

**RAJASTHAN ELECTRICITY REGULATORY COMMISSION**  
**(Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems)**  
**Regulations, 2015**  
**Notification Dated: 26<sup>th</sup> February 2015**

Sl. No	Description	Summary
1.	<b>Short Title and Commencement</b>	<ul style="list-style-type: none"> <li>• RERC (Connectivity and Net Metering for Rooftop and Small Solar Grid Interactive Systems) Regulations - 2015 Dated 26.02.2015</li> <li>• Regulations shall come into force from the date of their publication in the Official Gazette</li> </ul>
2.	<b>Definitions and Interpretation</b>	As per Regulations
3.	<b>Scope and Application</b>	<ul style="list-style-type: none"> <li>• Regulations to apply to the Distribution Licensee and consumers of electricity of Distribution Licensee of the State of Rajasthan</li> <li>• Eligible consumer may install the Rooftop Solar system under net metering arrangement which: <ul style="list-style-type: none"> <li>➤ Shall be within the permissible rated capacity as per these Regulations</li> <li>➤ Shall be located in the consumer premises.</li> <li>➤ Shall interconnect and operate safely in parallel with the Distribution Licensee network.</li> </ul> </li> </ul> <p><b>Note:</b> Regulations do not preclude the right of State Nodal Agency or Distribution Licensee of the State to undertake Rooftop Solar projects above 1 MWp capacity through alternative mechanisms</p>
4.	<b>General Principles</b>	<p>Distribution Licensee to offer net metering arrangement to the consumer, who installs grid connected Rooftop Solar system, in its area of supply on non-discriminatory and first come first serve basis provided:</p> <ul style="list-style-type: none"> <li>➤ Consumer is eligible</li> <li>➤ Interconnection of system with the grid is undertaken as per these Regulations and CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013.</li> </ul>
5.	<b>Connectivity of Rooftop Solar PV</b>	<ul style="list-style-type: none"> <li>• The cumulative capacity at a particular distribution transformer not to exceed 30% of the capacity of the distribution transformer</li> <li>• Distribution Licensee to update transformer level capacity available for connecting Rooftop SPV under net metering arrangement on yearly basis and provide the information on its website and the Commission.</li> </ul>
6.	<b>Eligible Consumer and Individual Project Capacity</b>	<ul style="list-style-type: none"> <li>• The maximum Rooftop SPV capacity to be installed at any Eligible Consumer premises shall not be more than 80% of the sanctioned connected load/contract demand of the consumer;</li> <li>• Capacity shall be more than one kilo watt peak minimum and not more than one Mega Watt peak (1000 kWp)</li> <li>• Capacity to be in conformity with RERC (Electricity Supply Code and Connected Matters) Regulations, 2004 and subsequent amendments thereto.</li> </ul>
7.	<b>Procedure for Application</b>	<ul style="list-style-type: none"> <li>• Eligible Consumer to apply in the application form (Annexure – II), notified by the Distribution Licensee on its website as downloadable and also available at his sub-divisional office along with the application fees as specified in the schedule (Annexure-III) of these Regulations.</li> </ul> <p>For more details and Annexure refer Regulations</p>
8.	<b>Standards, O&amp;M of Solar Power Generators</b>	<p>SPG and equipments to conform to the standards and requirements specified in these Regulations and in:</p> <ul style="list-style-type: none"> <li>➤ CEA (Technical Standards for connectivity of the Distributed Generating Resources) Regulations - 2013.</li> </ul>

	<b>(SPGs)</b>	<ul style="list-style-type: none"> <li>➤ CEA (Installation and Operation of Meters) Regulations - 2006.</li> <li>➤ RERC (Electricity Supply Code and Connected Matters) Regulations - 2004.</li> <li>• Equipments shall be pre tested by the supplier and a test certificate for the concerned equipment provided to the consumer.</li> <li>• Consumer to get the equipment installed at his/her premises by the representative of the supplier to confirm satisfactory working.</li> </ul>															
<b>9.</b>	<b>Interconnection with the Grid</b>	<ul style="list-style-type: none"> <li>• Interconnection of Rooftop Solar PV Plant with the network of the Distribution Licensee to be as per CEA(Technical Standards for Connectivity of the Distributed Generation Resources) Regulations - 2013, as amended from time to time.</li> <li>• The connectivity levels with grid are specified below: <table border="1" data-bbox="483 520 1263 789"> <thead> <tr> <th>Sl. No.</th> <th>Connected load of Eligible Consumer</th> <th>Connectivity level</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Up to 5 kW</td> <td>240 V- Single phase</td> </tr> <tr> <td>2.</td> <td>Above 5 kW and up to 18.65 kW</td> <td>415 V-Three phase</td> </tr> <tr> <td>3.</td> <td>Above 18.65 kW and up to 50 kW/kVA</td> <td>415 V-Three phase</td> </tr> <tr> <td>4.</td> <td>Above 50 kW/kVA</td> <td>HT/EHT level</td> </tr> </tbody> </table> </li> <li>• EHT/HT consumers may install SPG and connect them to their system.</li> <li>• Interconnection with the local Distribution Licensee’s grid to be as per CEA’s(Measures Relating to Safety and Electric Supply) Regulations - 2010 <ul style="list-style-type: none"> <li>▪ Developer to be responsible for safe O&amp;M and rectification of defect of its system up to the interconnection point beyond which the responsibility including the net meter shall rest with the Distribution Licensee.</li> </ul> </li> <li>• Consumer shall be solely responsible for any accident to human being/ animals that may occur due to back feeding from the SPG plant when the grid supply is off. The Distribution Licensee reserves the right to disconnect the consumer’s installation at any time in the event of such exigencies to prevent accident or damage to man and material. <ul style="list-style-type: none"> <li>▪ Tests as per EN 50160/ Distribution Licensee’s standards shall be done to ensure the quality of power generated from the Solar PV systems.</li> </ul> </li> <li>• Any alternate source of supply to be restricted to the consumer’s network and consumer shall be responsible to take adequate safety measures to prevent battery power/diesel generator power/ backup power extending to Distribution Licensee’s LT grid on failure of licensee’s grid supply.</li> <li>• Distribution Licensee to have the right to disconnect the generator from its system at any time subject to the conditions detailed in the Regulations.</li> <li>• Every Plant shall be equipped with automatic synchronization device. <ul style="list-style-type: none"> <li>▪ Plant using inverter not required to have separate synchronizing device, if the same is inherently built into the inverter.</li> </ul> </li> <li>• Plant operating in parallel with electricity system to be equipped with the protective functions(As detailed in the Regulations) to sense abnormal conditions on electricity system and automatically disconnect from the electricity system or to prevent Plant from being connected to electricity system inappropriately.</li> <li>• Every time the Rooftop PV Solar Power Plant of the Eligible Consumer is synchronized to the electricity system, it shall not cause voltage fluctuation greater than ±5% at the point of inter connection.</li> <li>• For more Details refer Regulations</li> </ul>	Sl. No.	Connected load of Eligible Consumer	Connectivity level	1.	Up to 5 kW	240 V- Single phase	2.	Above 5 kW and up to 18.65 kW	415 V-Three phase	3.	Above 18.65 kW and up to 50 kW/kVA	415 V-Three phase	4.	Above 50 kW/kVA	HT/EHT level
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<b>10.</b>	<b>Energy Accounting and Settlement</b>	Detailed in the Regulations Order															

<b>11.</b>	<b>Reporting Requirements</b>	Detailed in the Regulations Order
<b>12.</b>	<b>Solar Renewable Purchase Obligation (RPO)</b>	Quantum of Solar power generated by an eligible consumer who is not defined as obligated entity shall qualify for accounting towards RPO of the licensee in whose area of the supply the Eligible Consumer is located.
<b>13.</b>	<b>Applicability of other Charges</b>	Rooftop PV Solar Power Plant under net metering arrangement, whether self-owned or third party owned installed on Eligible Consumer premises, exempted from Banking and Wheeling charges and Cross Subsidy surcharge
<b>14.</b>	<b>Metering Arrangement</b>	<ul style="list-style-type: none"> <li>• Metering system to be as per the Regulations for installation &amp; operation of meters for Rooftop Solar systems under net-metering arrangement specified in these regulations.</li> <li>• The schematic arrangement for interconnection of Rooftop &amp; Small PV Solar Power Plant with the Distribution Licensee's grid is shown at Annexure – VI. There shall be two meters. The metering arrangement shall be as per Annexure–VII. (Annexure given in the Regulation Order)</li> <li>• Bi-directional (net meter) to be installed at the interconnection point of the Eligible Consumer with the network of the Distribution Licensee:</li> <li>• For the existing consumers, the consumer meter to be replaced with the bi-directional</li> <li>• Consumers having ABT compliant meters not required to install additional net meter.</li> <li>• Solar meter to be installed at the solar facility after the inverter to measure the solar generation.</li> <li>• Meters shall have the facility for downloading meter readings using Meter Reading Instrument (MRI).</li> <li>• Check meters shall be mandatory for rooftop solar systems having capacity more than 250 kW. For installations less than and equal to 250 kW check meters would be optional:</li> <li>• Provided that the cost of new/additional meter (s) shall be borne by the Eligible Consumer and installed &amp; owned by the Distribution Licensee:</li> <li>• Meters installed shall be jointly inspected and sealed on behalf of both the parties and shall be interfered / tested / checked only in the presence of the representatives of the Consumer and Distribution Licensee or as per the supply code specified by the Commission:</li> <li>• Meter readings taken by the Distribution Licensee shall form the basis of commercial settlement.</li> <li>• The technical standards for meters shall be as per Annexure– VIII (Regulation Order) and shall comply with the standards specified by CEA from time to time.</li> </ul>
<b>15.</b>	<b>Communication Facilities</b>	Meters installed for Rooftop PV Solar Power Plants of 250 kWp capacity to have communication port for exchange of real time information with Distribution Licensee.
<b>16.</b>	<b>Sharing of CDM Benefits</b>	CDM benefits from Solar energy generation to be retained by Distribution Licensee and to be fully passed on to the consumers through ARR.
<b>17.</b>	<b>Penalty or Compensation</b>	In case of failure to meet the requirements under these regulations, generator shall be liable to pay penalty as decided by the Commission from time to time
<b>18.</b>	<b>Power to Give Directions</b>	Vested with the Commission
<b>19.</b>	<b>Power to Relax</b>	Vested with the Commission
<b>20.</b>	<b>Power to Amend</b>	Vested with the Commission