# BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF: NET METERING (pursuant to P.L. 27-132 and 29-62)) COMMISSION RECEIVED

DEC 29 2008
Public Milities Commission

Docket No. 08-10 co. 9 Guan

## **DECISION AND ORDER**

Public Law 27-132 authorized the creation of a "net-metering system". Thereunder, customer-generators are authorized to establish facilities for the production of electrical energy, using various types of alternative energy sources. "Net-metering" is a service to the customer under which electric energy is generated by that electric customer from an eligible on-site generating facility and is delivered to Guam Power Authority (GPA) local distribution facilities. Net Metering is the measure of the difference between electricity supplied by a utility and the electricity generated by a customer-generator which is fed back to the utility over the applicable billing period. Such electric energy generated by the customer may be used to offset electric energy provided by GPA to the customer during the same billing period. Net-metering can result in providing a subsidy to an on-site generating customer and the transfer of certain cost burdens incurred by the utility to the utility's other customers.

P.L. 27-132 also required that the PUC promulgate rules and regulations for the implementation of the net-metering program. Public Law 29-62 states that the rate structure for the net metering program is subject to the approval of the PUC. In response to these public laws, the PUC issued an Order on May 30, 2008 initiating this proceeding, under which "net-metering" rates, rules and regulations would be established in accordance with Article 5 of GPA's enabling legislation. <sup>1</sup>

GPA and the PUC's independent consultant, the Georgetown Consulting Group, Inc. (GCG) initiated a collaborative effort to develop an "Interim" Net Metering Tariff. The parties presented a Workshop to the PUC on September 29, 2008, concerning their progress in developing a net metering tariff. GCG presented a draft tariff, and GPA raised concerns that the net metering program be limited to customers with usage no greater than 25kW in accordance with Public Law 27-132; and that the requirement in the draft tariff that customers maintain liability insurance was contrary to Public Law 27-132, which

<sup>&</sup>lt;sup>1</sup> Staff Report on the Implementation of a "Net-Metering" Rider pursuant to the Energy Policies Act of 2005 and Guam Public Law 29-62 (prepared by Georgetown Consulting Group, Inc.) filed September 8, 2008.

stated that the utility may not require the customer to purchase additional liability insurance. <sup>2</sup>

The parties appeared for a Regulatory Conference before Administrative Law Judge David A. Mair on December 15, 2008, and indicated that they were preparing a stipulation concerning net metering. GPA and GCG have now agreed upon a revised version of the Net Metering Tariff which addresses the concerns raised by GPA.<sup>3</sup> Attached hereto as Exhibit "A" is the Interim Net Metering Rider for Customer – Generator Energy Facilities.

After careful consideration of the record herein and the Interim Net Metering Rider, attached hereto as Exhibit "A", for good cause shown and on motion duly made, seconded and carried by the affirmative vote of the undersigned commissioners, the Commission hereby ORDERS that:

- 1. The Interim Net Metering Rider for Customer-Generator Energy Facilities, attached hereto as Exhibit "A", is hereby adopted and approved by the Commission.
- 2. The Interim Rider is adopted by the Commission pursuant to P.L. 27-132 and P.L. 29-62, and 12 GCA §12004. Since an "interim" rate is provided for by P.L. 29-62, and is initiated by the PUC pursuant to 12 GCA §12004, the net metering rider is not subject to the provisions of the Ratepayer's Bill of Rights.
- 3. Nevertheless, the PUC wishes to provide the public with a full opportunity to address the Interim Net Metering Rider and will schedule a Public Hearing on this subject in the near future. The "Interim" Net Metering Rider shall not become final until the public has had a full and adequate opportunity to comment upon the Rider.
- Since Guam law specifies a maximum limitation of 25kW per customer – generator, this limitation is and shall be included in the Interim Net Metering Rider.
- In accordance with the recommendation of GCG, at such time as the number of customer – generators availing themselves to the

<sup>3</sup> E-mail from William J. Blair to PUC Legal Counsel dated December 24, 2008.

<sup>&</sup>lt;sup>2</sup> Letter from General Manager of GPA to PUC Administrative Law Judge, dated September 17, 2008, Re: GPA Response on GCG Report Implementation of a "Net Metering".

"net metering" tariff approaches one-thousand (1,000) customers, the issue of whether a limitation should be imposed by Guam on the aggregate capacity eligible for "net metering" treatment will be reviewed and examined by the PUC.

- 6. Since there is no limitation in P.L. 29-62 on the availability of net metering to any particular customer classes, the Interim Net Metering Rider is available to all GPA customer classifications.
- 7. Net metering customers may utilize any of the available technologies indicated in Public Law 27-132, including fuel cells, micro turbines, wind, biomass, hydroelectric, solar energy or a hybrid system consisting of these facilities as its primary source of fuel.
- 8. In accordance with the Interim Rider, net-metering customers are required to enter into a separate agreement with GPA before being eligible for the program. GPA shall, at its earliest convenience, prepare a draft Interconnection Agreement for Net Metering Facilities and submit such agreement to the PUC for review and approval.
- 9. GPA is ordered to pay the Commission's regulatory fees and expenses, including, without limitation, consulting and counsel fees and the fees and expenses of conducting the hearing proceedings. Assessment of PUC's regulatory fees and expenses is authorized pursuant to 12 GCA §§12002(b) and 12024(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.

Dated this 29th day of December, 2008.

Jeffrey C. Johnson
Chairman

Filomena M. Cantoria

Rowena E. Perez

Michael A. Pangelinan

# Exhibit A Net Metering Rider—NM Interim

## NET METERING RIDER FOR CUSTOMER-GENERATOR ENERGY FACILITIES

## GENERAL:

To encourage private investment in renewable energy resources; stimulate economic growth; and enhance the diversification of energy resources in the Territory this Net Metering (NM) Rider for Customer-Generator Energy Facilities is offered to customers operating qualifying generation facilities. The NM Rider may be amended or modified in the future by GPA, with the approval of the Guam Public Utilities Commission (PUC),

## AVAILABILITY:

The NM Rider is available to GPA customers throughout the Territory who own and operate an eligible Net Metering Facility designed to operate in parallel with GPA's distribution facilities. Existing GPA distribution facilities of adequate capacity and suitable phase and voltage must be adjacent to the Net Metering Facility of the Customer-Generator. Customers eligible for this Rider must also take service from GPA under an applicable standard service tariff. The NM Rider is offered in conjunction with the GPA's existing rate schedules for the following customer classifications:

Schedule R-Residential Service

Schedule G-General Service - Non Demand

Schedule J — General Service - Demand Schedule P — Large Power Service Schedule S — Small Government Service - Non Demand Schedule K — Small Government Service - Demand

Schedule L-Large Government Service

Schedule N-Navy Service

The NM Rider is available to all customers without limitation as to the aggregate capacity of Customer-Generator installations on the GPA system. However, at that time the number of Customer-Generators exceeds one-thousand (1000) customers this issue will be reviewed by the PUC and a determination made as to the continued offering of the NM Rider for new "net metering" customers

Provisions of applicable rate schedules with which the NM Rider is used are modified as described herein.

# APPLICATION:

The NM Rider is applicable to Customer-Generator facilities which operate in parallel with the GPA system and which meet the Conditions of Service for a Net Metering Facility. Only those customers who produce electrical energy using eligible Net Metering Facilities (i.e., fuel cells, micro-turbines, wind, biomass, hydroelectric, solar energy or a hybrid system consisting of these facilities) will be eligible for this Rider. This Rider is applicable only to the net energy supplied to

### (Continued on Sheet NM-2)

## (Continued from Sheet NM-1)

GPA's system by the Customer-Generator. All other services furnished to the customer shall be billed in accordance with the rates and charges under the customer's applicable standard rate schedule.

#### CONDITIONS OF SERVICE:

For the purposes of this NM tariff, an eligible Customer-Generator must comply with all of the following requirements:

- Operate and produce electric energy by fuel cells, micro-turbines, wind, biomass, hydroelectric, solar energy or a hybrid system consisting of these facilities, as its primary source of fuel;
- Own and operate generation facilities located at customer premises:
- Have as its primary purpose the intent of supplying a part or all of the electrical energy requirements of customer; and
- 4) Design and install facilities to operate in parallel with GPA's electric distribution system without adversely affecting the operation of the equipment and service of GPA and its customers and without presenting safety hazards to GPA and customer personnel.

The rated capacity of the Customer-Generator facilities at any single customer service location shall not exceed twenty-five (25) kilowatts.

Customer-Generators seeking to interconnect an eligible Net Metering Facility to GPA's system must submit to GPA a completed "Standard Interconnection Agreement for Net Metering Facilities," and a one-line diagram showing the configuration of the proposed Net Metering Facility.

A "Standard Interconnection Agreement for Net Metering Facilities" between GPA and the eligible Customer-Generator must be executed before the Net Metering Facility may be interconnected with GPA's system.

Customer-Generator facilities connected in parallel operation with GPA and located on customer's premises must be manufactured, installed and operated in accordance with governmental and industry standards and capable of providing single phase or three phase electric energy at 60 Hertz. The service provided under the NM Rider will be provided to the entire premise through a single point of delivery at a single voltage.

All generator equipment and installations must comply with GPA's Technical Requirements. All generator equipment shall be installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code and state and local codes. All generator equipment and installations shall comply with all applicable safety, performance and power quality standards, established by the National Electrical Code, the Institute of Electrical and Electronic Engineers and accredited testing laboratories.

Customer-Generators shall provide GPA proof of qualified installation of the Net Metering Facility. Certification by a licensed electrician shall constitute acceptable proof.

# (Continued on Sheet NM-3)

# (Continued from Sheet NM-2)

Customer-Generators shall install, operate, and maintain the electric generating facility in accordance with the manufacturer's suggested practices for safe, efficient, and reliable operation in parallel with GPA's system.

Customer-Generators must provide a visibly open, lockable, manual disconnect switch, which is accessible by GPA and is clearly labeled.

GPA may, at its own discretion, isolate any electric generating facility if GPA has reason to believe that continued interconnection with the electric generating facility creates or contributes to a system of emergency.

GPA may perform reasonable on-site inspections to verify the proper installation and continuing safe operation of the Net Metering Facility and the interconnection facilities, at reasonable times and upon reasonable advance notice to the Customer-Generator.

An eligible Customer-Generator installation is transferable to other persons or service locations only upon notification to GPA and verification that the installation is in compliance with all applicable safety and power quality standards. All other conditions of service apply.

#### METERING:

Net energy metering shall be accomplished using a standard kilowatt-hour meter capable of measuring the flow of electricity in two (2) directions. If the existing electrical meter installed at the Customer-Generator's facility is not capable of measuring the flow of electricity in two directions, GPA shall furnish and install a standard bi-directional kilowatt-hour meter. The Customer-Generator shall provide any related interconnection equipment in accordance with GPA's technical requirements, including safety and performance standards. The Customer-Generator shall be responsible for all costs associated with the installation of a standard kilowatt-hour meter. Such Customer-Generator responsible costs include, but are not limited to, the meter socket, riser, weather head and other related equipment.

In the case where two meters are used, the reading of the meter measuring the flow of energy from the customer to GPA shall be subtracted from the reading of the meter measuring the flow of energy from GPA to the customer to obtain a measurement of net kWh for billing purposes

(Continued on Sheet NM-4)

## Deleted: 1

Customers operating electric generating facilities shall maintain homeowners, commercial or other insurance providing coverage in the amount of at least one million thousand dollars (\$1,000,000) for the liability of the insured against losses or damages arising from the use of customer's electric generating facility. Customer-Generators must submit evidence of such insurance to GPA with the "Standard interconnection Agraement for Net Metering Facilities!" GPA's receipt of evidence of liability insurance does not imply an endorsement of the terms and conditions of the coverage.

## (Continued from Sheet NM-3)

## MONTHLY BILLING:

On a monthly basis, net metering customers shall be billed energy charges applicable under the currently effective standard rate schedule and any appropriate rider schedules including the Levelized Energy Adjustment Clause and other clauses as well as surcharges. Under this NM tariff, only the kilowatt-hour (kWh) units of a Customer-Generator's bill are affected. No excess energy credits shall reduce any fixed monthly customer or demand charges, if any.

Monthly charges for energy, and demand where applicable, to serve the customer's net or total load shall be determined according to GPA's standard service tariff under which the customer would otherwise be served, absent the customer's electric generating facility. Energy charges under the customer's standard tariff shall be applied to the customer's net energy for the billing period to the extent that the net energy exceeds zero.

If the customer's net energy is zero or negative during the billing period, the customer shall pay only the non-energy charge portions of the standard tariff bill. If the customer's net energy is negative during a billing period, the customer shall be credited in the next billing period for the kWh difference. When the customer elects no longer to take service under this Net Metering Service Tariff, any unused credit shall revert to GPA. Excess electricity credits are not transferable between customers or locations.

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 bill. 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 the GPA without compensation to the customer.

#### OTHER CHARGES:

The customer is responsible for all equipment and installation costs of the electric generating facility.

As specified in the "Standard Interconnection Agreement for Net Metering Facilities," the Customer-Generator must pay for a non-refundable application fee of \$50.00. This fee includes the cost of inspection of the customer's electric generating facility if GPA deems such inspection is necessary.

Should GPA determine that an interconnection study is required; GPA will advise the customer of the estimated additional cost of performing such study. Upon payment by the customer of the estimated study costs, GPA will proceed with the interconnection study to determine if installation of the customer's electric generating facility will have significant impact on GPA's distribution system.

Should construction or upgrades of GPA's system be required in order to interconnect the customer's electric generating facility, additional charges to cover costs incurred by GPA shall be determined by GPA and paid by the customer.

The customer shall pay any additional charges, as determined by GPA, for equipment, labor, metering, testing or Inspections requested by the customer.

(Continued on Sheet NM-5)

### (Continued from Sheet NM-4)

## TECHNICAL REQUIREMENTS OF INTERCONNECTION:

The Customer-Generator shall agree to locate its Net Metering facility so as not to cause a hazard to GPA's existing distribution system. The Customer-Generator shall furnish and install equipment which will automatically isolate the Net Metering facility from GPA's system in the event of loss of GPA service as outlined in IEEE Standard 1547, "Standard for Interconnecting Distributed Resources with Electric Power Systems."

The Customer-Generator will have to acknowledge its understanding that several small systems on one line have the potential of degrading GPA's system integrity; therefore, Customer-Generator must agree to accept pursuant to the "Standard Interconnection Agreement for Net Metering Facilities" the responsibility of any electric service problems that Customer-Generator's Net Metering facility may cause.

The Net Metering Installation shall comply with the requirements specified in IEEE 1547, "Standard for Interconnecting Distributed Resources with Electric Power Systems" and other technical requirements stated herein. The Customer-Generator shall furnish and install equipment which will properly match voltage and phase and synchronize power from the Net Metering facility with GPA service. All Net Metering facilities shall maintain a current distortion level of five percent or less as defined in Table 3 Section 4.3.3. of IEEE standard 1547. The customer installed equipment must adhere to current standards and codes, including but not limited to, IEEE 929, IEEE 1547, U.L. 1741, National Electric Code, uniform building codes, and other applicable standards and codes. IEEE publications are available from the Institute of Electrical and Electronics Engineers, 433 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331 (http://standards.ieee.org/).

The standard IEEE 1547 contains the majority of the technical requirements necessary for interconnection; however, IEEE 1547 does not address planning, designing, operating, or maintaining a utility's distribution system and it does not identify or address all of the potential system impacts a proposed Net Metering Installation may create beyond the point of interconnection. Due to the limitations of IEEE 1547, additional technical requirements are contained herein.

To assure that the safety, reliability and power quality of the distribution system is not degraded by the interconnection of the Net Metering Installation the installation:

- Shall comply with the Technical Requirements stated herein.
- Any distribution system modifications and/or modifications to the Net Metering Installation identified by the Interconnection Study shall be completed.
- Will be required to install correction equipment approved by GPA if the operation of the Customer-Generator's Net Metering facility adversely affects GPA's system or the quality of service supplied to other GPA customers.
- 4) Shall be operated and maintained as agreed upon by the parties.

# **EQUIPMENT DESIGN REQUIREMENTS:**

Data for major equipment proposed by a Customer-Generator to satisfy the Technical Requirements must be submitted for review and approval by GPA with the completed Request for

(Continued on Sheet NM-6)

## (Continued from Sheet NM-5)

Interconnection. To facilitate review and approval, GPA will maintain a list of Pre-certified Equipment. The List of Pre-certified Equipment will be available to Customer-Generators upon request and contains Pre-certified Equipment types, makes, and models of manufactured generating equipment and interconnection system components. This listing is based upon equipment certified by recognized national testing laboratories as suitable for interconnection with a distribution system based upon compliance with IEEE Standard 1547. Suitably for interconnection does not imply that Pre-certified Equipment may be interconnected without study to determine system impact.

The use of equipment that is not Pre-certified may delay GPA review and approval of the Customer-Generator's design. All interconnection equipment must be approved by GPA prior to being connected to its distribution system and before parallel operation is allowed.

## ADDITONAL TERMS AND CONDITIONS:

In addition to the terms and conditions set forth in GPA's applicable rate schedules and/or on file with the Guam PUC, the following requirements will be adhered to:

- Customers operating Net Metering Facilities will be required to contract under the terms of a "Standard Interconnection Agreement for Net Metering Facilities."
- GPA will require the customer to sign a statement certifying that the customer is a Net Metering Facility and meets the requirements established by the Guam Public Utilities Commission.
- 3) GPA shall not be liable directly or indirectly for permitting or continuing to allow the attachment of a Net Metering Facility, or for the acts or omissions of the Customer-Generator that cause loss or injury, including death, to any third party.
- 4) The Contract Period for service under the NM Rider shall be one (1) year and thereafter shall be renewed for successive one-year periods.
- 5) After the initial period, customer may terminate service under the NM Rider by giving at least sixty (60) days previous notice of such termination in writing to GPA. GPA reserves the right to terminate service under the NM Rider at any time upon written notice to customer in the event that customer violates any of the terms or conditions of the NM Rider, or operates a Net Metering Facility in a manner which is detrimental to GPA or its customers.

# ANNUAL REPORTING:

GPA shall submit an annual "net-metering" report to the PUC. The report shall be submitted by April 1st of each year, and shall include the following information for the previous compliance year:

- 1) Total number of Customer-Generator facilities;
- 2) Total estimated rated generating capacity of its "net metered" Customer-Generators;
- 3) Total net kilowatt-hours received from Customer-Generators; and
- 4) Total estimated amount of energy produced by Customer-Generators.