

# JOINT ELECTRICITY REGULATORY COMMISSION

## (Solar Power - Grid Connected Ground Mounted and Solar Rooftop and Metering and Solar Tariff) Regulations, 2015, Dated: 08-05-2015

Sl. No.	Description	Summary
1.	<b>Control Period/Review Period</b>	3- Years w.e.f. 2015
2.	<b>Eligibility</b>	<ol style="list-style-type: none"> <li>1. Solar PV and / or Solar Thermal power projects of capacity equal to or more than 500 kWp, and Rooftop Solar Power of capacity equal to or more than 1 kWp but not more than 500 kWp at one location owned by one individual or entity or a house/ factory / Ware house / Government building / Panchayat Bhavan / Community centre/ School/ dispensary /hospital / parking Shed or place/ a solar plant on elevated structure / Group housing society / Resident welfare society/ market roof top or any such entity, based on the technologies approved by Ministry of New &amp; Renewable Energy of Government of India are eligible for connecting the project with Grid under these regulations.</li> <li>2. The Rooftop projects of ratings higher than 500 KWp can be considered by the Distribution Licensee if the distribution system remains stable with higher rating Rooftop Solar Projects getting connected to the grid.</li> </ol>
3.	<b>Solar Power Generation Capacities</b>	The Distribution Licensee shall update on a yearly basis, the distribution transformer capacity available for connecting the solar projects and shall provide the information on its website, as well as to the Commission.
4.	<b>Tariff Period</b>	25 Years
5.	<b>Net metering</b>	<ol style="list-style-type: none"> <li>1. Solar gross metering as well as net-metering options are allowed. Net metering will be applicable to Solar Power generators having an electrical service connection for all consumer categories of the Distribution Licensee.</li> <li>2. At the end of each billing cycle, the Distribution Licensee will take readings of imported and exported energy as shown by the bidirectional service connection meter. The Prosumer will be presented a bill for the difference between imported and exported energy (the net-imported energy). If during a billing cycle exported energy exceeds imported energy, the export surplus will be carried over to the next billing cycle.</li> <li>3. Excess energy exported to the grid (measured in kWh) can only be utilized to offset the electricity consumption (measured in kWh) and not for adjustment of any other fees or charges levied by the Distribution Licensee.</li> </ol>
6.	<b>Other Charges</b>	Prosumer or A Producer of Solar Power shall be exempted from charges in respect of electricity banking, wheeling, line losses and cross subsidy to the extent of Energy produced.
7.	<b>Interest Rate</b>	The Solar Power Producer shall raise a bi-monthly bill for energy supplied to the Distribution Licensee, which shall be paid by the Distribution Licensee within 30 (thirty) days. Interest for payment delays shall apply. The monthly interest rate shall be 1.25% (one and a quarter percent). The date of delay will be counted beyond 30 days of bill submission with acknowledgement received from the Distribution licensee.
8.	<b>Evacuation of Power</b>	The Distribution Licensee shall permit unrestricted and uninterrupted evacuation of solar power through its distribution and transmission network.
9.	<b>Banking</b>	Solar energy generated can be banked by carry-over of the energy units produced to the next billing cycle if required, by the Solar Power Generator for a

		max. of 12 months but not beyond 31 <sup>st</sup> March of the Financial Year. The banked energy can be drawn if Payment is not opted for by the SPG. There will be no banking charges for the banking of solar energy.
10.	<b>Despatch Principles</b>	All grid-connected Solar Power plants shall be treated as 'MUST-RUN' power plants and shall not be subjected to 'merit order despatch' principles.
11.	<b>Renewable Power Obligations -Solar</b>	<ol style="list-style-type: none"> <li>1. The quantum of purchase of power from solar power projects by the utilities to discharge mandatory obligations shall be as specified in the Joint Electricity Regulatory Commission for state of Goa &amp; Union Territories (Procurement of The shortfall in Solar Capacity installed in any year shall be carried forward to the succeeding year Renewable energy) Regulations, 2010.</li> <li>2. The Obligated entities including Open Access Consumers with load in excess of One (1) MW have to ensure compliance of their own RPOs. In case, the obligated entity is also a Solar Power Generator and feeding Solar Power in the grid of the Distribution Licensee, only one of the two Generator or Licensee would qualify for Renewable Power Obligation compliance, with 1<sup>st</sup> right to the Generator.</li> </ol>
12.	<b>State Agency</b>	The Commission has appointed the State Nodal Agencies who are certifying agencies for the RPOs generated by the obligated entities in the State or UT. The State Nodal Agencies will also support the Stake Holders in Electricity Distribution & Consumption in development of Renewable Agencies and associated matters.
13.	<b>Rebate</b>	<ol style="list-style-type: none"> <li>1. For payment of bills of the generating company or project developer through letter of credit or a banking instrument within five working days of presentation of bills, a rebate of 2% (Two %) shall be allowed..</li> <li>2. If payments of bills of the generating company or project developer are made through letter of credit or a banking instrument beyond five working days of presentation of bills but within thirty days of presentation of bills, a rebate of 1 % (One percent) shall be allowed.</li> </ol>
14.	<b>Late Payment Surcharge on Solar Power Bills</b>	In case the payment of any bill is delayed beyond a period of 30 Days from the date of presentation of bill, a late payment surcharge of 1.25% (one and a quarter percent) of billed amount per month calculated on a daily basis shall be levied by the generating company or project developer.
15.	<b>Application Fee for Setting up a Solar Power Plant</b>	The applicant shall pay application fee of Rs. 50 (Fifty) /kW along with the application to the Distribution Licensee.
16.	<b>Tariff Structure</b>	<p>The tariff for grid connected ground mounted and rooftop mounted Solar Power Plants shall be a single-part tariff consisting of the following fixed cost components:</p> <ol style="list-style-type: none"> <li>(a) Capital Cost of the Project;</li> <li>(b) Interest on long-term loans;</li> <li>(c) Depreciation;</li> <li>(d) Return on Equity;</li> <li>(e) Interest on Working Capital; and</li> <li>(f) Operation and Maintenance (O&amp;M) Expenses;</li> </ol>
17.	<b>Levelling Tariff Design</b>	The tariff shall be determined on the levellised basis for the tariff period; and, for the purpose of levellised tariff computation, discount factor equivalent to weighted average cost of capital (WACC) shall be considered.

18.	<b>Capital Cost</b>	Reviewed by the Commission
19.	<b>Debt Equity Ratio</b>	70:30 If the equity actually deployed is less than 30% the actual equity shall be considered and if the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % (Thirty percent) shall be treated as normative loan.
20.	<b>Interest Rate on Loan Tenure</b>	For the purpose of computation of tariff, the normative interest rate shall be considered as an average State Bank of India (SBI) Base rate prevalent during the first six months of the previous year plus 300 basis points.
21.	<b>Interest Rate on Working Capital</b>	Interest on Working Capital shall be at an interest rate equivalent to an average State Bank of India Base Rate equivalent during the first six months of the previous year plus 350 basis points.
22.	<b>Return on Equity</b>	1. The base value for the equity shall be 30% (Thirty percent) of the capital cost or actual equity (whichever is less) as determined under these Regulations. 2. The normative return on equity shall be: (a) Pre-tax return of 20% ( Twenty percent) per annum for the first 10 years; (b) Pre-tax return of 24% ( Twenty Four percent) per annum from 11 <sup>th</sup> year onwards
23.	<b>Operation and Maintenance Expenses</b>	To be determined by the Commission
24.	<b>Depreciation</b>	The depreciation rate for the first 12 years of the tariff period shall be 5.83% (Five point Eight Three per cent) of the capital cost per annum and the remaining depreciation shall be spread over the remaining useful life of the project from the 13 <sup>th</sup> year onwards.
25.	<b>Sharing of CDM Benefits</b>	1. 100% of the gross proceeds on account of CDM benefit to be retained by the developer in first year after the date of commercial operation of the generating station. 2. In the second year, the share of the project developer shall be 90% (Ninety percent) and 1/3 <sup>rd</sup> of this share will be deployed by the project developer for promotion of Renewable Energy, while 10% will be passed on to the Distribution Licensee. The 90% (Ninety percent) portion shall be progressively decreased by 10 % (Ten percent) every year till the proceeds shall be shared in equal proportion by the project developer/generating company and the distribution company. 3. Provided, that 2/3 <sup>d</sup> of benefits such received by the Distribution Licensee shall be passed on to the consumers and balance 1/3 <sup>rd</sup> shall be deployed for promotion of Renewable Energy by the distribution company.
26.	<b>Taxes and Duties</b>	The tariff determined under these Regulations shall be exclusive of taxes and duties as may be levied by the appropriate Government for sale of Solar Power, however, the taxes and duties levied on solar electricity generation by the appropriate Government shall be allowed as pass through on actual basis.