

# J&K STATE ELECTRICITY REGULATORY COMMISSION

## (Grid Interactive Roof Top Solar Photo Voltage Systems based on Net Metering) Regulation, 2015, Dated: 15-10-2015

Sl. No.	Description	Summary												
1.	<b>Scope and Applications</b>	<ol style="list-style-type: none"> <li>1. Any consumer in the area of supply of distribution licensee may install rooftop solar system under net metering arrangement which: Shall be of minimum 1 kWp &amp; upto 1 MWp (AC side) capacity with or without battery backup support.</li> <li>2. These Regulations do not preclude the right of any person to undertake rooftop solar projects above 1 MWp capacity through alternative mechanism.</li> </ol>												
2.	<b>Project Capacity</b>	<ol style="list-style-type: none"> <li>1. The maximum capacity of rooftop solar system shall not exceed 50% of the sanctioned load of the consumer (for kVA conversion to kW use a power factor of 0.9).</li> <li>2. The installed capacity shall not be less than 1 kWp and shall not exceed 1MWp (AC side) for a single eligible consumer.</li> <li>3. Variation in the rated capacity of the system within a range of 5 % shall be allowed.</li> </ol>												
3.	<b>Interconnection with the Grid</b>	<ol style="list-style-type: none"> <li>1. The interconnection of the Rooftop PV Solar Power Plant with the network of the distribution licensee shall be made as per the technical specifications and standards for connectivity provided in the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time.</li> <li>2. The connectivity levels at which the Rooftop PV Solar Power Plants shall be connected with the grid are as specified below: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: center;">S.No.</th> <th style="text-align: center;">Connected load of Eligible Consumer</th> <th style="text-align: center;">Connectivity level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Upto 5 kW</td> <td style="text-align: center;">240 V- single phase</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">Above 5 kW and upto100 kW</td> <td style="text-align: center;">415 V-Three phase</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">Above 100 KW</td> <td style="text-align: center;">HT/EHT level</td> </tr> </tbody> </table> </li> <li>3. EHT/HT consumers may install solar power generators at LT/HT voltage and connect them to their LT/HT system.</li> <li>4. The distribution licensee shall have the right to disconnect the roof top PV solar energy generator from its system at any time.</li> <li>5. The Rooftop PV Solar Power Plant operating in parallel with electricity system shall be equipped with the following protective functions to sense abnormal conditions on electricity system and cause the Rooftop PV Solar Power Plant to be automatically disconnected from the electricity system or to prevent the Rooftop PV Solar Power Plant from being connected to electricity system inappropriately: <ol style="list-style-type: none"> <li>(a) Over and under voltage trip functions if voltage reaches above 110% or below 80% respectively with a clearing time upto two seconds; however, appropriate licensee may prescribe a narrower range of voltage for the purpose.</li> <li>(b) Over and under frequency trip functions, if frequency reaches 50.5 Hz or below 47.5 Hz with a clearing time upto 0.2 seconds; however, appropriate licensee may prescribe a narrower range of frequency for the purpose.</li> </ol> </li> <li>6. Paralleling device of the Rooftop PV Solar Power Plant shall be capable of withstanding 220% of the nominal voltage at the interconnection point.</li> </ol>	S.No.	Connected load of Eligible Consumer	Connectivity level	1	Upto 5 kW	240 V- single phase	2	Above 5 kW and upto100 kW	415 V-Three phase	3	Above 100 KW	HT/EHT level
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4.	<b>Third Party Owned Rooftop Solar PV system based on Net Metering</b>	<ol style="list-style-type: none"> <li>1. The owner of the premises provides the rooftop and engages a turnkey installer to design and install the system.</li> <li>2. The developer shall continue to be the owner of equipment in third party owned system, to qualify for claiming depreciation on capital cost for the solar PV system with associated direct tax benefits, if any.</li> </ol>
5.	<b>Metering Arrangement</b>	<ol style="list-style-type: none"> <li>1. Solar meter shall be installed at the solar facility after the inverter to measure the solar generation.</li> <li>2. Check meters shall be mandatory for rooftop solar systems having capacity more than 250 kW. For installations size of less than and equal to 250 kW, the solar check meters would be optional.</li> <li>3. The meters installed for Rooftop PV Solar Power Plants with capacity above 250 kWp shall have the communication port for exchanging real time information with Distribution Licensee.</li> </ol>
6.	<b>Energy Accounting and Settlement</b>	<ol style="list-style-type: none"> <li>1. In case the electricity injected exceeds the electricity consumed from licensee's supply system during the billing cycle such excess injected electricity shall be carried forward to the next billing cycle as electricity banked and may be utilized in the next billing cycle(s) within the settlement period. In such a case, the distribution licensee shall issue an invoice containing all these details.</li> <li>2. In case the eligible consumer is under the ambit of TOD tariff, the electricity consumption in any time block i.e. peak hours, off peak hours etc. shall be first compensated with the 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 occurred during non peak hours.</li> <li>3. A normative power factor of 0.9 shall be considered for conversion of kWh to kVAh, wherever applicable.</li> <li>4. in the event of electricity generated exceeds 90% of the electricity consumed at the end of the settlement period no payment shall be made by the distribution licensee and shall not be carried forward to next settlement period and the same shall be treated as inadvertent injection.</li> <li>5. At the beginning of each settlement period, cumulative carried over solar electricity injected shall be reset to zero.</li> </ol>
7.	<b>Certificates</b>	The eligibility for issuance of renewable energy certificate shall be as per the eligibility criteria specified under Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time.
8.	<b>Renewable Purchase Obligation (RPO)</b>	The quantum of electricity consumed by eligible consumer, who is not defined as obligated entity, from the rooftop solar system under net metering arrangement shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the distribution licensee.