

# RAJASTHAN ELECTRICITY REGULATORY COMMISSION

## (Terms and Conditions for Determination of Tariff for Renewable Energy Sources -Wind and Solar Energy) Regulations, 2014 with amendment, Dated 18-03-2015

Sl. No	Description	Summary		
1.	<b>Eligibility Criteria</b>	1. Wind power plant – using new wind turbine generators. 2. Solar PV and Solar Thermal power plant – Based on Technologies approved by MNRE		
2.	<b>Control Period</b>	5 - Year (FY-2014-15)		
3.	<b>Tariff Period/Useful Life</b>	1. Wind energy plants - 25 years. 2. Solar PV and Solar Thermal plants - 25 year.		
4.	<b>Tariff Structure</b>	Wind, Solar PV and Solar Thermal energy plants shall be a single-part tariff consisting of fixed cost. Biomass, Biogas and Biomass Gasifier based power plants shall be a two-part tariff consisting of fixed cost and fuel cost. Following are the Fixed cost components : (a) Operation and Maintenance (O&M) Expenses; (b) Depreciation; (c) Interest on long-term loans; (d) Interest on Working Capital; and (e) Return on Equity.		
5.	<b>Tariff Design</b>	1. The generic tariff shall be determined on levelled basis considering the year of commissioning of the power plant for fixed cost component for the Tariff Period while the fuel cost component shall be specified on yearly basis. However, for the purpose of computation of interest on the working capital requirement of the fixed cost component, an escalation of 5% per annum in fuel/feed stock price shall be considered. 2. For the purpose of levelled tariff computation, the discount factor equivalent to post tax weighted average cost of capital shall be considered. 3. Levelisation shall be carried out for the Tariff Period of the Wind, Solar, Biogas, Biomass and Biomass Gasifier power plants.		
6.	<b>Despatch Principles</b>	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.		
7.	<b>Capital Cost</b>	<b>Sl. No</b>	<b>Renewable Energy Source</b>	<b>Capital Cost (Rs. Lakh/MW)</b>
		1.	Wind Energy	565 (including pooling cost)
		2.	Solar PV Power Plants	determined by the Commission
		3.	Solar Thermal Power Plants	determined by the Commission
8.	<b>Debt-equity ratio</b>	70:30		

9.	<b>Loan Tenure/Interest Rate</b>	Loan Tenure - 12 years The normative interest rate shall be considered as average State Bank of India (SBI) Base Rate prevalent during the first six months of the year previous to the relevant year plus three hundred (300) basis points.		
10.	<b>Depreciation</b>	1. The Salvage Value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the total Capital Cost. 2. The depreciation rate for the first 12 years of the Tariff Period shall be 5.83% 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.		
11.	<b>Return on Equity</b>	1. The value base for the equity shall be 30% of the Capital Cost. 2. The Return on Equity shall be computed at the base rate of 16% to be grossed up.		
12.	<b>Operation &amp; Maintenance Expenses</b>	<b>Sl. No</b>	<b>Renewable Energy Source</b>	<b>O&amp;M Expense (Rs. Lakh / MW)</b>
		1.	Wind Energy	7.87
		2.	Solar PV Power Project	12.76
		3.	Solar Thermal Power Project	17.24
13.	<b>Rebate</b>	1. 2% for payment through cheque/cash. 2. 1% for payment other than cheque/cash.		
14.	<b>Late Payment Surcharge</b>	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.		
15.	<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.		
16.	<b>Subsidy or incentive by Central/State Government</b>	The Commission shall take into consideration any incentive or subsidy or benefit available from Central or State Government, including accelerated or higher depreciation benefit.		
17.	<b>Auxiliary Consumption</b>	<b>Sl. No</b>	<b>Renewable Energy Source</b>	<b>Auxiliary Consumption</b>
		1.	Solar Thermal Power Project	6.5%
18.	<b>Metering</b>	1. The metering shall be at the line isolator on the outgoing feeder on HV side of the generator transformer. 2. For wind power plants supplying power through pooling arrangement, the metering shall be at the grid substation of the licensee.		
19.	<b>Interest on Working Capital</b>	The normative interest rate shall be considered as average SBI Base Rate prevalent during the first six months of the year previous to the relevant year plus two hundred and fifty (250) basis points.		
20.	<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%)		

21.	<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> <p>(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.</p> <p>(b) For wind power plants supplying power through pooling arrangement, the metering shall be at the grid substation of the licensee.</p>
22.	<b>Other Charges</b>	<p>1. <b>kVArh charges</b> Net kVArhdrawal 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.</p> <p>2. <b>Transmission &amp; wheeling charges</b></p> <p>(a) For use of transmission network, transmission charges and losses as determined by the Commission in respect of open access transactions would be applicable.</p> <p>(b) For 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.</p> <p>(c) For use of both EHV and distribution network, both transmission and wheeling charges as well as losses, as applicable, shall be payable:</p> <p>3. <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.</p> <p>4. <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.</p>
23.	<b>Banking</b>	Banking charges at the rate of 2% of banked energy in each month would be payable in kind.