

Provided further that Net Metering Arrangement or Net Billing Arrangement, as the case may be, shall be permitted by the distribution licensee on a nondiscriminatory basis and distribution transformer-wise or feeder-wise 'first come first serve' basis to eligible consumers:

Provided further that for the solar-PV generating system, which are already connected with the distribution network under Net-Metering Arrangement shall continue with the existing accounting and settlement mechanism. However, in case of any roof-top solar capacity addition by existing net-metered consumers, they will be treated freshly for eligibility under net-metering or net-billing as per these Regulations:

Provided further that in case consumers under Net Billing system resorts to unlawful drawal of solar power directly from solar panel before capturing of entire solar generation, then net billing facility will be withdrawn immediately for violation of agreement."

21. For regulation 7.2 of the Principal Regulations the following regulation shall be substituted:

"7.2 Interconnection of solar PV system of eligible consumer:

- (a) Solar PV sources of eligible consumers as mentioned in regulation 6.1 (v)(c) of these Regulations shall generally be allowed connectivity at the same voltage level at which the consumer has been given supply by the distribution licensee or any other voltage of the distribution system of the licensee as considered technically and financially suitable by the licensee:

Provided that, the cumulative capacity of solar-PV generating systems allowed to be interconnected with the distribution network (feeder/distribution transformer) shall not exceed 100% of the feeder and/or distribution transformer capacity, as applicable:

Provided that HT consumer may install and connect its solar PV system at its LT bus bar provided the Net Meter shall be installed on the HT side of the consumer's transformer.

- (b) The distribution licensee shall ensure the interconnection of the solar-PV generating system of eligible consumer with its network conforming to the specifications, standard and other provisions specified in the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013 and its subsequent amendments thereof.
- (c) The consumer shall be responsible for safe installation, operation, maintenance and rectification of any defect of the solar-PV generating system up to the point of net meter, beyond which the responsibility of safe operation, maintenance and rectification of any defect in the system, including the net meter, shall be that of the distribution licensee as per the provisions specified in the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010 and its subsequent amendments thereof.
- (d) The distribution licensee shall have the right to disconnect the solar-PV generating system at any time in the event of threat/damage from such renewable energy system to its distribution system to prevent any accident or damage, without any notice. The distribution licensee shall call upon the consumer to rectify the defect within a reasonable time.
- (e) The solar-PV generating system must be capable of detecting an unintended islanding condition. The system must have anti-islanding protection to prevent any feeding into the grid in case of failure of supply or grid. Applicable IEC/IEEE technical standards shall be followed to test islanding prevention measure for grid connected inverters.
- (f) The consumer may install grid interactive renewable energy system with or without battery backup: Provided that if the consumer prefers setting up of solar-PV generating system with battery backup (full load backup/partial load backup), the inverter shall have appropriate arrangement to automatically prevent the battery power to flow into the grid in the absence of grid supply in addition to manual isolation switch that shall also have to be provided.
- (g) The solar-PV generating system shall be equipped with an automatic synchronization device: Provided that the solar-PV generating system using inverter shall not be required to have separate synchronizing device if it is inherently built into the inverter.

- (h) The inverter shall have the features of filtering out harmonics and other distortions before injecting the energy into the system of the distribution licensee. The Total Voltage Harmonic Distortion (THD) shall be within the limits specified in the Technical Standards for Connectivity of the Distributed Generation Resources (Amendments), 2019 of CEA and its subsequent amendments thereof and Indian Electricity Grid Code (IEGC)/ IEEE technical standards:

Provided that, if the presence of harmonics is beyond the limits specified mentioned above it may be treated as "the event of threat/damage" under regulation 7.2 (d) of these Regulations, and the utility shall have the right to disconnect the solar PV generating system.

- (i) The consumers who have installed grid-connected roof-top solar generator under net-metering / net-billing arrangement shall have to furnish certificate of fitness conforming to correct operation of islanding, generation of harmonics and other Power Quality parameters as per limits mentioned above. Consumer can arrange such testing by their own in presence of representative of distribution licensee or request the connected distribution licensee for arranging such tests on cost basis. The periodicity and the procedure for such testing will be specified in the detailed procedure developed by the licensee under regulation 16.9 of these Regulations. The cost for such testing will be uploaded in the website of the distribution licensee.
- (j) The Net Metering Arrangement shall include a single-phase or a three-phase Net Meter, as per the existing supply arrangement of the eligible consumer, located at the point of inter-connection as would be ascertained by the distribution licensee. The solar-PV generation meter and net meter shall be procured and installed by the distribution licensee against the cost to be borne by the consumer. However, if any consumer wishes to procure the generation meter(s) with standard specification(s) to be set by the distribution licensee, he may procure and present that/those to the distribution licensee for testing and installation:

Provided that, if the eligible consumer is within the ambit of Time-of-Day ('ToD') Tariff, notwithstanding anything to the contrary contained elsewhere in any other Regulations of the Commission, the Net Meter installed shall be capable of recording ToD consumption and generation:

Provided that, in case of Net Billing arrangement a check meter of appropriate class shall be installed by the distribution licensee for the solar-PV generation meter against the cost to be borne by the consumer:

Provided that All meters shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof and the meters shall have Advanced Metering Infrastructure (AMI) facility with RS 485 (or higher) communication port:

Provided further that distribution licensee shall be responsible for the testing, installation and maintenance of the metering equipment, and its adherence to the applicable standards and specifications.

22. In regulations 8.0, 8.1 and 8.2 the phrase 'unscheduled interchange' shall be substituted with the phrase 'deviation settlement'.

23. After regulation 16.8 of the Principal Regulations the following regulation shall be inserted:

"16.9 Each distribution licensee shall, within 30 days, prepare a detailed procedure for receiving and disposal of applications for connectivity of the solar-PV generating system of the eligible consumer and submit it before the Commission for approval. The detailed procedure shall specify the application fees, standard formats and procedure, manner & timeline for processing the application and granting connectivity, manner and process for applying for certificate of fitness, model net-metering and net-billing connection agreement for processing the application and granting connectivity. After granting connectivity the eligible consumer has to enter into a Net Billing Connection Agreement or a Net Metering Connection Agreement with the distribution licensee, as the case may be."

24. After regulation 20.2 of the Principal Regulations the following Schedules are to be inserted:

"Schedule-1: Net Metering - Energy Accounting and Settlement

1. The accounting of electricity exported and imported by the eligible consumer shall become effective from the date of notification of these Regulations or date of connectivity of the solar PV generating system with the distribution network, whichever is later.