

Joint Electricity Regulatory Commission

(For the State of Goa & Union Territories)

(Solar PV Grid Interactive System based on Net Metering) Regulations, 2019, Dated: 24.07.2019

Sl. No.	Description	Summary
1.	Control period	N.A.
2.	Applicability	<ul style="list-style-type: none"> • These Regulations shall apply only to the Grid Connected Rooftop mounted, ground mounted and floating Solar Power Projects. • Group Net Metering Framework shall be applicable for all Consumers. • Virtual Net Metering Framework shall be applicable for residential consumers, Group Housing Societies, and establishments of Government/Local Authorities.
3.	Eligibility Criteria	<ol style="list-style-type: none"> 1. Solar Projects of capacity up to 500 kWp at one premise based on the technologies approved by MNRE are eligible for connecting the project with the Grid under these Regulations. The capacity of the Solar Project to be installed under Group Net Metering or Virtual Net Metering framework shall not be less than 5 kWp and more than 500 kWp. 2. The Solar Project of rating higher than 500 kWp can be considered by the Distribution Licensee if the distribution system remains stable with higher rating Solar Project getting connected to the grid. 3. The Eligible Consumer may install the Solar Project under these Regulations, provided the Solar Project is <ul style="list-style-type: none"> • Within the permissible rated capacity as defined under these Regulations; • Located at the consumer's premises; • Interconnected and operated safely in parallel with the Distribution Licensee's network. 4. The maximum Solar Power Generation capacity to be installed at any eligible consumer premises shall not exceed his Contract Demand (in kVA) or Sanctioned load (in kW). 5. Consumers will generate solar power for self-consumption and are allowed to feed the excess solar power into the grid, which shall be adjusted under Net Metering as per provisions of these Regulations.
4.	Third party owned Solar Project (RESCO Model)	<ul style="list-style-type: none"> • The Consumer may lease out / rent the Rooftop Space/ Land/ Water bodies to a Solar Project Developer on a mutual commercial arrangement for setting up Solar Project under Net Metering framework. The Consumer will pay the Solar Project Developer for all the energy generated by the Solar Project at a mutually agreed tariff. The commercial arrangement between the Project Developer and the Prosumer will be submitted to the Distribution Licensee for records and the Distribution Licensee will not have any role in such commercial arrangement. • Such Solar Projects set up under these Regulations shall be exempted from Open Access restrictions and associated charges including losses. • For any new business model not envisaged in these Regulations, the Commission will approve the framework for such business model based on the specific Petition to be filed in this regard.
5.	Solar Power Generation Capacities	<ul style="list-style-type: none"> • The Distribution Licensee may undertake demand aggregation and other related activities, to promote solar power capacity in its licensed area. The Distribution Licensee may act EPC to undertake solar power development. • Cumulative solar capacity allowed at a particular Distribution Transformer shall not exceed 75 percent of the capacity of the Distribution Transformer. • Distribution Licensee may allow solar power capacity connected to a particular Distribution Transformer and feeder connected to the same

		exceeding 75 percent of capacity upon consideration of a detailed load study carried out by it.
6.	Solar Project-Types	For the purpose of these Regulations, the Commission has covered the Solar Power Projects for Prosumer, which may be roof mounted, ground mounted, floating on water bodies or installed on Elevated structures.
7.	Metering Arrangement	<ol style="list-style-type: none"> 1. The metering system shall be as per the Central Electricity Authority (Installation & Operation of Meters) Regulations, 2006 as amended from time to time 2. Net Meter of the same accuracy class as the Consumer's meter existing before the commissioning of the Solar Project, shall be installed in replacement of existing meter. 3. If the Eligible Consumer is within the ambit of Time-of-Day ('ToD') Tariff, the Net Meter installed shall be capable of recording ToD consumption and generation. 4. The Solar Energy Meter (a unidirectional meter) is to be installed as an integral part of the Net Metering system at the point at which the electricity is generated by the Solar Project and delivered to the main panel. 5. Check Meters shall be mandatory for Solar Project having capacity more than 20 kW. For installations having capacity less than or equal to 20 kW, the Check Meters would be optional. 6. The Distribution Licensee shall be responsible for installation, testing and maintenance of the metering equipment/system and its adherence to the applicable standards and specifications.
8.	Inter-connection with the Distribution Network, Standards and Safety	<ol style="list-style-type: none"> 1. The Distribution Licensee shall ensure that the inter-connection of the Solar Project with its distribution network conforms to the specifications, standards and other provisions specified in the CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations, 2013, CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 including amendments thereto, the CEA (Measures relating to Safety and Electric Supply), Regulations, 2010 including amendments thereto and the Joint Electricity Regulatory Commission for the State of Goa and UT's (Electricity Supply Code) Regulations, 2018 including amendments thereto and Joint Electricity Regulatory Commission for the State of Goa and UT's (State Grid Code) Regulations, 2010. 2. Solar Power generation with Net metering will be allowed for all the Consumers of the Distribution Licensee under the jurisdiction of the Commission at one location owned by one Solar Project Developer with/without battery back-up support 3. The Eligible Consumer shall provide appropriate protection for islanding of the Solar Project from the network of the Distribution Licensee in the event of grid or supply failure. 4. HT Consumers opting for Net Metering shall not be required to provide separate connectivity for the Solar Project at HT voltage level for consumption at LT Level.
9.	Communication Facilities	<ul style="list-style-type: none"> • All grid connected Solar Projects shall have electricity meters with features to record energy for data storage for injection into the grid through Solar Meter as provided under these Regulations. • All meters shall have Advanced Metering Infrastructure (AMI) facility.
10.	Billing, Energy Accounting and Settlement	<ol style="list-style-type: none"> 1. For each billing period, the Distribution Licensee shall show separately:- <ul style="list-style-type: none"> • the quantum of electricity Units exported by the Eligible Consumer; • the quantum of electricity Units imported by the Eligible Consumer; • the net quantum of electricity Units billed for payment by the Eligible Consumer; and • the net quantum of electricity Units carried over (if surplus) to the next billing period.

		<ol style="list-style-type: none"> 2. If the quantum of electricity exported exceeds the quantum imported during the billing period, the excess quantum shall be carried forward to the next billing period as credited Units of electricity. 3. If the quantum of electricity Units imported by the Eligible Consumer during any billing period exceeds the quantum exported, the Distribution Licensee shall raise its invoice / bill for the net electricity consumption after adjusting the credited Units. 4. The unadjusted net credited Units of electricity as at the end of each financial year shall be purchased at APPC of the concerned Distribution Licensee or Feed-in-Tariff determined for that Year without considering subsidy and Accelerated Depreciation, whichever is lower by the Distribution Licensee, latest by April 30th of the following year. 5. In case the Eligible Consumer is within the ambit of Time of Day (ToD) tariff, the electricity consumption in any time block, i.e., peak hours, off-peak hours, etc., shall be first compensated with the quantum of electricity injected in the same time block.
11.	Group Net Metering Billing, Energy Accounting and Settlement	<p>In case of Group Net Metering, the billing and energy accounting shall be dealt with as under:</p> <ol style="list-style-type: none"> 1. Where the export of units during any billing period exceeds the import of units at the connection where Solar Project is located, such surplus units injected into the grid shall be adjusted against the energy consumed in the monthly bill of service connection(s) in a sequence indicated in the priority list provided by the Consumer. 2. The priority list for adjustment of the balance surplus energy against other electricity connection(s) may be revised by the Consumer once at the beginning of every financial year with an advance notice of two months. 3. 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 Consumer where the Solar Project 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 provided by the Consumer, as if the surplus generation/ Energy Credits occurred during the off peak time block for Time of Day (ToD) Consumers and normal time block for Non-ToD Consumer. 4. Where during any billing period, the export of units either in Non-ToD Tariff or ToD Tariff exceeds the import of units by the electricity service connection(s), such surplus units injected by the Consumer shall be carried forward to the next billing period as energy credit and shown as energy exported by the Consumer for adjustment against the energy consumed in subsequent billing periods within the Settlement Period in the sequence indicated in the priority list.
12.	Virtual Net Metering Billing, Energy Accounting and Settlement	<ol style="list-style-type: none"> 1. The energy generated from the Solar Project shall be credited in the monthly electricity bill of each participating consumer(s) as per the ratio of procurement from Solar Project indicated under the agreement/MoU entered on a stamp paper by the Consumer(s) and submitted to the Distribution Licensee. 2. 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. 3. 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. 4. 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).
13.	Penalty or Compensation – Failure in Metering System	In case of failure of metering system, the provisions of penalty or compensation shall be as per the provisions of the Joint Electricity Regulatory Commission for the State of Goa and UT's (Standards of Performance for Distribution Licensees) Regulations, 2015 for the Distribution Licensee.
14.	Late Payment Surcharge	In case the payment by the Distribution Licensee is delayed beyond 31 st of May of that year, a late payment surcharge at the rate of 1.25% per month shall be levied on the Distribution Licensee.
15.	Charges for Banking of Solar Power	The Solar Projects, whether self-owned or third party owned installed on eligible consumer's premises under these Regulations, shall be exempted from charges in respect of banking of electricity.
16.	Renewable Purchase Obligation and Eligibility to Participate under REC Mechanism	<ol style="list-style-type: none"> 1. The quantum of electricity consumed by the eligible consumer from the Solar Project under the Net Metering Arrangement shall qualify towards his compliance of Solar RPO, if such Consumer is an Obligated Entity. 2. The quantum of electricity consumed by the Eligible Consumer from the Roof-top Solar PV System under the Net Metering arrangement shall, if such Consumer is not an Obligated Entity, qualify towards meeting the Solar RPO of the Distribution Licensee: 3. The Solar energy generated by an Eligible Consumer in a Net Metering Arrangement under these Regulations shall not be eligible for REC.
17.	Registration Fee	<ol style="list-style-type: none"> 1. The Eligible Consumer shall apply to the concerned Distribution Licensee for connectivity of the Solar Project with the Licensee's distribution network along with a registration fee of Rs. 500, or such other amount as may be stipulated by the Commission from time to time; and the Distribution Licensee shall acknowledge receipt of such application . 2. Matters relating to subsidy shall be dealt by the State Nodal Agency or as approved by MNRE from time to time. 3. The plants with capacity more than 500 kWp shall be checked by the Chief Electrical Inspector associated with the Distribution Licensee.