

# RAJASTHAN ELECTRICITY REGULATORY COMMISSION

**(Terms and Conditions for Determination of Tariff for Renewable Energy Sources -Wind and Solar Energy) Regulations, 2014 Dated: 24-02-2014 with amendments Dated 18-03-2015, March, 2019**

Sl. No	Description	Summary												
1.	<b>Control/Review Period</b>	6 - Year(April 1, 2014 to March 31, 2020)												
2.	<b>Applicability</b>	These Regulations shall apply in cases where generic tariff for generating plants based on Wind, Solar PV and Solar Thermal sources of energy, is to be determined by the Commission.												
3.	<b>Eligibility Criteria</b>	<ol style="list-style-type: none"> <li>1. Wind power plant – using new wind turbine generators.</li> <li>2. Solar PV and Solar Thermal power plant – Based on Technologies approved by MNRE</li> </ol>												
4.	<b>Tariff Period/Useful Life</b>	<ol style="list-style-type: none"> <li>1. Wind energy plants - 25 years.</li> <li>2. Solar PV and Solar Thermal plants - 25 year.</li> </ol>												
5.	<b>Tariff Design</b>	<ol style="list-style-type: none"> <li>1. The generic tariff shall be determined on levelised basis for the Tariff Period.</li> <li>2. For the purpose of levellised tariff computation, the discount factor equivalent to post tax weighted average cost of capital shall be considered.</li> <li>3. Levelisation shall be carried out for the Tariff Period of the Wind and Solar energy plants.</li> </ol>												
6.	<b>Despatch Principles</b>	<ul style="list-style-type: none"> <li>• All Wind and Solar Biomass energy plants shall be treated as 'MUST – RUN' power plants and shall not be subjected to 'merit order despatch' principles.</li> <li>• The dispatch principles for electricity generated from wind and solar energy plants shall be as per the provisions of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 and amendments thereto.</li> </ul>												
7.	<b>Capital Cost</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Sl. No</th> <th style="text-align: center;">Renewable Energy Source</th> <th style="text-align: center;">Capital Cost (Rs. Lakh/MW)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td style="text-align: center;">Wind Energy</td> <td>565 (including Rs. 25 Lakh/MW transmission cost, Rs. 25 Lakh/MW pooling cost and Rs. 2 Lakh/MW for grid connectivity charges)</td> </tr> <tr> <td style="text-align: center;">2.</td> <td style="text-align: center;">Solar PV Power Plants</td> <td>determined by the Commission</td> </tr> <tr> <td style="text-align: center;">3.</td> <td style="text-align: center;">Solar Thermal Power Plants</td> <td>determined by the Commission</td> </tr> </tbody> </table>	Sl. No	Renewable Energy Source	Capital Cost (Rs. Lakh/MW)	1.	Wind Energy	565 (including Rs. 25 Lakh/MW transmission cost, Rs. 25 Lakh/MW pooling cost and Rs. 2 Lakh/MW for grid connectivity charges)	2.	Solar PV Power Plants	determined by the Commission	3.	Solar Thermal Power Plants	determined by the Commission
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8.	<b>Debt-equity ratio</b>	<ol style="list-style-type: none"> <li>1. For the purpose of determination of generic tariff, debt-equity ratio shall be 70:30.</li> <li>2. For project specific tariff, the following provisions shall apply- If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.</li> </ol>												
9.	<b>Loan Tenure/Interest Rate</b>	<ol style="list-style-type: none"> <li>1. Loan Tenure - 13 years</li> <li>2. For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered.</li> </ol>												
10.	<b>Depreciation</b>	<ol style="list-style-type: none"> <li>1. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.</li> <li>2. Depreciation rate of 5.28% per annum for the first 13 years and remaining depreciation to spread during the remaining useful life of the project considering the salvage value of the project as 10% of project cost shall be considered.</li> </ol>												
11.	<b>Return on Equity</b>	<ol style="list-style-type: none"> <li>1. The value base for the equity shall be 30% of the Capital Cost.</li> <li>2. The normative Return on Equity shall be 14 % to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project.</li> </ol>												
12.	<b>Interest on Working Capital</b>	Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (one year tenor) prevalent during the last available six months for the determination of tariff.												
13.	<b>Operation &amp; Maintenance Expenses</b>	Normative O&M expenses allowed during first year of the Control Period (i.e., FY 2014-15) under these Regulations shall be escalated at the rate of 5.85% per annum over the Tariff Period.												
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14.	<b>Rebate</b>	<ol style="list-style-type: none"> <li>1. 2% for payment through cheque/cash.</li> <li>2. 1% for payment other than cheque/cash.</li> <li>3. <b>Rebate w.e.f. 1.4.2019 for payment of bills shall be as per provisions of rebate specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time.</b></li> </ol>												
15.	<b>Late Payment Surcharge</b>	<ul style="list-style-type: none"> <li>• In case the payment of any bill is delayed beyond a period of 45 days from the date of presentation of bill, a late payment surcharge of 1.25% per month calculated on a daily basis shall be levied by the generating company.</li> <li>• <b>Late Payment Surcharge w.e.f. 1.4.2019 shall be as per provisions of Late payment Surcharge specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time.</b></li> </ul>												

16.	<b>Sharing of CDM benefits</b>	The proceeds of carbon credit from approved CDM plants during the Control Period shall be shared in the ratio of 25:75 between the distribution licensee and generating company, respectively.		
17.	<b>Subsidy or incentive by Central/State Government</b>	<ol style="list-style-type: none"> <li>1. The Commission shall take into consideration any incentive or subsidy or benefit available from Central or State Government, including accelerated or higher depreciation benefit.</li> <li>2. If accelerated or higher depreciation benefit has been claimed despite submission of the undertaking, the distribution licensee shall be entitled to recover amount wrongly claimed along with penal charges @ 1.50 % per month calculated on daily basis.</li> </ol>		
18.	<b>Auxiliary Consumption</b>	<b>Sl. No</b>	<b>Renewable Energy Source</b>	<b>Auxiliary Consumption</b>
		1.	Solar Thermal Power Project	6.5%
19.	<b>Capacity Utilisation Factor/Plant Load factor</b>	<b>Sr. No.</b>	<b>RE Technology</b>	<b>CUF/PLF</b>
		1.	Wind Energy	
			Jaisalmer, Jodhpur, and Barmer	21%
			Other districts	20%
		2.	Solar PV Power Plants	20% (with duration factor 0.5%)
3.	Solar Thermal Power Project	23% (with duration factor 0.25%)		
20.	<b>Tariff for existing Plants set up as per Government of Rajasthan and Government of India Policies</b>	Tariff for electricity supply to the distribution licensee by wind energy plants, for which Power Purchase Agreements (PPA) have been executed under GoR policy of 1999 & 2000 and commissioned before 31.03.2007 shall be as hereunder, being the same as per the said Policy for FY 2013-14:		
		<b>Sr. No.</b>	<b>Renewable Energy Generation during the year</b>	<b>Tariff in Rs. Per kWh for plants under GoR policy of:</b>
				<b>11.3.99</b>
	1.	2019-20	5.7171	5.7135
21.	<b>Grid Connectivity</b>	Grid connectivity charges of Rs. 2 Lakh per MW shall be payable by the Wind and Solar power plants to Transmission Licensee or Distribution Licensee, as the case may be.		
22.	<b>Metering</b>	<p>In respect of sale of energy to the Distribution Licensee, the metering for the purpose of energy accounting shall be as under:</p> <ol style="list-style-type: none"> <li>(a) For Solar PV and solar thermal plants, the metering shall be at the line isolator on the outgoing feeder on HV side of the generator transformer.</li> <li>(b) For wind power plants supplying power through pooling arrangement, the metering shall be at the grid substation of the licensee.</li> </ol> <p>For metering at the grid substation of licensee, the following losses shall be considered for the plants commissioned during the control period:</p> <ol style="list-style-type: none"> <li>(a) Losses of 1% for metering upto 33 kV.</li> <li>(b) Losses of 2.5 % for metering at 132 kV and above.</li> </ol>		

23.	<b>kVArh charges</b>	Net kVArh drawal by Wind and Solar power plants from the Grid shall be billed at 12 paise / kVArh w.e.f 01.04.2014 escalated annually at 0.50 paise / kVArh, unless otherwise revised by the Commission by Order.
24.	<b>Transmission &amp; wheeling charges</b>	<p>In case of third party sale or for captive use both within the State or outside the State, the transmission charges and wheeling charges shall be recovered in cash and transmission losses and wheeling losses shall be recovered in kind as under:</p> <ul style="list-style-type: none"> <li>➤ For use of transmission network, transmission charges and losses as determined by the Commission in respect of open access transactions would be applicable.</li> <li>➤ or use of distribution licensee's network, the wheeling charges and losses as determined by the Commission in respect of open access transactions at respective voltage levels at which electricity is supplied, would be applicable.</li> <li>➤ For use of both EHV and distribution network, both transmission and wheeling charges as well as losses, as applicable, shall be payable.</li> </ul>
25.	<b>SLDC Fees and Charges</b>	SLDC fees and charges shall be as specified in RERC (Levy of fee and charges by the State Load Despatch Centre) Regulations, 2004 as amended from time to time.
26.	<b>Surcharge</b>	The Cross-subsidy surcharge as determined by the Commission from time to time shall not be applicable in case of open access transactions based on Wind energy, Solar PV and Solar thermal power stations.
27.	<b>Banking</b>	<ol style="list-style-type: none"> <li>1. Energy shall be allowed to be banked at consumption end for only captive consumption within the State.</li> <li>2. Banking charges at the rate of 2% of banked energy in each month would be payable in kind.</li> </ol>
28.	<b>Energy Accounting</b>	<p>Notwithstanding anything contrary contained in any other Regulations time being in force the Energy Accounting shall be as under.</p> <ul style="list-style-type: none"> <li>➤ If in any block injected energy is more than the energy drawn, the excess energy shall be computed. The excess energy of each time block shall be cumulated till the end of the month and shall be set off against the cumulative drawl of Discom energy in the same month.</li> <li>➤ For remaining excess injected energy, if any at the end of the month, the RE Power Generator/Developer would be entitled to get payment @60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of the same month. Unutilized banked energy, in excess of 10% shall lapse.</li> </ul>