PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation of Parallel Generation Purchase Rates

5-EI-157

ORDER

This is the Order requiring Wisconsin Electric Power Company (WEPCO), Wisconsin Public Service Corporation (WPSC), Wisconsin Power and Light Company (WP&L), Madison Gas and Electric Company (MGE), and Northern States Power Company-Wisconsin (NSPW) to, no later than September 1, 2021, file tariffs with the Commission which update the utilities' rates with respect to parallel generation, consistent with the principles adopted by the Commission in this Order with respect to determining utility avoided energy and capacity costs. These tariff filings will be reviewed by the Commission through individual Class 1 contested case proceedings, while further work continues in this investigation regarding net metering issues, legally enforceable obligations (LEO), and the parallel generation terminology and terms of service.

Introduction

On June 11, 2020 the Commission issued a Notice of Investigation to consider parallel generation purchase rates. (PSC REF#: 391581.) On July 9, 2020 the Commission instructed all electric utilities in the state to file with the Commission information identifying all active distributed generation rates, and specifying how the rates take into account each of the factors for determining avoided costs outlined in 18 CFR § 292.304(e)(2)-(4). The Commission also required all electric utilities in the state to file data corresponding to each of the factors for

determining energy and capacity avoided costs under 18 CFR § 292.304(e). (PSC REF#: 393351.)

On December 18, 2020 the Commission staff issued an informational memorandum on parallel generation purchase rates, which provided detailed Commission staff engineering and economic analysis of the data submitted by utilities, along with Commission staff analysis regarding appropriate methods for determining avoided energy and capacity costs. (PSC REF#: 401895.)

On December 18, 2020 the Commission requested that parties to this investigation, along with the public, submit comment on Commission staff's analysis as well as on procedural questions that emerged from the stakeholder input and research in the investigation. (PSC REF#: 401895.)

On December 23, 2020 the Commission granted the request of the Wisconsin Utilities Association and RENEW Wisconsin to extend the deadline for submitting comments to January 15, 2021. (PSC REF#: 402139.)

As of January 15, 2021 the Commission received responses from environmental, consumer, labor, and utility organizations, including RENEW Wisconsin, the Environmental Law & Policy Center (ELPC), Vote Solar, Clean Wisconsin, Citizens Utility Board of Wisconsin, Wisconsin Industrial Energy Group, SOUL of Wisconsin, IBEW Local 2304, Radloff Group, Tomahawk Power, Wisconsin Utilities Association, Municipal Electric Utilities of Wisconsin, and WPPI energy, as well as from individuals and utilities. (PSC REF#: 406268.)

On February 22, 2021, based on Commission staff's analysis and submitted comments, Commission staff provided the Commission with a memorandum presenting action alternatives

with regard to the issues analyzed in the docket. (<u>PSC REF#: 406268.</u>) The Commission reviewed these issues at its open meeting of March 4, 2021. (<u>PSC REF#: 406631.</u>)

Findings of Fact

- 1. Based on the particular circumstances involving the parallel generation tariffs submitted by WEPCO, WPSC, WP&L, MGE, and NSPW and Commission staff's analysis of the data submitted regarding these specific five utilities, it is reasonable to, no later than September 1, 2021, file tariffs with the Commission which update the utilities' rates with respect to parallel generation, consistent with the principles adopted by the Commission in this order with respect to determining utility avoided energy and capacity costs.
- 2. It is reasonable to require these five utilities to identify avoided costs associated with customer-owned generation systems (COGS) based on total system economic and engineering modeling of the incremental and decremental costs for that utility's resource mix and load shape.
- 3. It is reasonable to conduct further analysis of the remaining issues, in accordance with the provisions discussed further in this order.

Conclusions of Law

1. The Commission has authority under Wis. Stat. §§ 1.12, 196.03, 196.20, 196.25 and 196.37 to issue an order requiring WEPCO, WPSC, WP&L, MGE, and NSPW to file tariffs with the Commission which update the utilities' rates with respect to parallel generation, consistent with the principles adopted by the Commission in this order with respect to determining utility avoided energy and capacity costs.

Opinion

The Commission reviewed the following 10 issues related to parallel generation purchase rates:

Issue 1:	Using forecasted location	nal marginal prices	(LMP) to calculate energy rates
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Issue 2: Reducing, increasing, or maintaining capacity rates

Issue 3: Reducing or expanding net metering rates

Issue 4: Including avoided transmission costs in purchase rates

Issue 5: Including ancillary costs in transmission rates

Issue 6: Including environmental costs in purchase rates

Issue 7: Equivalent treatment of all parallel generation resources

Issue 8: Expanded support for LEO arrangements

Issue 9: Establishing consistent parallel generation terms of service

Issue 10: Establishing consistent parallel generation terminology

The Commission takes no action at this time on Issues 5, 6, and 7, and Commission action for each of the other seven issues is discussed further below.

Issues 1, 2, and 4: Avoided Energy, Capacity, and Transmission Costs

Purchase rates for larger COGS currently incorporate avoided energy costs at all utilities, avoided capacity costs at most large IOUs, and avoided transmission costs at two utilities.

Energy rates for larger COGS at large investor-owned utilities (IOU) are most commonly based on historical LMPs for purchasing energy in Midcontinent Independent System Operator, Inc.'s (MISO) regional wholesale market. Generally, municipal utilities and some small IOUs base their rates on the rates paid to their wholesale supplier, but if their supplier

purchases energy from the MISO market, those rates also effectively represent LMPs. The Federal Energy Regulatory Commission's (FERC) recent modifications in Order 872 to the Public Utility Regulatory Policies Act (PURPA) implementation requirements affirm the use of LMPs as a source for energy rates, while also providing states more flexibility in the methods used to calculate LMP-based rates, such as the use of varying rates over the life of a contract or fixed rates based on projected energy prices. (PSC REF#: 401895.)

Commenters highlighted forecasted rates as a desirable alternative to existing historically-based rates. The Clean Energy Advocates stated that it would be more accurate to set energy rates based on future projections of LMPs rather than historical values, to reflect the value the facilities would provide over the same long-term duration served by utility-owned facilities. (PSC REF#: 402999.) While the Wisconsin Utilities Association (WUA) stated that existing historical rates serve as a "good proxy" for avoided energy costs, it agreed with statements in Commission staff's analysis that forward-looking projections based on production cost modeling may provide more accurate values, and noted that forecasts based on such modeling are already used in fuel cases. (PSC REF#: 403001 at 3.)

Currently, four of five large IOUs also include in their tariffs for larger COGS a capacity payment based on capacity values in MISO's Planning Reserve Auction. (PSC REF#: 401895 at 13.) Multiple utility commenters stated that PURPA prohibits utilities from paying purchase rates higher than their avoided costs. Those commenters stated that the value to utilities of COGS capacity could therefore be considered zero when the utility has adequate capacity to meet its own needs, since the addition of the COGS would not provide any marginal value.

On the other hand, multiple other commenters stated that existing rates are too low to reflect the long-term capacity value COGS can provide over their operating lifetime. Some of those

commenters proposed to base rates on the Cost of New Entry (CONE), as an established metric already used to value utility capacity. Commenters also justified support for a higher capacity rate based on the aggregate value COGS deployment can have in reducing peak capacity needs for the utility. Other commenters stated that CONE does not provide an accurate value to reflect utility capacity, and that the avoided capacity value of COGS is limited because they are as-available resources that generally do not have the same operating characteristics of dispatchability, predictable output, and long-term contractual commitment that allow utilities to rely on the capacity value from their own resources.

Two utilities currently incorporate avoided transmission costs into their purchase rates. (PSC REF#: 401895 at 14.) Multiple commenters stated that transmission costs could generally be avoided by the deployment of COGS, and supported its inclusion in rates. WUA stated that PURPA prohibits the inclusion of avoided costs other than energy and capacity, and stated that the "limited degree" to which the Commission staff memorandum addressed transmission costs does not provide sufficient evidence to support further action on transmission costs at this time. (PSC REF#: 403001 at 5.) The Commission adopts, as a starting point for further review, that avoided energy, capacity, and transmission costs shall be calculated under a conceptual framework outlined by Commission staff in the Commission's memorandum dated February 22, 2021. (PSC REF#: 406268 at 8 and 9.) Under this framework, each utility provides total system economic and engineering modeling of the incremental and decremental costs for that utility's resource mix and load shape. Modeling of both avoided energy and capacity costs under this framework may distinguish between short-term and long-term resources; while modeling from a business-as-usual scenario can be appropriate for short-term resources, system analysis under various futures and scenarios is appropriate for determining the value of long-term resources.

Modeling procedures shall allow COGS to relieve capacity requirements for a utility, either by providing resources that allow a utility to meet its planning reserve margin requirement or by reducing peak demand for the utility.

The avoided energy, capacity, and transmission costs identified through these modeling procedures can be used as a starting point for avoided cost values, and can be reviewed by utilities and the Commission for adaptations to utility-specific circumstances. In order to apply this conceptual framework, the Commission directs each large IOU to file electric tariff (TE) dockets by September 1, 2021 detailing how it would conform, respond, or make changes to its tariffs to implement this conceptual framework.

Commissioner Nowak dissents and writes separately (see attached).

Issue 3: Net Metering Rates

Purchase rates for smaller-capacity COGS have historically been set under net metering frameworks that are based on the retail electric rate, although four of five large IOUs and some municipal utilities have established lower purchase rates based on other sources.

Utility commenters stated that net metering arrangements do not accurately reflect avoided costs, since retail rates incorporate fixed costs that a COGS does not help the utility avoid. As a result, they added, net metering arrangements do not accurately allocate costs to customers, but instead subsidize COGS owners at the expense of other ratepayers. These commenters expressed interest in investigating modifications to existing small COGS tariffs that would reduce existing purchase rates to more closely align with avoided costs. Other commenters expressed support for the continuation and expansion of net metering, referencing customer interest in pursuing deployment as well as the environmental benefits provided by

COGS, which several referenced in supporting the incorporation of additional avoided costs into purchase rates. These commenters also emphasized support for more consistent net metering across the state, on terms supportive to expanded net metering such as lengthier netting periods and higher eligibility thresholds for net metering tariffs.

The Commission directs Commission staff to conduct further review of net metering practices by developing an informational paper to be issued for public comment, in order to obtain further information for the Commission's consideration. The issues addressed by this paper could include, but are not limited to, the differing size thresholds set by different utilities for net metering tariff eligibility, the practices for measuring capacity relative to the eligibility thresholds, different options for netting calculations, the potential effects of FERC Order 2222, and the potential application of minimum bill methods for net metering customers. The Commission may consider conducting a workshop on this issue at a later date.

Issue 8: LEO Arrangements

Several of the commenters who emphasized the limitations of as-available arrangements also acknowledged that COGS could serve as more equivalent energy resources under contractual arrangements that provide energy on terms more consistent with those used for utility resources. LEO arrangements that commit to offer a facility's energy and capacity to the utility, and that provide for dispatch and other forms or reliability support, would address the differences present between utility resources and as-available COGS and provide more comparable value. Some commenters did add that limitations to equivalent treatment may remain, due to the impacts of a utility's capacity needs on avoided costs and the potential for bankruptcies from contracting parties.

Commenters who supported equivalent treatment also expressed support for further efforts to establishing LEO arrangements that reflect system performance. The Clean Energy Advocates proposed a standardized contract for PURPA qualified facilities that establish consistent purchase terms, as well as consistent rates, over a fixed contract term. (PSC REF#: 402999 at 8.)

The Commission directs Commission staff to further review the considerations associated with expanding LEO arrangements by preparing an informational paper to be issued for public comment, in order to obtain further information for the Commission's consideration. The Commission may consider conducting a workshop on this issue at a later date.

Issues 9 and 10: Consistent Parallel Generation Terminology and Terms of Service

Commenters stated that establishing more consistent terms of service statewide would provide more clarity for customers and installers, particularly entities that seek to develop or procure COGS across multiple utility service territories. Terms identified by commenters as candidates for greater consistency include net metering eligibility thresholds, netting practices, capacity definitions (alternating current inverter capacity vs. direct current panel capacity), and metering requirements. Utilities also suggested that the terminology used to describe various parallel generation and purchase rate concepts, such as tariff labels, metering setups, and wording use to describe generation and consumption, could be standardized statewide to increase transparency.

The Commission directs Commission staff to develop one or more straw proposals on greater statewide consistency to be issued for public comment. The Commission may consider conducting a workshop on this issue at a later date.

Order

- 1. With regard to WEPCO, WPSC, WP&L, MGE, and NSPW, and to address the specific quantitative findings made with regard to these five utilities, the Commission adopts a conceptual framework for the calculation of avoided electric energy, capacity, and transmission costs under which total system economic and engineering modeling of the incremental and decremental costs for that utility's resource mix and load shape shall serve as a starting point for determining appropriate rates.
- 2. WEPCO, WPSC, WP&L, MGE, and NSPW shall file electric tariff (TE) dockets by September 1, 2021 detailing how each would conform, respond, or make changes to its tariffs to implement the Commission's conceptual framework for calculating avoided costs.
- 3. Commission staff shall develop an informational paper on issues related to the determination of net metering rates to be issued for public comment.
- 4. Commission staff shall develop an informational paper on considerations associated with LEO arrangements to be issued for public comment.
- Commission staff shall develop one or more straw proposals addressing considerations associated with establishing more consistent parallel generation terminology and terms of service to be issued for public comment.

6. Jurisdiction is retained.

Dated at Madison, Wisconsin, the 4th day of May, 2021.

By the Commission:

Steffany Powell Coker

Secretary to the Commission

Stiffany Roudl Coker

SPC:JF:cmb:jlt:pc DL:01788606

See attached Notice of Rights

PUBLIC SERVICE COMMISSION OF WISCONSIN 4822 Madison Yards Way P.O. Box 7854 Madison, Wisconsin 53707-7854

NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE PARTY TO BE NAMED AS RESPONDENT

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

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¹ See Currier v. Wisconsin Dep't of Revenue, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation of Parallel Generation Purchase Rates

5-EI-157

DISSENT OF COMMISSIONER ELLEN NOWAK

I write to dissent, in part, from the Commission's decision in the Investigation of Parallel Generation Purchase Rates, docket 5-EI-157.

This decision continues a concerning trend of this Commission issuing unclear mandates that will lead to greater uncertainty for utility ratepayers and investors.

I dissented from the opening of this generic investigation because I did not believe that a wide-ranging generic docket was the appropriate vehicle to address these tariffs. Also, I did not believe that the Commission had clearly identified its concerns with current tariffs before embarking on a quest for solutions and new regulatory mandates. (PSC REF#:390868 and 391581).

Without telling utilities what is actually wrong with the existing tariffs, the Commission has now asked them to refile tariffs that conform to a framework that was discussed for the first time in a Commission staff memo that was not distributed for comment. In a hastily made decision, the Commission adopted a new policy with little to no guidance for those who must comply. This type of decision-making can erode Wisconsin's long-held constructive regulatory environment. If the Commission is going to chart a new path on a policy, it should do so after receiving comments and evidence from stakeholders and then articulate a clear path. The decision in this docket does not do that. What started as a generic investigation less than a year ago has now resulted in the Commission adopting new policies and requiring utilities to file new

tariffs in under six months. Despite asking, I received no clear answer as to the urgency of Commission action in this docket.

Also unknown is what the Commission will do with the new tariffs that must be filed by September 1, 2021. Most, if not all, of our investor owned utilities are filing rate cases this year. I am unclear if it is the Commission's intention to incorporate the new tariff proposals into the pending rate cases. If not, will the new rates, if adopted in the tariffs, be effective in test year 2023? The majority was not clear on this point.

I am not opposed to pursuing a more consistent statewide framework to setting purchase rate policies and calculation methods, but we simply did not have enough information to adopt new policies at this stage in the process. While statewide frameworks can provide clarity, I do not support a one-size-fits-all approach.

The Commission's decision to order inclusion of costs such as capacity and transmission in the avoided calculation formula also strays from the clear direction from the Federal Energy Regulatory Commission's (FERC) recent modifications in Order 872 to PURPA¹. PURPA establishes that the purchasing utility cannot be required to pay more for power purchased from a qualifying facility than it would otherwise pay to generate the power itself or purchase from a third party. Adders to the actual avoided costs must be clearly measurable and objective.

For avoided energy costs, the Commission staff memo suggested a framework that requires each generator-owning utility to provide a total system economic and engineering modeling of the incremental and decremental costs for that utility's load shape². I would have

¹ Public Utility Regulatory Policies Act of 1978.

² FERC Order 872 reaffirms the use of LMPs as a source for energy rates while also providing states more flexibility in the methods used to calculate LMP-based rates, such as use of varying rates over the life of a contract or fixed rates based on projected energy prices.

sought additional comment on this proposed framework rather than adopt it and create the rebuttable presumption that this is the methodology going forward. Again, what is the rush?

For avoided capacity costs, the buy-back rate should reflect whether the customer owned generation has a long-term obligation to provide energy or capacity to the utility or whether the parallel generator is primarily built to offset the generation of the owner and occasionally sells excess energy to the utility when able. In the latter case, inclusion of capacity costs is fraught with potential to overcompensate the customer. As-available arrangements do not provide the utility with control over dispatch, outage coordination or other methods to maintain reliability that they maintain for their own or contractually-committed capacity. Therefore, compensating as-available units for something they cannot provide would result in overpayment for the value they provide.

Even if customer owned generators, in aggregate, provide capacity for utilities, any compensation for them must still recognize that these customer owned generators do not have the same obligation to serve as utilities and could stop providing excess energy or capacity as business operations change or cease. Third-party generators are not held to the same safety, liquidity, financial and reliability standards as utilities. In other words, they still are not as reliable as utility-owned generation, yet this Commission seems willing to treat them equally. They are not.

Compensation must also recognize that customer owned generators still rely on the distribution and transmission assets of the utility. Whether the customer owned unit is as-available or subject to a legally enforceable obligation, the customer still relies on the utility 24/7 and therefore, the utility must plan as though the customer owned generator can fail or not

provide energy or capacity at any moment. Therefore, it is important that all customers continue to pay their fair share of the fixed costs. When customers do not pay their portion of fixed costs, the burden is shifted to all other ratepayers. Misalignment of rates and costs hurts middle and

low-income customers the hardest.

Also, when rates are not set at actual avoided cost, it creates incorrect price signals and results in the Commission picking winners and losers among sources of generation. Regulators should strive to set rates that are cost-based and avoid artificially incentivizing one form of

generation over another, yet this Commission is traveling down a road that leads to this outcome.

Finally, a word about the Commission's decision to review net metering policies. I am

pleased that the Commission is seeking further analysis and comment on net metering policies.

Since many of the initial rates were established, advanced metering has become more prevalent.

I am looking forward to receiving more information about how the new technologies can assist

in matching cost to the buy-back rate in order to achieve more fairness and equity.

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