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THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (ROOFTOP SOLAR GRID INTERACTIVE SYSTEMS BASED ON NET METERING) (FIRST AMENDMENT) REGULATIONS, 2015 (1 OF 2024)

# **PRE-PUBLICATION NOTIFICATION**

# The 25<sup>th</sup>September 2024

**NOTIFICATION No. MSERC/RSG/2015/**In exercise of the powers conferred under sub-section (2) of Section 181 of the Electricity Act, 2003 and all powers enabling it in that behalf, the Meghalaya State Electricity Regulatory Commission proposes to issue the Meghalaya State Electricity Regulatory Commission (Rooftop Solar Grid Interactive Systems Based on Net Metering) (First Amendment) Regulations, 2015 (1 of 2024).

The Commission invites suggestion, if any, within 30 (thirty) days from the date of this notice before the publication of the notification.

### 1. Short Title and Commencement

- (1) These regulations shall be called the Meghalaya State Electricity Regulatory Commission(Rooftop Solar Grid Interactive Systems Based on Net Metering) (First Amendment) Regulations, 2015 (1 of 2024).
- (2) They shall come into force on the date of their publication in the Gazette of Meghalaya Extra Ordinary.
- **2.** Regulation 2 Definitions and Interpretations; Regulation 5. Capacity Targets for Distribution Licensee; Regulation 7 Interconnection with the Grid and Regulation 8. Energy Accounting and Settlement, are hereby amended as follows.

# CHAPTER - I

# 2. Definitions and Interpretations

- 2.1 In these regulations, unless the context otherwise requires,
- (a) "Act" means the Electricity Act, 2003 (36 of 2003) and subsequent amendments thereof;
- (b) "Agreement" means an agreement entered into by the Distribution licensee and the consumer/prosumer/generator;
- (c) "Billing cycle or billing period" means the period for which regular electricity bills as specified by the Commission, are prepared for different categories of consumers by the licensee;
- (d) "Commission" means the Meghalaya State Electricity Regulatory Commission constituted under the Act:
- (e) 'Consumer' means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and

- includes any person whose premises are, for the time being, connected for the purpose of receiving electricity with the works of a distribution licensee, the Government or such other person, as the case may be;
- (f) "Contracted load" or "contract demand" means the maximum demand in kW, kVA or BHP, agreed to be supplied by the licensee and indicated in the agreement executed between the licensee and the consumer;
- (g) "Distribution licensee" or "licensee" means a person granted a license under Section 14 of the Act authorizing him to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
- (h) "Electricity Supply Code" means the Meghalaya State Electricity Supply Code specified under section 50 of the Act and subsequent amendments thereof
- (i) 'Eligible consumer' means a consumer of electricity in the area of supply of the distribution licensee, who uses a rooftop solar system installed in the consumer premises, to offset part or all of the consumer's own electrical requirements, given that such systems can be self-owned or third party owned;
- (j) "Financial year" or "year" means the period beginning from first of April in an English calendar year and ending with the thirty first of the March of the next year;
- (k) "Generation meter" means an energy meter installed to measure the electricity generated by the rooftop solar system;
- (1) "Group Net Metering" or "GNM" means an arrangement whereby surplus energy from the roof top solar is exported to the grid and the exported energy is adjusted in more than one electricity service connection(s) of the same name consumer located within the area of supply of the distribution licensee as specified by the Commission.
- (m) "Gross Metering" or "GM" means a mechanism whereby the total energy generated from the rooftop solar and the total energy consumed by the Prosumer are accounted separately through appropriate metering arrangements, and for the billing purpose the total energy consumed by the Prosumer is accounted at the applicable retail tariff and total energy generated by the rooftop solar is accounted for as feed-in tariff to be determined by the Commission from time to time.
- (n) "Interconnection point" means the interface of solar power generation facility system with the network of distribution licensee;
- (o) "Invoice" means either a Monthly Bill / Supplementary Bill or a Monthly Invoice/ Supplementary Invoice raised by the distribution licensee;
- (p) "kWp" means kilo Watt peak;
- (q) "Net metering" means an arrangement under which rooftop solar system installed at eligible consumer premises delivers surplus electricity, if any, to the Distribution Licensee after off-setting the electricity supplied by distribution licensee during the applicable billing period;
- (r) "Prosumer" is a person who consumes electricity from the grid and can also inject distributed renewable energy into the grid using the same network;
- (s) "Obligated entity" means the entity mandated under clause (e) of subsection (1) of section 86 of the Act to fulfil the renewable purchase obligation and identified under RPO Regulations;
- (t) "Premises" means rooftops or/and elevated areas on the land, building or infrastructure or part or combination thereof in respect of which a separate meter or metering arrangements have been made by the licensee for supply of electricity;
- (u) 'Rooftop solar system' means the solar photo voltaic power system installed on the rooftops of consumer premises that uses sunlight for direct conversion into electricity through photo voltaic technology;
- (v) "Renewable Energy Certificate (REC)" means the means the certificate issued in accordance with the procedures approved by the Central Electricity Regulatory Commission;
- (w) 'Settlement period' means the period beginning from first of April in an English calendar year and ending with the thirty first of the March of the next year;

- (x) "Tariff Order" in respect of a licensee means the most recent order issued by the Commission for that licensee indicating the rates to be charged by the licensee from various categories of consumers for supply of electrical energy and services;
- (y) "Virtual Net Metering" or "VNM" means an arrangement whereby the entire energy generated from a solar rooftop is exported to the grid and the energy exported is adjusted in more than one electricity service connection(s) of the participating consumers located within the area of supply of the licensee as specified by the Commission.
- 2.2 All other words and expressions used in these Regulations although not specifically defined herein above, but defined in the Act, shall have the meaning assigned to them in the Act.

# 5. Capacity Targets for Distribution Licensee

5.1 The distribution licensee shall provide net metering arrangement to eligible consumers as long as the total capacity (in MW) does not exceed the target capacity as may be determined by Commission from time to time;

Provided that the capacity of renewable energy system to be installed at the premises of any consumer shall not be less than 1KW peak.

Provided a maximum cumulative capacity of 1 MW shall be allowed to eligible consumers under net metering, on yearly basis, in the area of supply of the distribution licensee;

Provided that the cumulative capacity to be allowed at a particular distribution transformer shall not exceed 40% of the peak capacity of the distribution transformer;

### 7. Interconnection with the Grid – Technical standards & safety And Metering Infrastructure

7.1 The interconnection of the rooftop solar system with the network of the distribution licensee shall be made as per the technical standards for connectivity and safety measures as laid down by the Central Electricity Authority (CEA) or a competent authority to be notified in this regard. Until such time, the interconnection of the rooftop solar system of a particular capacity, with the network of the distribution licensee, shall be as per the contracted load and/or respective voltage level applicable to the consumer as per the provisions of Electricity Supply Code;

Provided further that the system qualifies the technical requirements for grid interconnection with the network of the distribution licensee.

- 7.2 The eligible consumer shall install grid interactive renewable system.
  - Provided that if the eligible consumer, prefers connectivity with battery backup in such case the backup shall have separate wiring to prevent power flow into the grid in the absence of grid supply. Protection for such situation shall have to be provided by the consumer. The licensee may provide instruction to the consumer in this regard which will be abided by such consumer.
- 7.3 The eligible consumer shall be responsible for safe operation, maintenance and correction of any defect in their renewable energy system up to the point of net meter. Beyond meter the responsibility shall rest with the distribution licensee.
- 7.4 The distribution licensee shall have the right to disconnect the renewable system at any time in the event of possible threat or damage from such renewable energy system to its distribution system to prevent an accident or damage.
- 7.5 The eligible consumer shall abide by the instructions issued by the distribution licensee in order to maintain the health of their distribution system in good shape.
- 7.6 All meters installed shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof.
- 7.7 The meters shall be procured, installed and maintained by the distribution licensee. However, it the prosumer wishes to procure meter(s), he may do so and present the meter(s) to the distribution licensee for testing and installation.
- 7.8 The distribution licensee shall undertake meter testing before installation to ensure accuracy of the meter.

7.9 If the eligible consumer is under the ambit of time of day tariff, both generation and net meter shall be capable of recording time of day consumption/generation.

# 8. Energy Accounting and Settlement

# 8.1 Net Metering – Energy Accounting and Settlement

(a) For each billing period, the licensee shall show the quantum of injected electricity by eligible consumer in the billing period, supplied electricity by distribution licensee in the billing period, net billed electricity for payment by the consumer for that billing period and net carried over electricity to the next billing period separately;

Provided that in the event the electricity injected exceeds the electricity consumed during the billing period, such excess injected electricity shall be carried forward to next billing period as electricity credit and may be utilized to net electricity injected or consumed in future billing periods;

Provided further that in the event the electricity supplied by the distribution licensee during any billing period exceeds the electricity generated by the eligible consumer's rooftop solar system, the distribution licensee shall raise invoice for the net electricity consumption after taking into account any electricity credit balance remaining from previous billing periods;

Provided, in case the eligible customer is under the ambit of time of day tariff, as determined by the Commission from time to time, the electricity consumption in any time block (e.g., peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in the same timeblock (e.g., peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in the same time block. Any cumulated excess generation over consumption in any other time block in a billing cycle shall be accounted as if the excess generation occurred during the off-peak time block.

Provided also that the excess electricity measured in kilo-watt hour may only be utilized to offset the consumption measured in kilo-watt hour unless otherwise allowed by the commission and may not be utilized to compensate any other fee and charges imposed by the distribution licensee as per the instructions of Meghalaya State Electricity Regulatory Commission;

Provided also that the distribution licensee in addition to consumer tariff shall be eligible to raise invoice for any other charges as allowed by the Meghalaya State Electricity Regulatory Commission.

(b) The electricity generated by the rooftop solar system of an eligible consumer shall not be more than 90% of the electricity consumption by the eligible consumer at the end of the settlement period.

Provided that such injection of the above mentioned eligible consumer shall be settled only as per net metering arrangement at the end of each settlement period in the manner given at 8.1;

Provided further that in the event the electricity generated exceeds 90% of the electricity consumed at the end of the settlement period, no adjustment shall be made by the distribution licensee and it shall not be carried forward to next settlement period and the same shall be treated as unwanted/inadvertent injunction.

#### 8.2 Gross Metering – Energy Accounting and Settlement

- (a) Gross metering is permitted for rooftop solar installations above 10 KW and who opts to sell all the energy generated to the distribution licensee instead of availing the other metering mechanisms in these Regulations.
- (b) An eligible consumer under gross metering scheme shall inject the entire power generated by the rooftop solar system to the distribution system of the distribution licensee at the interconnection point.
- (c) The payment for energy exported from the rooftop solar will be as per the rate to be determined by the Commission from time to time for such system.

- (d) This shall be adjusted against the total billing demand for consumption of energy by the prosumer from the distribution licensee in every billing month.
- (e) In case the gross energy exported by the rooftop solar exceeds the billing demand of the distribution licensee during any billing month, such an excess shall either be adjusted as credit energy in the subsequent billing months.
- (f) At the end of each settlement period, any electricity credits which remain unadjusted shall be accounted for and paid by the distribution licensee at a rate to be determined by the Commission from time to time for such system.

# 8.3 Group Net Metering – Energy Accounting and Settlement

- (a) Group net metering is permitted for rooftop solar for capacity of not less than 5 KW and not more than 5000 KW.
- (b) The energy generated from the rooftop solar shall be credited in the electricity bill of each participating connection(s), for each billing cycle, as per the ratio indicated in the connectivity agreement with the distribution licensee.
- (c) The sequence of priority for adjustment shall be deemed to begin with the service connection where the solar rooftop is located.
- (d) The priority list for adjustment of the surplus energy against other electricity connection(s) may be revised by the Prosumer once at the beginning of every financial year with an advance notice of three months to the distribution licensee.
- (e) The electricity consumption in any time block (e.g. peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in similar time blocks in the same billing cycle of the Prosumer where the solar rooftop is located and any surplus units injected shall be adjusted against the energy consumed in the monthly bill of service connection(s) in a sequence indicated in the priority list and in accordance with the ratio provided by the Prosumer, as if the surplus generation/energy credits occurred during the off-peak time block for time of day (TOD) consumer(s) and normal time block for Non-TOD consumer(s).
- (f) Where during any billing period the export of units either in Non-TOD or TOD tariff exceeds the import of units by the Electricity service connection(s), such surplus units injected by the Prosumer shall be carried forward to the next billing period as energy credit and shown as energy exported by the Prosumer for adjustment against energy consumed in subsequent billing period within the settlement period indicate in the ration indicated in the priority list.
- (g) For the purpose of carry forward of surplus or sett-off of energy credits, the energy units shall be moderated as per the relevant rebate/surcharge percentage of the TOD tariff applicable for the relevant financial year. Any surplus generation over consumption in any time block in a billing cycle shall be accounted as if the surplus generation/energy credits occurred during the off-peak time block for ToD consumers and normal time block for Non-ToD consumers.
- (h) At the end of each settlement period, any electricity credits which remain unadjusted, such excess electricity shall be accounted for and paid by the distribution licensee to the consumer at a rate to be determined by the Commission from time to time for such system. It shall then be rest to zero at the beginning of each settlement period.

#### 8.4 Virtual Net Metering – Energy Accounting and Settlement

- (a) Virtual net metering is permitted for rooftop solar for capacity of not less than 5 KW and not more than 5000 KW.
- (b) The energy generated from solar rooftop system shall be credited in the monthly electricity bill of each participating consumer(s) as per the ratio of procurement from the rooftop solar indicated under the agreement/ MoU entered by the consumer(s).
- (c) The consumer(s) shall have the option to change the share of credit of electricity from the rooftop solar system, subject to the ratio of procurement from the rooftop solar system indicated under the agreement/ MoU entered by the consumer(s) once in the financial year with an advance notice of three months

- (d) Where the service connection of any participating consumer(s) is disconnected due to any reason under any law for the time being in force, the unadjusted units/ remaining credits of that consumer shall be paid by the distribution licensee at the end of the financial year as per the rate to be determined by the Commission from time to time for such system.
- (e) The electricity consumption in any time block (e.g., peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in the similar time blocks in the same billing cycle of the participating consumer(s). Any surplus generation over consumption in any time block in a billing cycle shall be accounted as if the surplus generation/ Energy Credits occurred during the off-peak time block.
- (f) Where the units credited during any billing period of any participating consumer exceeds the import of units by that consumer, such surplus credited units shall be carried forward in the next billing period as energy credits for adjustment against the energy consumed in subsequent billing periods within the settlement period of each participating consumer(s).
- (g) For the purpose of carry forward of surplus or set off of energy credits, the energy units shall be moderated as per the relevant rebate/surcharge percentage of ToD tariff applicable for the relevant year.

### 8.5 Energy accounting during meter defect / failure / burnt

- (a) In case of defective/failure/burnt condition of any meter, the Prosumer shall report the failure to the distribution licensee in the specified format of the distribution licensee.
- (b) The distribution licensee shall replace the meter as specified.
- (c) The electricity generated by the solar rooftop during the period in which the meter is defective shall be computed on normative basis.

# 8.6 Dispute Resolution

In case of any dispute in billing, it would be settled by the consumer grievance redressal forum and if the issue still unresolved, it shall be settled by the Commission.

By order, etc

Sd/(E. Slong)
Secretary
Meghalaya State Electricity Regulatory Commission
Shillong