



**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

	)	<b>GPA DOCKET 20-06</b>
	)	
<b>PETITION TO AMEND GUAM</b>	)	
<b>POWER AUTHORITY'S NET</b>	)	<b>ORDER</b>
<b>METERING RIDER</b>	)	
	)	
	)	
	)	

---

**INTRODUCTION**

This matter comes before the Guam Public Utilities Commission (the "PUC") pursuant to the December 6, 2019 Petition to Amend GPA's Net Metering Rider, filed by the Guam Power Authority ("GPA") (hereinafter referred to as the "Petition").

On March 23, 2020, the Administrative Law Judge of the PUC (the "ALJ") assigned to this matter filed an ALJ Report that included his findings and recommendations based on the administrative record before the PUC. The ALJ found the following.

**DETERMINATIONS**

**A. Net Metering**

Net metering, or net energy metering ("NEM"), is essentially a billing system that credits small customers at the full retail electric price for any excess electricity they generate and sell to the utility via the grid from on-site small sources such as residential rooftop solar arrays.<sup>1</sup>

---

<sup>1</sup> See "Net Energy Metering—Are We Capitalists Or What?," James Conca, Forbes.com, found at <https://www.forbes.com/sites/jamesconca/2014/11/28/net-energy-metering-are-we-capitalists-or-what/#5e40cd9e2fbf> (Nov. 28, 2014).

NEM has served as a solar incentive that allows customers to store energy in the electric grid. For instance, when solar panels produce more electricity than needed, that energy is sent to the grid in exchange for credits. Then at night, or other times when the solar panels are under producing, energy is pulled from the grid and the use of such credits offset the costs of that energy.<sup>2</sup> In Guam, as of this February, there are 2,081 net metering customers.<sup>3</sup>

**B. GPA's Net Metering Rider**

On December 29, 2008, the PUC approved and adopted the current Interim Rider for Customer-Generator Energy Facilities, developed by both GPA and the Georgetown Consulting Group, Inc. ("Georgetown").<sup>4</sup> On February 27, 2009, the PUC approved and adopted GPA's Standard Interconnection Agreement for Net Metering Facilities, as well as GPA's Net Metering Program Interconnection Policy.<sup>5</sup> On December 10, 2015, the PUC amended the Net Metering Rider to allow customers an option to rollover annual credits indefinitely or request payment for the credits remaining in the account.

**C. Public Hearings**

On February 24, 25, and 26, 2020, duly-noticed public hearings were held in the villages of Dededo, Agat, and Hagåtña, pursuant to the Ratepayer Bill of Rights, to take

---

<sup>2</sup> See <https://www.energysage.com/solar/101/net-metering-for-home-solar-panels/>.

<sup>3</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 1 (Mar. 18, 2020).

<sup>4</sup> PUC Decision and Order, GPA Docket 08-08, p. 2 (Dec. 29, 2008).

<sup>5</sup> PUC Order, GPA Docket 08-10, p. 1 (Feb. 27, 2009).

testimony related to GPA's proposed amendment to the Net Metering Rider. No member of the public participated in the public hearings and no comments were received by the PUC.

**D. GPA's Request to Terminate the Indefinite Rollover of Customer Credits**

In its Petition, GPA requests that the PUC amend its Net Metering Rider "such that all NEM excess credits are zeroed out annually."<sup>6</sup> Basically, GPA requests that the Net Metering Rider be amended to state that "[a]t the end of each calendar year, or in the event of termination of service under this Rider, any excess kWh credits; if any will be granted by the customer to GPA without compensation to the customer," which was the language in the past.

In support of its Petition, GPA has included Resolution No. 2019-20 issued by the Consolidated Commission on Utilities ("CCU"), which maintains the following. The Resolution indicates that:

NEM customers receive services from the grid subsidized by non-NEM customers including but not limited to: (1) Use of the grid to sell power (get credit at full retail rate for excess production); (2) Use of the grid to energize their homes at night; (3) Frequency regulation absorbed by grid for intermittencies; (4) Reactive power supply; (5) Voltage regulation; and (6) Standby power on overcast days when the sun does not shine.<sup>7</sup>

In addition, GPA also maintains that based on the number of its net metering customers, this results in "an approximate \$3,527,745 annual subsidy going forward."<sup>8</sup>

---

<sup>6</sup> Petition, GPA Docket 20-06, p. 1.

<sup>7</sup> Resolution No. 2019-20, p. 1 (Nov. 26, 2019).

<sup>8</sup> Resolution No. 2019-20, p. 1.

The Resolution further indicates that “the payment or carry over of excess credits tend to encourage net metering customers to install larger capacity which results in receiving payments for excess energy thereby resulting in increased cost to non-NEM customers.”<sup>9</sup> It goes on to state that “in other jurisdictions NEM excess credits are zeroed out annually.”<sup>10</sup>

In response to questions posed in a Request for Information issued by the ALJ, GPA submits that the roughly \$3.5 million “subsidy” it’s claiming “was calculated by multiplying the estimated solar production by the under-recovery subsidy.”<sup>11</sup> According to GPA, “[t]he estimated solar production takes into account the annual degradation of the solar panels and an estimated 1794kWh of installed capacity.”<sup>12</sup> And that the “under-recovery subsidy” is the “difference between the retail rate per kWh and the calculated value of the solar rate on the estimated solar production.”<sup>13</sup>

In addition, GPA further submits that there are some NEM customers who “are applying for new accounts for the same building where one account had long existed. These customers then install multiple NEM systems on the same building to skirt the 100KW commercial NEM limit.”<sup>14</sup> GPA contends that these types of systems “will produce greater

---

<sup>9</sup> Resolution No. 2019-20, p. 2.

<sup>10</sup> Resolution No. 2019-20, p. 2.

<sup>11</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 1.

<sup>12</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 1.

<sup>13</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 1.

<sup>14</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 2.

overall net excess generation for the same building, and result in greater net excess generation liabilities for GPA . . . .”<sup>15</sup>

**E. Public Laws on Net Metering**

**1. Public Law 27-132.**

When the Guam Legislature enacted GPA’s net metering statutory scheme, the Legislature clearly expressed its intent “to combine new power-generation technologies with traditional power-generation systems in order to expand and safeguard the island’s electric supply, without the need for additional capital investment by the utility company.” P.L. 27-132, p. 2 (Dec. 30, 2004). The Legislature also unequivocally expressed its intent to “(a) encourage private investment in renewable energy resources; (b) stimulate economic growth; and (c) enhance the continued diversification of the renewable energy resources used on Guam.” *Id.*

Pursuant to the net metering statutes, the Legislature also entrusted the PUC with the authority to determine the rate for NEGs [Net Excess Generation]. In particular, Section 8505(b)(3) of Title 12 provides that where “the electricity generated by the customer-generator which is fed back to the utility exceeds the electricity supplied by the utility during the billing period, the customer-generator is entitled to compensation for electricity provided to the utility during the billing period at a rate to be determined by the Public Utility Commission.” P.L. 27-132, p. 5 (codified at 12 G.C.A. § 8505(b)(3)).

---

<sup>15</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 2.

## **2. Public Law 29-62.**

Pursuant to Public Law 29-62, the Legislature stated that it requires “the development of renewable energy production and decrease [ ] total reliance on oil for electricity production.” P.L. 29-62, p. 2 (Apr. 4, 2008). Accordingly, the Legislature amended GPA’s net metering statute to require GPA to “immediately implement an interim, emergency net metering rate structure wherein Customer generators *shall* be entitled to receive immediate credit for one hundred percent (100%) of the power generation capacity based on the specifications of the generation equipment installed times the rate of the Guam Power Authority currently charges the customer until such time that GPA submits a rate structure to the PUC for the net metering program and it is approved by the PUC. The interim rate *shall* be subject to PUC revocation at any time.” *Id.* at 4 (codified at 12 G.C.A. §8506) (emphases in original).

### **C. Georgetown’s August 27, 2013 Report**

In a report issued back in August 27, 2013, Georgetown, one of the PUC’s consultants for utility matters, maintained that “[t]he interim net metering rider currently in effect and approved by the GPUC is based on an industry accepted approach to the balancing of interest necessary to maximize the renewable capacity from customer-generators availing themselves to ‘net-metering’ and the impact to other customers subsidizing the distribution and other related costs avoided by net metered customers who qualify for the interim net meter rider.”<sup>16</sup>

---

<sup>16</sup> Report of Georgetown Consultants Group, Inc. (“Georgetown Report”), p. 45 (Aug. 27, 2013).

Georgetown further submitted that presently, “most mainland regulatory jurisdictions continue to credit NEG to the grid at the full retail energy rate (either through billing credits of kWh offsets) on the customer bill with any excess kWhs credited to the customer’s next bill and any NEG credits remaining at the end of the calendar year either being granted to the utility at no cost or . . . an increasing number of jurisdictions require some form of payment (28).”<sup>17</sup>

**F. Other Jurisdictions**

As indicated in GPA’s petition, the majority of jurisdictions that offer NEM credits do not employ an indefinite rolling over of credits. Many jurisdictions offer a monthly rolling-over of credits that terminate at the end of the billing year.

**1. California.**

Generally, utilities in California provide compensation for NEM credits to its customers at the end of a twelve (12) month period. “Customers that generate a net surplus of energy at the end of a twelve-month period can receive a payment for this energy under special utility tariffs.”<sup>18</sup>

**2. Florida.**

In Florida, credits do not carry over across calendar years because of Florida’s net metering policies. For credits at the end of the year, a cash credit will be offered on the January bill.<sup>19</sup>

---

<sup>17</sup> Georgetown Report, p. 47.

<sup>18</sup> See [https://www.gosolarcalifornia.ca.gov/solar\\_basics/net\\_metering.php](https://www.gosolarcalifornia.ca.gov/solar_basics/net_metering.php).

<sup>19</sup> See <https://www.energysage.com/net-metering/fpl/>.



3. **Kansas.**

“Any NEG credit remaining in a net metering customer's account on March 31 of each year shall expire.”<sup>20</sup>

4. **Arizona.**

Based on an April 12, 2018 recommendation by the chief administrative law judge of the Arizona Corporation Commission, this particular utility rate-making body ordered that “*new customer-generators will not be permitted to bank credits associated with exported energy.*”<sup>21</sup>

For existing rate payers, “customers interconnecting to the utility’s distribution system prior to the effective date of the decision implementing the new export compensation rate in each utility’s rate case,” these rate payers “will be grandfathered under the former net metering rules for a period of 20 years.”<sup>22</sup> These “old” rate payers are credited according to the following: NEG remaining at the customer’s last monthly bill in the annual true-up period will be paid to the customer, via check or billing credit, at the utility’s avoided cost payment.<sup>23</sup>

5. **Oregon.**

---

<sup>20</sup> See <https://kcc.ks.gov/electric/net-metering-in-kansas>

<sup>21</sup> See <http://programs.dsireusa.org/system/program/detail/3093>.

<sup>22</sup> See <http://programs.dsireusa.org/system/program/detail/3093>.

<sup>23</sup> See <http://programs.dsireusa.org/system/program/detail/3093>.



In Oregon, “any remaining unused kilowatt-hour credit accumulated during the previous year shall be granted to the electric utility for distribution to customers enrolled in the electric utility’s low-income assistance programs, credited to the customer-generator or dedicated for other use as determined by the commission . . . .” 2017 O.R.S. 757.300(3)(d).

**6. Pennsylvania.**

At the end of each 12-month billing cycle, utilities will compensate net-metered generators for their excess credits at the “price-to-compare,” which is the retail price of the electricity minus the distribution component.<sup>24</sup>

**7. Vermont.**

“Credits will remain on the account for 12 months to be applied to future bills. If a credit is not used within 12 months of the time it’s generated, it will expire.”<sup>25</sup>

**8. Washington.**

Any excess is credited to customer’s next bill at retail rate; and then granted to the utility at end of a twelve (12) month billing period.<sup>26</sup>

**9. Puerto Rico.**

Customers with excess credits remaining at the end of a twelve (12) month period are compensated as follows: seventy-five percent (75%) of the excess credits are purchased by Puerto Rico Electric Power Authority (“PREPA”) at a rate of \$0.10 per kWh

---

<sup>24</sup> See <https://www.solarunitedneighbors.org/pennsylvania/learn-the-issues-in-pennsylvania/net-metering-in-pennsylvania/>.

<sup>25</sup> See <https://www.vermontelectric.coop/programs-services/net-metering>.

<sup>26</sup> See <https://programs.dsireusa.org/system/program/detail/42>

or “the amount resulting from the subtraction of the adjusted fuel fee based on the variable costs incurred by the public corporation exclusively for the purchase of fuel and energy, from the total price charged by the public utility to its customers, converted into kilowatt-hours, whichever is greater.”<sup>27</sup> The remaining 25% is returned to the utility to distribute as a credit or reduction applied to the electricity bills of public schools.<sup>28</sup>

#### **10. American Samoa and the U.S. Virgin Islands.**

In both American Samoa and the U.S. Virgin Islands, any net excess generation (NEG) produced by a customer is credited at the utility’s full retail rate and carried forward to the customer's next monthly bill. At the end of a 12-month period, any remaining NEG is granted to the utility.<sup>29</sup>

#### **11. CNMI**

Lastly, in the CNMI, excess electricity production is credited to the customer’s bill at retail rate.<sup>30</sup> Any excess remaining after a twelve (12) month billing period is credited at fifty percent (50%) of the retail rate.<sup>31</sup>

#### **G. NEM’s Impact on Demand Side Management**

---

<sup>27</sup> <http://energy.gov/savings/puerto-rico-net-metering>; [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=PR02R](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=PR02R);

<sup>28</sup> <http://energy.gov/savings/puerto-rico-net-metering>; [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=PR02R](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=PR02R);

<sup>29</sup> See <https://programs.dsireusa.org/system/program/detail/3218>; <https://programs.dsireusa.org/system/program/detail/2507>.

<sup>30</sup> See <https://programs.dsireusa.org/system/program/detail/5556>.

<sup>31</sup> See <https://programs.dsireusa.org/system/program/detail/5556>.

In the ALJ's March 12, 2020 Request for Information, the ALJ requested information concerning NEM's impact, if any, on GPA's Demand Side Management ("DSM") energy efficiency program. In response, GPA indicated that its DSM energy efficiency program "targets include energy and peak demand reductions."<sup>32</sup> GPA submits that "[e]nergy reductions result in less fuel not being burned" and other "variable operations and maintenance expenses."<sup>33</sup> GPA maintains that "[p]eak demand reductions, over time, result in generation capacity savings and may also result in potential fuel cost savings."<sup>34</sup> In addition, "[o]ver time, peak demand reductions result in generation capacity savings by lowering the peak generation requirement."<sup>35</sup>

In response to NEM's impact on DSM, GPA maintained that "NEM without energy-shifting storage does not reduce GPA's peak demand because GPA's system peaks at night when the solar resource is not available."<sup>36</sup> GPA submits that, as a result, "NEM cannot save GPA capacity costs."<sup>37</sup> GPA adds that "NEM energy savings resulting in economic savings to the grid only apply to net excess generation"; and that particularly, "NEM customers are allowed to swap/credit energy produced by their system during the day for energy produced by GPA at night."<sup>38</sup> GPA submits that "[t]his one-to-one swap does

---

<sup>32</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 5.

<sup>33</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 5.

<sup>34</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 5.

<sup>35</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 5.

<sup>36</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 6.

<sup>37</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 6.

<sup>38</sup> GPA's Response to Request for Information, GPA Docket 20-06, p. 6.

not account for energy produced at night,” which it adds is “often more expensive than that produced during the day when GPA operates peaking units to meet the peak load.”<sup>39</sup>

#### **H. Criticism Regarding NEM Roll-Over Credits**

NEM crediting policies have been criticized as having an adverse impact on grid services. A report by the California Public Utilities Commission found that “non-solar customers in the state face over \$1 billion annually in higher costs because of net metering.”<sup>40</sup>

The criticism is that “[w]hen normal consumers pay their electric bill, part of the bill is for the electricity they actually used, but the other part goes to maintaining the grid, referred to as grid services.”<sup>41</sup> It is argued that these particular customers “are not ever “off the grid,” “even if they’re making more energy than they consume.”<sup>42</sup>

Indeed, Georgetown too has indicated that “[w]hile there is unarguably a potential subsidization of ‘net metering’ customers by other customers, the PUC found that the potential benefits in the near-term as the renewable industry grows in Guam outweighed

---

<sup>39</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 6.

<sup>40</sup> See “Net Energy Metering—Are We Capitalists Or What?,” James Conca, Forbes.com, found at <https://www.forbes.com/sites/jamesconca/2014/11/28/net-energy-metering-are-we-capitalists-or-what/#5e40cd9e2fbf> (Nov. 28, 2014).

<sup>41</sup> See “Net Energy Metering—Are We Capitalists Or What?,” James Conca, Forbes.com, found at <https://www.forbes.com/sites/jamesconca/2014/11/28/net-energy-metering-are-we-capitalists-or-what/#5e40cd9e2fbf> (Nov. 28, 2014).

<sup>42</sup> See “Net Energy Metering—Are We Capitalists Or What?,” James Conca, Forbes.com, found at <https://www.forbes.com/sites/jamesconca/2014/11/28/net-energy-metering-are-we-capitalists-or-what/#5e40cd9e2fbf> (Nov. 28, 2014).



these concerns.”<sup>43</sup> In addition, GPA has consistently believed that NEM customers do not pay “their full share of the system’s cost to serve” and that cost recovery for demand is based in “the energy component of residential rates.”<sup>44</sup>

The ALJ found that the PUC is authorized to determine the rate for energy “generated by the customer-generator which is fed back to the utility [that] exceeds the electricity supplied by the utility during the billing period . . . .”; and, therefore, how such rate is assessed. 12 G.C.A. § 8505(b)(3).

Based on a review of other jurisdictions, public utilities have provided customers whose usage results in a net credit to their accounts may be compensated financially or through a rolling credit. As shown above, many stateside jurisdictions, as well as other territories of the U.S., require that any net excess generation held as a credit by the customer at the end of a 12-month period, is given to the utility.<sup>45</sup> Accordingly, the zeroing out of credits after a calendar year is reasonable given its widespread practice, and in light of the “potential subsidization of ‘net metering’ customers by other customers.”<sup>46</sup>

In addition, with respect to NEM’s impact on Demand Side Management, “NEM cannot save GPA capacity costs”<sup>47</sup>; that “NEM customers are allowed to swap/credit

---

<sup>43</sup> Georgetown Report, p. 46 (Aug. 27, 2013).

<sup>44</sup> GPA’s Response, p. 21 (Nov. 30, 2015).

<sup>45</sup> See <https://programs.dsireusa.org/system/program/detail/3218>; <https://programs.dsireusa.org/system/program/detail/2507>.

<sup>46</sup> Georgetown Report, p. 46 (Aug. 27, 2013).

<sup>47</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 6.

energy produced by their system during the day for energy produced by GPA at night,”<sup>48</sup> which is ostensibly “more expensive than that produced during the day when GPA operates peaking units to meet the peak load.”<sup>49</sup>

Based on the discussion above, and based on the record before the Commission, including the authorities reviewed herein, the ALJ recommended that the PUC amend GPA’s Net Metering Tariff such that all NEM excess credits are zeroed out annually. In particular, the Net Metering Tariff shall be amended to state:

In no event shall the excess credit from a single month be carried forward beyond twelve (12) months as a credit against the current monthly billing. At the end of each calendar year, or in the event of termination of service under this Rider, any excess kWh credits, if any, will be granted by the customer to GPA without compensation to the customer.

This scheme still corresponds with the intent of the Legislature when it enacted GPA’s net metering statutes, which is to “(a) encourage private investment in renewable energy resources; (b) stimulate economic growth; and (c) enhance the continued diversification of the renewable energy resources used on Guam.” P.L. 27-132, p. 2 (Dec. 30, 2004).

In light of the PUC’s commitment to encouraging renewable energy investment, the ALJ proposed that GPA implement this revision on January 1, 2021.

---

Accordingly, the affected language of the current Net Metering Rider shall expire on December 31, 2020.

---

<sup>48</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 6.

<sup>49</sup> GPA’s Response to Request for Information, GPA Docket 20-06, p. 6.



The Commission hereby adopts the findings made in the March 23, 2020 ALJ Report, and therefore, issues the following.

### **ORDERING PROVISIONS**

Upon careful consideration of the record herein, and for good cause shown, on motion duly made, seconded and carried by the affirmative vote of the undersigned Commissioners, the Commission hereby ORDERS the following:

1. That the instant Petition is hereby APPROVED.
2. That the Net Metering Rider shall be amended to state “In no event shall the excess credit from a single month be carried forward beyond twelve (12) months as a credit against the current monthly billing. At the end of each calendar year, or in the event of termination of service under this Rider, any excess kWh credits; if any will be granted by the customer to GPA without compensation to the customer.” The amendment shall be effective January 1, 2021.
3. GPA is ordered to pay the PUC’s regulatory fees and expenses, including and without limitation, consulting and counsel fees, and the fees and expenses associated with this matter. Assessment of the PUC’s regulatory fees and expenses is authorized pursuant to 12 G.C.A. §§ 12103(b) and 12125(b), and Rule 40 of the Rules of Practice and Procedure before the PUC.

//

//



[SIGNATURES TO FOLLOW ON NEXT PAGE]

//

//

//

SO ORDERED this 28<sup>th</sup> day of May, 2020.

  
\_\_\_\_\_  
**JEFFREY C. JOHNSON**  
Chairman  
\_\_\_\_\_  
**ROWENA E. PEREZ-CAMACHO**  
Commissioner  
\_\_\_\_\_  
**JOSEPH M. MCDONALD**  
Commissioner  
\_\_\_\_\_  
**PEDRO GUERRERO**  
Commissioner  
\_\_\_\_\_  
**MICHAEL A. PANGELINAN**  
Commissioner  
\_\_\_\_\_  
**PETER MONTINOLA**  
Commissioner  
\_\_\_\_\_  
**DORIS FLORES BROOKS**  
Commissioner

---

P203013.JRA