

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

Net Metering for Roof-top Solar Photo Voltaic Systems - Regulations - 2015 Dated 10th September 2015

Sl. No	Description	Summary												
1	Short Title, Extent and Commencement	<ul style="list-style-type: none"> MERC (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations - 2015 Dated 10th September 2015. Regulations shall extend to the whole of the State of Maharashtra Regulations to come into force from the date of their publication in Official Gazette 												
2	Definitions and Interpretations	As per Regulations												
3.	General Principles	<ul style="list-style-type: none"> Net Metering arrangement by the Distribution Licensee to be on a non discriminatory and 'first come, first serve' basis to Eligible Consumers who have installed, intend to install a Roof-top Solar PV System connected to the Network of Distribution Licensee Inter-connection with the Network of the Distribution Licensee to be in accordance with the standards and norms specified in the CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations - 2013 Priority for connectivity to the Network of the Distribution Licensee to be accorded to consumers who have installed Roof-top Solar PV Systems before the commencement of these Regulations, subject to their compliance. 												
4.	Capacity of Transformer	<ul style="list-style-type: none"> Cumulative capacity of all Roof-top Solar PV Systems under Net Metering Arrangements connected to a particular Distribution Transformer of the Licensee shall not exceed 40% of its rated capacity. Distribution Licensee may allow Net Metering connectivity exceeding 40% of such rated capacity upon consideration of a detailed load study carried out by it. Distribution licensee to provide information on its website regarding capacity available on each distribution transformer for connecting Rooftop Solar system under net metering within 3 months from the date of notification of these regulations. Licensee to update the distribution transformer capacity available and the cumulative capacity of the Rooftop Solar systems installed under net metering quarterly and provide the information on its website in the month following the close of the relevant quarter. 												
5.	Eligible Consumer and Project Capacity	<ul style="list-style-type: none"> Capacity of the Roof-top Solar PV System to be connected at the Eligible Consumer's premises shall not exceed his Contract Demand / Sanctioned load Maximum capacity to be installed at an Eligible Consumer's premises to be subject to the cumulative capacity of the relevant Distribution Transformer Variation in the rated capacity of the System within a range of five percent allowed. Capacity limits for the connectivity of a Roof-top Solar PV System to the Network of the Distribution Licensee to be as specified in Regulation 5.3 of the MERC (Standards Performance of Distribution Licensee, Period of giving Supply and Determination of Compensation) Regulations - 2014, which are presently as follows: <table border="1" data-bbox="581 1535 1442 1864"> <thead> <tr> <th>SL. No.</th> <th>Maximum limit for Roof-top Solar PV system</th> <th>Connectivity level</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Less than 8 kW/40 A</td> <td>230/240 V- single phase</td> </tr> <tr> <td>2</td> <td>Less than 150kW/187 kVA (Municipal Corporation areas) Less than 80kW/100 kVA(in other areas)</td> <td>400/415 V-Three phase</td> </tr> <tr> <td>3</td> <td>Above 150 kW/187 kVA and less than 1000 kVA (in Mumbai Metropolitan Region) Above 80kW/ 100 kVA and less than 1000 kVA (in other areas)</td> <td>11 kV and above (HT)</td> </tr> </tbody> </table>	SL. No.	Maximum limit for Roof-top Solar PV system	Connectivity level	1	Less than 8 kW/40 A	230/240 V- single phase	2	Less than 150kW/187 kVA (Municipal Corporation areas) Less than 80kW/100 kVA(in other areas)	400/415 V-Three phase	3	Above 150 kW/187 kVA and less than 1000 kVA (in Mumbai Metropolitan Region) Above 80kW/ 100 kVA and less than 1000 kVA (in other areas)	11 kV and above (HT)
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		<ul style="list-style-type: none"> • These norms to apply only to Roof-top Solar PV Systems which seek connectivity with the Networks of the Distribution Licensees • HT Consumers may install and connect Roof-top Solar PV System at their LT Bus Bar System and, in such cases, Net Meter to be installed on HT side of the Transformer • Eligible Consumer may install/enhance capacity of, or upgrade the Roof-top Solar PV Systems at different locations within the same premises Provided the total capacity of such Systems within the same premises shall not exceed the individual capacity limits specified in these Regulations
6.	Interconnection with Grid, Standards and Safety	<ul style="list-style-type: none"> • Distribution Licensee to ensure that the inter-connection of the Roof-top Solar PV System with its Network conforms to the specifications, standards and other provisions specified in the CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations - 2013, the CEA (Measures relating to Safety and Electric Supply), Regulations - 2010 and the Maharashtra Electricity Regulatory Commission (State Grid Code) Regulations - 2006, or as may be specified in future. • Eligible Consumer may install a Roof-top Solar PV System with or without battery back-up and in case with battery back-up, inverter to have a separate back-up wiring to prevent the battery/DG power from flowing into the grid in the absence of grid supply, and an automatic as well as manual isolation switch shall also be provided. • Consumer to be responsible for the safe operation, maintenance and rectification of any defect in the Roof-top Solar PV System up to the point of Net Meter, beyond which responsibility, including the Net Meter and Solar Generation Meter, shall be of the Distribution Licensee. • Consumer to provide protection for islanding of the Rooftop Solar PV System from the Network of the Distribution Licensee in the event of grid or supply failure. • Licensee shall have the right to disconnect the Roof-top Solar PV System from its Network any time in the event of any threat of accident or damage from such System to its distribution system so as to avoid any accident or damage to it • Eligible Consumer may use his Roof-top Solar PV System in islanding mode for his own consumption.
7.	Metering Arrangement	<ul style="list-style-type: none"> • Net Metering Arrangement to include a single/three-phase Net Meter located at the point of inter-connection as ascertained by the Distribution Licensee. • Net Meter to conform to the standards of CEA for installation and operation of meters. • Net Meter at the Eligible Consumer premises to be procured and installed by the Licensee at its own cost and in accordance with the Electricity Supply Code • 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 • Distribution Licensee may replace the meter of an existing Eligible Consumer with a Net Meter • In case the Eligible Consumer procures the Net Meter, the testing and installation shall be by the Distribution Licensee. • Licensee to be responsible for supply, installation, testing and maintenance of the metering equipment, and its adherence to the applicable standards and specifications. • Eligible Consumer(if an Obligated Entity)/Distribution Licensee may install, at their own cost, a Solar Generation Meter conforming to the applicable CEA Regulations at an appropriate location to measure the energy generated from the Roof-top Solar PV system, if they desires that such energy be counted towards meeting its RPO. • Solar Generation Meter to be maintained by the Distribution Licensee at its cost. • Net Meter and the Solar Generation Meter to be installed at such locations at the Eligible Consumer premises as would enable easy access to the Distribution Licensee for meter reading.
8.	Procedure for Application and Registration	<ul style="list-style-type: none"> • Consumer to apply to the Licensee for connectivity of the Roof-top SPV System with the Licensee's Network along with a registration fee of Rs. 500/- and Rs. 1,000/- for Consumers with Sanctioned Load/Contract Demand, up to and above 5kW, respectively, or such amount as may be stipulated by the Commission from time to time. • Distribution Licensee to acknowledge receipt of the application.

		<ul style="list-style-type: none"> • Application and payment of fees may be made by electronic means online within two months from the date of publication of these Regulations • Procedure for application is available at Annexure 1 of these Regulations. • The model Form, along with check-list, for application to be made by the Eligible Consumer to the concerned Licensee is at Annexure 2 of the Regulations. • For more Details refer Regulations.
9.	Net Metering Connection Agreement	<ul style="list-style-type: none"> • Distribution Licensee and Eligible Consumer to enter into a Net Metering Connection Agreement after approval of connectivity of the Roof-top SPV System with the distribution Network but before the start of actual generation from the System. • A model Net Metering Connection Agreement, which the Distribution Licensee may modify subject to consistency with these Regulations, is provided at Annexure 3. • Distribution Licensee to make available the Agreement format, along with the applicable procedure and Application and other relevant forms, on its website and also at its local offices within two months of notification of these Regulations. • Agreement to remain in force for twenty years • Eligible Consumer may terminate the Agreement at any time by giving 30 days' notice to the Distribution Licensee • Distribution Licensee may terminate the Agreement by giving 30 days' notice if the Consumer breaches any term of the Agreement and does not remedy such breach within 30 days, or longer period as may be provided, of receiving notice from the Licensee of such breach, or for any other valid reason to be communicated in writing • Agreement may be terminated at any time by mutual consent. • Eligible Consumer shall, upon termination of the Agreement, disconnect forthwith its Roof-top Solar PV System from the Distribution Licensee's Network.
10.	Energy Accounting and Settlement	As detailed in the Regulations
11.	Solar Renewable Purchase Obligation	<ul style="list-style-type: none"> • Quantum of electricity consumed by the Eligible Consumer from the Roof-top Solar PV System under the Net Metering Arrangement to qualify towards his compliance of Solar RPO, if such Consumer is an Obligated Entity. • Quantum of electricity consumed by the eligible consumer under net metering who is not defined as Obligated entity, to qualify towards meeting RPO of the Licensee • Distribution Licensee, with the consent of the Eligible Consumer, to make all the arrangements, including for additional metering, as may be required for the accounting of the Solar energy generated and consumed by the Consumer. • The unadjusted surplus Units of Solar energy purchased by the Distribution Licensee to qualify towards meeting its Solar RPO.
12.	Eligibility under Renewable Energy Certificate (REC) Mechanism	Solar energy generated by an Eligible Consumer in a Net Metering Arrangement under these Regulations shall not be eligible for REC
13.	Power to Relax, Amend & Remove Difficulties	Powers vested with the Commission
14	Issue of Orders and Practice Directions	Powers vested with the Commission