

# Maharashtra Electricity Regulatory Commission

## (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019,

Dated: 30.12.2019

Sl. No.	Description	Summary
1.	<b>Control Period</b>	N.A.
2.	<b>Applicability</b>	<ol style="list-style-type: none"> <li>These Regulations would apply to: <ul style="list-style-type: none"> <li>Net Metering Arrangements;</li> <li>Net Billing Arrangements;</li> <li>Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, who have not opted either for Net Metering Arrangement or Net Billing Arrangement.</li> </ul> </li> <li>These Regulations shall be applicable to all Grid Interactive installations for which Applications are received on or after the notification of these Regulations.</li> </ol>
3.	<b>General Conditions of Net Metering Arrangement and Net Billing Arrangement</b>	<ul style="list-style-type: none"> <li>Net Metering Arrangement or Net Billing Arrangement, as the case may be, shall be permitted by the Distribution Licensee on a non-discriminatory and Distribution Transformer-wise or feeder wise 'first come, first serve' basis to Eligible Consumers who have installed or intend to install a Renewable Energy Generating System connected to the Network of such Distribution Licensee.</li> <li>The Eligible Consumer of all categories may set up the Renewable Energy Generating System under the Net Metering Arrangement or Net Billing Arrangement.</li> </ul>
4.	<b>Capacity limits at Distribution Transformer level</b>	The cumulative capacity of all Renewable Energy Generating Systems under Net Metering Arrangements and/or Net Billing Arrangements connected to a particular Distribution Transformer/feeder of the Licensee shall not exceed 70% of its rated capacity.
5.	<b>Eligible Consumer and individual Project capacity</b>	<ul style="list-style-type: none"> <li>The minimum size of the Renewable Energy Generating System that can be set up under Net Metering Arrangement and Net Billing Arrangement would be 1 kW.</li> <li>The capacity of the Renewable Energy Generating System to be connected at the Eligible Consumer's premises shall not exceed the Sanctioned load (in kW) or the Contract Demand (in kVA) of the Consumer, as applicable.</li> <li>The maximum Renewable Energy Generating System capacity to be installed at an Eligible Consumer's premises shall be subject to the cumulative capacity of the relevant Distribution Transformer, which has already been utilized.</li> <li>HT (11 kV and above) Consumers may install and connect Renewable Energy Generating System at their LT Bus Bar System.</li> <li>An Eligible Consumer may install or enhance the capacity of, or upgrade the Renewable Energy Generating Systems at different locations within the same premises.</li> <li>Consumers with pending arrears with the Distribution Licensee shall not be eligible for Net Metering Arrangement or Net Billing Arrangement under these Regulations.</li> </ul>
6.	<b>Inter-connection with the Distribution Network / Grid, Standards and Safety</b>	<ol style="list-style-type: none"> <li>The Distribution Licensee shall ensure that the inter-connection of the Renewable Energy Generating 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.</li> <li>The Eligible Consumer may install a Renewable Energy Generating System with or without storage.</li> <li>The Renewable Energy Generation Meter shall be maintained by the Distribution Licensee.</li> <li>The Distribution Licensee shall have the right to disconnect the Renewable Energy Generating System from its network at 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.</li> <li>The Renewable Energy Generating System must have appropriate protection for islanding the RE generating system from the network of the Distribution Licensee to prevent any feeding into the grid in case of failure of supply or grid.</li> <li>The inverter shall have the features of filtering out harmonics and other distortions before injecting the energy into the system of the Distribution Licensee.</li> </ol>

		7. Grid Connected Renewable Energy Generating Systems connected behind the Consumer's meter, and not opting for either Net Metering Arrangement or Net Billing Arrangement, shall be allowed only after prior intimation to the respective Distribution Licensee.						
7.	<b>Metering Infrastructure</b>	<ol style="list-style-type: none"> <li>All meters installed at the Renewable Energy Generating System shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof.</li> <li>All meters shall have Advanced Metering Infrastructure (AMI) facility with RS 485 (or higher) communication port.</li> <li>Existing Meter in the premises of the Eligible Consumer shall be replaced by the Net Meter at the cost of the Consumer, in accordance with the provisions of the Electricity Supply Code.</li> <li>In case of Renewable Energy Generating System with capacity above 20 kW set up under Net Metering Arrangement, a Check Meter of appropriate class shall be installed by the Distribution Licensee for the Renewable Energy Generation Meter.</li> </ol>						
8.	<b>Registration</b>	<p>The Eligible Consumer shall apply to the concerned Distribution Licensee for connectivity of the Renewable Energy Generating System with the Licensee's Network along with a registration fee as follows and the Distribution Licensee shall acknowledge receipt of such application:</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Registration Fee</th> </tr> </thead> <tbody> <tr> <td>Low Tension Consumer</td> <td>Rs. 500 for consumer having Sanctioned Load or Contract Demand upto 20 kW and Rs 100 thereafter for every 20 kW or part thereof</td> </tr> <tr> <td>High Tension Consumer</td> <td>Rs 5,000</td> </tr> </tbody> </table> <p>The approval for connectivity from the Distribution Licensee shall indicate the maximum permissible capacity of the System, and shall be valid for a period of 6 months from the date of approval, or such extended period as may be agreed to by the Distribution Licensee</p>	Particulars	Registration Fee	Low Tension Consumer	Rs. 500 for consumer having Sanctioned Load or Contract Demand upto 20 kW and Rs 100 thereafter for every 20 kW or part thereof	High Tension Consumer	Rs 5,000
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9.	<b>Connection Agreement</b>	<ul style="list-style-type: none"> <li>The Connection Agreement shall remain in force for twenty years.</li> <li>Eligible Consumer may terminate the Agreement at any time by giving 90 days' notice to the Distribution Licensee.</li> <li>Distribution Licensee may terminate the Agreement by giving 15 days' notice in case the consumer fails to pay his dues in a timely manner or indulges in any malpractices.</li> </ul>						
10.	<b>Net Metering - Energy Accounting and Settlement</b>	<ol style="list-style-type: none"> <li>The Distribution Licensee shall undertake meter reading of both, the Renewable Energy Generation Meter and the Net Meter, for all Eligible Consumers, according to the regular metering cycle.</li> <li>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.</li> <li>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 for the net electricity consumption after adjusting the credited Units.</li> <li>At the beginning of each Settlement Period, the cumulative quantum of injected electricity carried forward will be re-set to zero.</li> <li>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; any excess injection over and above the consumption in any other time block in a Billing Cycle shall be accounted as if the excess injection had occurred during off-peak hours.</li> <li>The Commission may determine in the retail Tariff Order such Grid Support Charges to be levied on the generated energy under Net Metering systems which shall cover balancing, banking and wheeling cost after adjusting RPO benefits, avoided distribution losses and any other benefits accruing to the Distribution Licensee.</li> <li>The consumers of all Categories having Sanctioned Load up to 10 kW shall be exempted from payment of Grid Support Charges for Net Metering systems.</li> <li>In case the Eligible Consumer leaves the system or changes the Supply Licensee, the excess electricity shall be considered in the following manner: <ul style="list-style-type: none"> <li>The unadjusted Units as on date of leaving the system or changing the Supply Licensee shall be compensated at the Generic Tariff, and adjusted along with the final bill settlement with the existing Supply Licensee;</li> </ul> </li> </ol>						

		<ul style="list-style-type: none"> <li>Any injection of electricity without entering into a new Net Metering Agreement with the new Supply Licensee shall be considered as inadvertent injection and shall not be paid for by the new Supply Licensee.</li> </ul>
11.	<b>Net Billing - Energy Accounting and Settlement</b>	<ol style="list-style-type: none"> <li>The accounting of electricity exported and imported by the Eligible Consumer shall become effective from the date of connectivity of the Renewable Energy Generating System with the distribution network.</li> <li>The Distribution Licensee shall enter into Power Purchase Agreement at the APPC approved for the respective period by the Commission.</li> </ol>
12.	<b>Energy Accounting during meter defect/failure/burnt</b>	<ul style="list-style-type: none"> <li>In case of defective/failure/burnt condition of any meter, the Distribution Licensee shall replace the meter as specified in the Electricity Supply Code.</li> <li>The electricity generated by the Renewable Energy Generating System during the period in which the meter is defective shall be determined based on the readings of the Check Meter.</li> <li>The consumption of the Consumer during the period in which the Consumer meter or Net Meter is defective shall be determined as specified in the Electricity Supply Code.</li> </ul>
13.	<b>Renewable Purchase Obligation</b>	<ul style="list-style-type: none"> <li>The quantum of electricity consumed by the Eligible Consumer from the Renewable Energy Generating System under the Net Metering Arrangement shall qualify towards his compliance of RPO, if such Consumer is an Obligated Entity.</li> <li>The quantum of electricity consumed by the Eligible Consumer from the Renewable Energy Generating System under the Net Metering arrangement shall, if such Consumer is not an Obligated Entity, qualify towards meeting the RPO of the Distribution Licensee.</li> <li>Under the Net Billing Arrangement, the entire quantum of electricity recorded by the Generation Meter shall qualify towards meeting the RPO of the Distribution Licensee.</li> </ul>
14.	<b>Eligibility under Renewable Energy Certificate mechanism</b>	The Renewable Energy generated by an Eligible Consumer under the Net Metering Arrangement or the Net Billing Arrangement under these Regulations shall not be eligible for issuance of Renewable Energy Certificate.