com.*, 100 Wis. 2d 300, 310 (1981) (reversing an order of the Commission that contained "no findings and no analysis . . .

to justify the choice made, no indication of the basis on which the Commission exercised its expert discretion."); *Voight v. Washington Island Ferry Line, Inc.*, 79 Wis. 2d 333, 342 (1977). Although the Commission is not bound by its prior orders, deviations from prior orders are justified only when supported by a sufficient and rational explanation. Wis. Stat. § 227.57(8); *Arrowhead United Teachers Org. v. Wis. Employ. Relations Comm'n*, 116 Wis. 2d 580, 589, 342 N.W.2d 709 (1984); *Wisconsin Pub. Serv. Corp. v. PSCW*, 109 Wis. 2d 256, 263-65, 325 N.W.2d 867 (1982).

The record here is incomplete, and does not support WPSC's request to set strict size limits on customer-owned net metered facilities, much less its request that the Commission reverse course from its 2011 order increasing the size cap for such facilities. WPSC's sole witness on the issue of net metering, Russell Laursen, provided no evidence to support the reduction in the size cap of net-metered facilities from 100 kW to 20kW, and his proffered bases for setting strict size limitations on the Pg-4 tariff are flawed. His primary contention is that the expansion of net-metering creates "inequity" by shifting a "larger portion of fixed distribution, transmission, and generation costs" to other customers. Direct-WPSC-Laursen-24; *see* also Rebuttal-WPSC-Laursen-4 to 6. But his testimony is pure speculation, as WPSC has made no effort to assess the actual cost of providing service specifically to net-metered customers. *See* Direct-PSC-Singletary-20r (noting that neither Mr. Laursen nor any other WPSC witness produced any "quantitative evidence into the record that would support restricting service for Pg-4 customers.").

Mr. Laursen testifies that "[n]et energy billing impairs the ability of WPSC to collect fixed distribution, transmission, and generation system costs that are currently included in the energy rate." Direct-WPSC-Laursen-24. But this argument assumes first that there are costs caused by net metering customers that are not collected in the energy rate. WPSC provided no evidence that net metering customers cause more costs than is recovered in energy rates that they pay. WPSC's sole witness on this issue also claimed without any factual basis that net metering does "little to reduce the fixed costs of providing an electric distribution, transmission, and generation system." *Id*. at 25. He does not explain what he means by "little" and he proffers no evidence, calculations or other data to substantiate his opinion. His claims are so vague as to be meaningless, and without factual support they do not warrant the strict size caps WPSC is seeking here.

The closest Mr. Laursen comes to actually quantifying the costs supposedly shifted from net-metered customers to other customers is in his response to an example provided by RENEW's Mr. Vickerman of the monthly production vs. billing of a single hypothetical customer with a net-metered solar PV system. *See* Rebuttal-WPSC-Laursen-4, 5. Mr. Laursen duplicates the data table prepared by Mr. Vickerman, adds an assumed monthly cost of $48.71, and uses the new table in an attempt to show that net metered customers cause more costs than they pay. *Id*. Yet as Mr. Vickerman explained, Mr. Laursen's response is flawed because it makes at least three faulty assumptions. First, it arbitrarily assumes a 1 kW peak demand reduction value to a 4 kW system, even though the undisputed evidence in the record (including from

WPSC's own records) shows that the appropriate peak demand reduction value of such a system is at least 2 kW. Second, Mr. Laursen incorrectly assigns no dollar value to the many benefits of customer-owned generating systems, which are discussed in more detail below but which include avoided line losses, avoided regional transmission costs, reduced need for investment in generation, transmission and distribution, among others. Surrebuttal-RENEW-Vickerman-5-8.

Finally, Mr. Laursen's example assumes, without any rational basis, that the costs caused by the hypothetical Pg-4 customer is $48.71, which is the average cost assumed for WPSC's Rg-1 tariff. This is wrong for several reasons. First, there is no basis to assume that a net-metered customer with a solar PV system would actually cause anywhere near the costs caused by the average residential customers, and the record indicates it would actually be much less because the net-metered customer would cause WPSC to incur fewer service line, transformer, distribution, substation, transmission, and generation costs. Surrebuttal-RENEW-Vickerman-7. Second, Mr. Laursen assumes without explanation that the hypothetical net metered customer would cause WPSC to incur exactly the cost that the "average" Rg-1 customer causes—and that buying less energy than the average Rg-1 customer constitutes a subsidy. In fact, as Mr. Vickerman explains, WPSC's assumptions undercuts WPSC's own argument because under WPSC's theory, half of WPSC's residential customers—those 50% who cause more than the class-wide average of $48.71 per month—are subsidized by all other customers. *Id*. In other words, in order to support a convoluted argument that the tiny category of net metering customers should be constrained, WPSC creates a theory that in application means that half of its customers are receiving an improper "subsidy." Not only should the Commission reject WPSC's arguments as unsupported by evidence and illogical, it also should do so to avoid opening the door to charges of improper subsidy by half of WPSC's customers.

In sum, the record is simply devoid of any evidence that net-metered customers cause WPSC to incur costs that are not recovered from them, or that any "inequity" or "subsidy" is created between net metered customers in the Pg-1 tariff and other residential customers in the Rg-1 tariff.

C. <u>WPSC's claim that a size cap is needed to avoid "inequity" ignores the many benefits provided by customer-owned renewable facilities</u>.

As discussed above, the main thrust of Mr. Laursen's testimony is to assert that the expansion of customer-owned renewable generation facilities will require that WPSC shift certain fixed costs to WPSC's other residential customers, creating a subsidy or an "inequity" in how those costs are recovered. Not only has WPSC failed to quantify or even explain what "costs" are shifted under net metering, but it has completely neglected to account for the considerable <u>benefits</u> conferred on other customers from distributed generation.

As Mr. Vickerman explains, customer-owned renewable facilities not only reduce the utility's energy purchases (a benefit arguably reflected by the MISO LMP), but they also reduce the utility's need for new generating capacity, avoid line losses, reduce the need for new distribution and transmission facilities, hedge against fuel price uncertainties, reduce RPS compliance costs, avoid transmission costs, and suppress market prices. *See* Direct-RENEW-Vickerman-26 to 32. These benefits, which have been quantified at the system-wide level by studies in Vermont, New Jersey, and elsewhere (*See* Direct-RENEW-Vickerman at 27-27 and Ex.-RENEW-Vickerman 4, 5, and 6), undoubtedly have a dollar value that has not been calculated by WPSC. The many benefits provided to WPSC by customer-owned net-metered facilities must be accounted for, and should at a minimum be used to offset any purported "costs", before WPSC's unfounded claim of "inequity" can be given any credence. While WPSC's Mr. Laursen claims that he thinks the benefits are small, he makes zero attempt to substantiate that claim. The actual, undisputed, evidence in the record shows that net metering customers confer benefits on other customers, not the other way around.

II. THE COMMISSION SHOULD MAKE WPSC'S Pg-4 NET METERING TARIFF CONSISTENT WITH THE OTHER INVESTOR OWNED UTILITIES BY REQURIING AN ANNUAL, AS OPPOSED TO A MONTHLY, NETTING PERIOD.

In its proposed Pg-4 tariff, proposes to continue a flawed policy of "monthly netting," which credits its net-metered customers for their offset consumption plus any excess generation sent to the grid on a monthly basis. Evidence in the hearing record shows that using a monthly netting period instead of the annual netting period used by other Wisconsin utilities[3] crates a disincentive in the deployment of customer-owned solar systems, which make up more than 90% of WPSC's newly added interconnected

[3] It is important to note that the only other Wisconsin utilities that offer net metering under a two-tiered rate structure—Northern States Power-Wisconsin (NSPW), Madison Gas & Electric (MGE), and Wisconsin Electric Power Company (WEPCO)—use an annual netting period. Direct-RENEW-Vickerman-14.

net-metered systems. Direct-RENEW-Vickerman-7. The Commission should instead modify the Pg-4 tariff by requiring annual netting.

First, as a practical matter, use of a monthly netting period provides a false incentive to a potential net-metered customer to install a solar PV system smaller than her annual average load. As shown by Mr. Vickerman's testimony, even a hypothetical solar PV system that is carefully designed to match a customer's load on an annual basis will not precisely match her load on a monthly basis; instead, these systems will produce less electricity than is needed during the summer and winter months, and produce more than is needed during the spring and fall. Direct-RENEW-Vickerman-10 to 12. Because the excess electricity generated during the shoulder season (March, April, May, September, and October) will be sold to WPSC at a loss—that is, at WPSC's "avoided cost" which is less than the levelized cost of a solar PV system—this hypothetical customer will be forced to either accept those financial losses (thereby extending the payback period of her system) or will size her system smaller than her peak summertime load so as to minimize monthly overproduction and avoid those losses. *Id*. at 12-13. With either result, this WPSC customer is at a disadvantage when compared to net metered customers served by other Wisconsin utilities that use an annual netting period. *Id*. at 15-16.

As Mr. Vickerman explains, this discriminatory effect of WPSC's monthly netting period is felt in other ways. For example, because a WPSC customer under the Pg-4 tariff is likely to forego projects or size their facilities to be smaller than their peak demand, they will be deprived of Focus on Energy incentives that are available to customers of other utilities in Wisconsin. *Id*. at 15-16. Moreover, monthly netting will also have the effect of increasing the per-unit cost of a WPSC customer's solar PV system by artificially suppressing the system size below the size that is optimal, on an annual basis, for that customer's demand. *Id*. at 16.

Changing from a monthly to an annual netting period would have, at most, a *de minimis* impact on WPSC's revenues. The record contains the undisputed estimate that new solar PV installations under the Pg-4 tariff in 2014 and 2015 would have a cumulative impact of between $36,000 to $72,000—representing at most 0.0075% of WPSC's revenues and an indiscernible cost to ratepayers. *Id*. at 18-19. By contrast, as shown above and in more detail in Mr. Vickerman's testimony, the benefits to current and potential future net-metered customers of annual netting are considerable. The Commission should modify the proposed Pg-4 tariff to establish an annual, as opposed to monthly, netting period.

III. THE COMMISSION SHOULD REJECT WPSC'S PROPOSAL TO LIMIT NET METERING TO ENERGY-ONLY CUSTOMERS WHO ARE NOT ENROLLED IN A RESPONSE REWARDS TARIFF.

WPSC initially sought to exclude demand charge customers and customers participating in its Response Rewards program from the Pg-4 net metering tariff. Direct-WPSC-Laursen-26. According to testimony of WPSC witness Mr. Laursen, WPSC has withdrawn its proposal to limit net-metering to energy-only rate schedules, contingent upon the Commission imposing a 20 kW cap on the size of customer-owned generating facilities. *See* Rebuttal-WPSC-Laursen-6. While WPSC is right to rescind its misguided proposal limiting access to the Pg-4 tariff, it should not be conditional upon anything, and the tariff should be available to demand-billed customers regardless of the system size cap imposed by the Commission.

WPSC offered no evidence to support its proposal to limit net-metering to energy-only rate schedules, regardless of whether a 20 kW size cap is also imposed. The sole basis for its request to exclude demand charge customers is that the Pg-4 tariff "is intended for small customers who should only quality for energy-only rate schedules." Direct-WPSC-Laursen-26. There is no evidentiary support for this assertion in the record, however, and it is directly rebutted by PSC witness Mr. Singletary as well as RENEW's witness Mr. Vickerman. As Mr. Singletary explained, the Pg-4 tariff provides an avenue for "small to medium sized customers, both residential and commercial, [to] control their energy costs," an important consideration "in a still-sluggish economy." Direct-PSC-Singletary-22r. Moreover, the proposal to limit the Pg-4 tariff to energy-only rate schedules (which is presumably an additional attempt to limit the size of customer-owned net metered generation facilities) is unnecessary given that the Pg-4 tariff provides an energy-only benefit. *Id*. at 23r. In other words, a customer cannot "roll back" her demand, and since demand-only rate schedules typically have lower energy charges than energy-only rate schedules, there is "a limited incentive to oversize generation with respect to load" for demand-energy customers. *Id*.

Indeed, since demand-energy customers (unlike energy-only customers) are actually assessed energy, monthly demand, distribution demand, and customer charges separately, there is even less of a risk that WPSC will not recover its fixed costs if these customers are enrolled in the Pg-4 tariff. *Id.*; *see also* Direct-RENEW-Vickerman-23. This undercuts WPSC's broader attack on net metering, which is based almost exclusively on its unsupported argument that net metering customers are "subsidized" by other customers because net metering customers do not pay their share of fixed costs. Even if this flawed argument was correct, WPSC should welcome demand-energy customers into the Pg-4 tariff, not exclude them from it.

As for WPSC's request to exclude customers enrolled in the Response Rewards program from the Pg-4 tariff, the sole basis it provides is that the program "require[s] manual billing for Pg-4 customers, and consequently result[s] in an unnecessary administrative burden." Direct-WPSC-Laursen-27. But neither Mr. Laursen nor any other WPSC witness attempted to quantify this "burden," and as PSC witness Mr. Singletary explained, the burden is minimal: approximately $40 per bill, for the one rewards response customer who is currently taking service under the Pg-4 tariff. Direct-PSC-Singleton-23r. Moreover, testified Mr. Singletary, any such administrative burden will be temporary, as WPSC intends to complete a billing system migration project in the next 12 months which will eliminate the need to manually bill Pg-4 customers. *Id*. at 24r. Ironically, WPSC has forced the parties and the Commission staff to bear the administrative burden of considering and submitting testimony on the issue, and forced the Commission to decide the issue, all to avoid WPSC's temporary "administrative burden" of less than $5000. In short, WPSC failed to provide sufficient justification for discriminating against customers enrolled in the Response Rewards program by excluding them from the Pg-4 tariff.

IV. THE COMMISSION SHOULD REJECT WPSC'S PROPOSAL TO PURCHASE EXCESS GENERATION FROM Pg-4 NET METEREING CUSTOMERS AT THE AVERAGE MISO LMP AND INSTEAD REQUIRE WPSC TO PAY THOSE CUSTOMERS ITS FULL AVOIDED COSTS.

Finally, the Commission should modify the Pg-4 tariff to ensure that WPSC's net-metered customers are paid for the electricity they send to the grid at a buy-back rate reflecting WPSC's true avoided cost, which is not reflected in the current rate (which is based upon the annual average MISO LMP).

PURPA requires WPSC to purchase electricity from certain customer-owned renewable generation facilities (known as "qualifying facilities" under PURPA) at its "avoided cost", and federal regulations implementing PURPA require that Commission to consider, "to the extent practicable", a number of factors when calculating avoided cost. *See* 18 C.F.R. § 292.304(e). As is clear from the regulations, the Commission must consider a number of factors—such as avoided capacity costs—beyond the mere short term marginal price of energy on the regional MISO market when determining a utility's avoided cost. For example, the Commission must consider: (a) WPSC's "plan for the addition of capacity;" (b) "the usefulness of energy and capacity supplied from a qualifying facility during system emergencies;" (c) the "individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system;" and (d) the deferral of capacity additions and the reduction of fossil fuel use." 18 C.F.R. §§ 292.304(e)(1), (2)(v), (2)(vi), and (3); *id*. § 292.302(b).

As explained by Mr. Vickerman, the average MISO LMP does not reflect WPSC's true avoided cost for several reasons. First, customer-owned generation that qualifies for net metering will be primarily solar, which generates electricity anytime there is sufficient sunlight and will likely be in place for twenty years or more. Direct-RENEW-Vickerman-38. The electricity provided by these customers is reliable over the long term and they should therefore get the benefit of a buy-back rate based upon WPSC's <u>levelized</u> avoided cost, just as parallel generators seeking a long-term energy sales contract with WPSC do. In fact, such an approach is similar to that used by WPSC when it calculates the PURPA avoided cost of other variable, renewable energy sources for possible power purchase agreements. *Id*. at 38; Ex.-RENEW-Vickerman-9 (showing that WPSC considers, *inter alia*, avoided capacity costs and avoided emissions costs when determining avoided costs as part of a power purchase agreement).

Second, the use of an <u>annual average</u> LMP is inconsistent with the generation profile of solar PV, which represents approximately 90% of WPSC's present and anticipated future Pg-4 customers. Direct-RENEW-Vickerman-39. As the record shows, these customers produce excess electricity that is sold to WPSC only during daylight hours, and predominantly during the summer and fall. *Id*.; Ex.-RENEW-Vickerman-10. Because the MISO LMP during daylight hours in the summer and fall is considerably higher than the annual average LMP across all 8760 hours, the buy-back rate provided to Pg-4 customers when they are actually producing and selling electricity is artificially suppressed and is certainly lower than WPSC's <u>actual</u> avoided energy cost (even leaving aside the issue of WPSC's avoided non-energy costs).

RENEW proposes that even if the MISO LMP is used as the basis for the Pg-4 buy-back rate, it must be limited to LMPs during the hours of 9:00 AM to 5:00 PM and must be adjusted to account for varying monthly LMPs. *See* Direct-RENEW-Vickerman-40.

Third, the proposed buy-back rate based only on the annual average MISO LMP does not account for avoided transmission costs, and consistent with the Commission's order in the recent WEPCO rate case (Docket 05-UR-106) the Commission should also include a transmission credit in WPSC's buy-back rate. However, any $/kW transmission credit must be based not on an annual average transmission cost but rather allocated across only the daylight hours, the only time that 90% of WPSC's Pg-4 customers can generate and sell electricity. Direct-RENEW-Vickerman-40.

Finally, consistent with the PURPA regulations, the Commission must consider WPSC's avoided capacity costs and, where they exist, include such avoided capacity costs in its calculation of total avoided costs. RENEW suggests a capacity credit in the range of 50% of a solar PV system's rated capacity, given existing data regarding solar PV generation profiles and WPSC's current peak hours. Direct-RENEW-Vickerman-40-41. Notably, that is the only evidence on capacity value in the record. WPSC proffered no evidence that its avoided capacity costs are zero, and therefore basing the Pg-4 buy-back rate solely on the MISO LMP is arbitrary and without support in the record.

There is no basis in the record to support the conclusion that the annual average MISO LMP reflects WPSC's total avoided cost, and thus using it as the basis for the Pg-4 buy-back rate is arbitrary.

CONCLUSION

For the foregoing reasons, RENEW respectfully requests that the Commission order that WPSC's Pg-4 tariff: (a) maintain the existing 100 kW size cap; (b) contain no requirement that a customer size the system to match load; (c) use an annual, as opposed to monthly, netting period; (d) be available to demand-billed customers; and (e) include a buy-back rate equal to WPSC's true avoided cost, as required by PURPA.

Respectfully submitted this 16th day of October, 2013.

McGILLIVRAY WESTERBERG & BENDER LLC
Counsel for RENEW Wisconsin

__s/ David C. Bender____________
David C. Bender (SBN 1046102)
James N. Saul (SBN 1067236)
211 S. Paterson Street, Suite 320
Madison, WI 53703
Ph: (608) 310-3560