

## UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

### Rooftop Solar PV Grid Interactive Systems Gross/Net Metering - Regulations – 2015, RSPV Regulations 2015

Notification No.: UPERC/Secretary/RSPVRegulations/2015/2150 Dated: 20/03/2015

| Sl. No. | Description                                 | Summary  |
|---------|---|--|
| 1.      | <b>Short Title and Commencement.</b>        | UPERC (Rooftop Solar PV Grid Interactive Systems Gross/Net Metering) - Regulations – 2015 Dated 20/03/2015. RSPV Regulations 2015<br>Regulations to come into force from the date of its notification  |
| 2.      | <b>Definitions</b>                          | As per Regulations   |
| 3.      | <b>Scope and Application</b>                | <ul style="list-style-type: none"> <li>• Regulations to apply to the Distribution Licensees, eligible consumers of the Distribution Licensees and third party owners of gross metering arrangement of Rooftop Solar PV system in the State of Uttar Pradesh.</li> <li>• Consumer may install the Rooftop Solar PV system under either gross/ net metering arrangement which:               <ul style="list-style-type: none"> <li>– Shall be within the permissible rated capacity as defined under these Regulations;</li> <li>– Shall be located in the premises of the consumer;</li> <li>– Shall interconnect and operate safely with the distribution system of the Licensee.</li> </ul> </li> <li>• Regulations do not preclude the right of the State authorities to undertake Rooftop Solar projects of 1 MWp and above capacity through alternative mechanisms.</li> <li>• Any consumer/third party owner claiming accelerated depreciation benefits on the Rooftop Solar PV system shall only be eligible to avail net metering arrangement</li> </ul>   |
| 4.      | <b>General Principles</b>                   | <ul style="list-style-type: none"> <li>• Eligible consumers may install Rooftop Solar PV system under either gross / net metering arrangement</li> <li>• Third party owners who have entered into a lease or commercial agreement for the Rooftop in the premises of the consumers can also install Rooftop Solar PV system under gross metering arrangement with the Distribution Licensee, for such capacity which shall be cumulative of the prescribed limits of Rooftop Solar PV capacity for each eligible consumer whose Rooftop has been leased by the third party owner.</li> <li>• Consumer/third party availing gross metering arrangement not allowed to apply for net metering arrangement within the same premises.</li> <li>• Consumer availing net metering arrangement not allowed to apply for gross metering arrangement within the same premises.</li> <li>• Licensee to offer gross/net metering arrangement to consumer/third party owner installing grid connected Rooftop Solar PV system, in its area of supply on non-discriminatory and first come first serve basis.</li> <li>• If the consumer/third party owner installs Rooftop Solar system under the gross metering scheme, the entire power generated shall be injected to the distribution system of the Licensee at the interconnection point.</li> <li>• If the consumer installs Rooftop Solar system under the net metering scheme, he shall be entitled to use the power generated from the Rooftop Solar PV system at his premises. The surplus power can be injected to the distribution system of the Licensee at the interconnection point.</li> </ul> |
| 5.      | <b>Capacity of Rooftop Solar PV System.</b> | <ul style="list-style-type: none"> <li>• Peak capacity of consumer shall not exceed 100% of the sanctioned connected load / contract demand of the consumer.</li> <li>• Capacity of consumer/third party owner shall be more than one kilo watt peak minimum and be in conformity with the provisions relating to the connected load or contract demand permissible under the UPERC (Electricity Supply Code) Regulations 2005 and subsequent amendments thereof</li> </ul>  |

| 6.    | <b>Capacity of Transformer</b>  | <ul style="list-style-type: none"> <li>Licensee shall provide information on its website regarding capacity available on distribution transformer(s) for feeding the consumer at different locations for connecting Rooftop Solar PV system within three months from the date of commencement of these Regulations, and shall update the same within one month of the start of the subsequent financial year under intimation to the Commission.</li> <li>Capacity of the distribution transformer/any other transformer from which power is fed to the consumer shall not exceed 15% / percentage fixed by the Commission of the rated capacity of such transformer(s).</li> <li>In case of multiple applications, the connectivity with the Rooftop Solar PV system shall be allowed on first come first serve basis.</li> </ul>   |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
|-------|---|--|-------|---|--------------------|----|------------|-----------------------|----|-----------------------------------|--------------------------|----|----------------------------|------------------|
| 7.    | <b>Procedure for Application and Registration</b>                                   | <ul style="list-style-type: none"> <li>Consumer/third party owner i.e applicant installing grid interactive Rooftop Solar PV system in his/her premises shall apply in the application form given at Annexure-I along with the application fees as specified in Annexure-II of these Regulations</li> <li>On receipt of approval of Distribution Licensee, applicant to apply for registration as per Annexure-III along with the registration fees as specified in Annexure-II.</li> <li>In case the application is rejected, Licensee to intimate to the applicant in writing reasons for rejection within 15 days of receipt of re-submitted Registration form and refund 50% of the registration fee within 7 days from issue of written intimation for rejection of application.</li> </ul> <p>For Details refer Regulations</p>  |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
| 8.    | <b>Interconnection with the Distribution System</b>                                 | <ul style="list-style-type: none"> <li>To be as per the technical specifications and standards for connectivity specified by the Central Electricity Authority (CEA).</li> <li>Cost of evacuation system and interconnection of the Rooftop Solar PV system with the distribution system to be borne by the eligible consumer/third party owner.</li> <li>Information related to technical &amp; interconnection standards are given at Annexure IV of these Regulations.</li> </ul> <p>Distribution Licensee to ensure that:</p> <ul style="list-style-type: none"> <li>Interconnection of the Rooftop Solar PV system with the distribution system conforms to the specifications, standards and provisions provided in CEA (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013, CEA (Measures Relating to Safety and Electric Supply) Regulations, 2010 and UPERC (Grant of connectivity to intra-state Transmission System) Regulations, 2010 as amended from time to time</li> <li>In case of a conflict between these Regulations and UPERC (Grant of connectivity to intra-state Transmission System) Regulations, 2010 with amendments, these Regulations shall be applicable to the consumers/third party owner</li> </ul> |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
| 8.1   | <b>Connectivity levels for Rooftop Solar PV system with the Distribution System</b> | <table border="1" data-bbox="586 1287 1446 1472"> <thead> <tr> <th>S.No.</th> <th>Connected Load/Contract Demand of Eligible Consumer</th> <th>Connectivity Level</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Up to 5 kW</td> <td>Single phase at 230 V</td> </tr> <tr> <td>2.</td> <td>5 kW and above up to 50 kW/63 kVA</td> <td>3 Phase, 4 wire at 415 V</td> </tr> <tr> <td>3.</td> <td>Above 50 kW and up to 1 MW</td> <td>3 Phase at 11 kV</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Consumer shall be responsible for safe operation, maintenance and rectification of any defect of the rooftop solar PV system up to the interconnection point and beyond that the responsibility shall rest with the Distribution Licensee.</li> <li>Licensee shall have the right to disconnect the Rooftop Solar PV system at any time in the event of possible threat/damage from the system to its distribution system</li> </ul>   | S.No. | Connected Load/Contract Demand of Eligible Consumer | Connectivity Level | 1. | Up to 5 kW | Single phase at 230 V | 2. | 5 kW and above up to 50 kW/63 kVA | 3 Phase, 4 wire at 415 V | 3. | Above 50 kW and up to 1 MW | 3 Phase at 11 kV |
| S.No. | Connected Load/Contract Demand of Eligible Consumer                                 | Connectivity Level   |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
| 1.    | Up to 5 kW  | Single phase at 230 V  |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
| 2.    | 5 kW and above up to 50 kW/63 kVA   | 3 Phase, 4 wire at 415 V   |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |
| 3.    | Above 50 kW and up to 1 MW  | 3 Phase at 11 kV   |       |   |                    |    |            |                       |    |                                   |                          |    |                            |                  |

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| 9.  | <b>Metering Arrangement</b>  | <ul style="list-style-type: none"> <li>• Meters to adhere to standards and provisions specified in CEA (Installation and Operation of Meters), Regulations, 2006 and subsequent amendments thereof.</li> <li>• Meter(s) shall be single or three phase as per requirement and be of the same or better Accuracy Class Index than the existing meter installed at the premises.</li> <li>• Meter(s) to be procured, installed and maintained by the Licensee at the consumer premises at the cost of the consumer. If the consumer procures the Meter(s), he should hand over the meter(s) to the Licensee for testing and installation</li> <li>• Location of meter(s) to be in accordance with the CEA Regulations, 2006 and UPERC (Grid Code) Regulations, 2007 with amendments</li> <li>• Installation of check meters shall be mandatory for Rooftop Solar PV system having rated capacity more than 50 kWp.</li> <li>• Charges for testing, installation and maintenance of the check meter to be borne by the consumer. Licensee to own the check meter.</li> <li>• For rated capacity up to 50 kWp, consumer/Licensee may install check meter at their own cost.</li> <li>• Meters to be jointly inspected and sealed on behalf of both the parties.</li> <li>• Meter reading taken by the Distribution Licensee to form the basis of commercial settlement.</li> </ul> |
| 10. | <b>Energy Accounting and Settlement</b>                                    | Refer Regulations  |
| 11. | <b>Applicability of other Charges</b>                                      | Rooftop Solar PV System installed at consumer premises to be exempted from Wheeling and Cross subsidy surcharge.   |
| 12. | <b>Solar Renewable Purchase Obligation (RPO)</b>                           | <ul style="list-style-type: none"> <li>• In case of gross metering scheme the quantum of solar power of eligible consumer, who is not an obligated entity, shall qualify for accounting towards RPO of the licensee in whose area of supply the consumer is located</li> <li>• In case of net metering scheme the quantum of solar power of eligible consumer, who is not an obligated entity, shall qualify for accounting towards deemed RPO for the licensee in whose area of supply the consumer is located</li> </ul>   |
| 13. | <b>Eligibility to Participate under Renewable Energy Certificate (REC)</b> | <ul style="list-style-type: none"> <li>• As per Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations - 2010 and UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations - 2010 and subsequent amendments thereof</li> <li>• Eligibility for and issuance of REC shall be as per the eligibility criteria specified under Central Electricity Regulatory Commission Regulations, 2010 and amendments thereof</li> </ul>  |
| 14. | <b>Penalty or Compensation</b>   | In case of failure of gross/net metering system, penalty or compensation shall be as per UPERC (Electricity Supply Code) Regulations 2005 and subsequent amendments thereof or as determined by the Commission from time to time   |
| 15. | <b>Power to give Directions</b>  | Vested with the Commission   |
| 16. | <b>Power to Relax</b>  | Vested with the Commission   |
| 17. | <b>Power to Amend</b>  | Vested with the Commission   |