

# Maharashtra Electricity Regulatory Commission (Terms and Conditions for Determination of RE Tariff) Regulation " 2019

## HIGHLIGHTS

<b>Tariff Period</b>	<b>Technology</b>	<b>No. of Years</b>
	Biomass, non-fossil fuel projects	25
	Wind, Solar PV, Solar thermal, Solar rooftop	25
	Mini, Micro and Small hydro	35
<b>Control Period</b>	5 years, of which the first year shall be FY 2020-21.	
<b>Useful Life of a Plant</b>	<b>Technology</b>	<b>No. of Years</b>
	Biomass, non-fossil fuel projects	25
	Wind, Solar PV, Solar thermal, Solar rooftop	25
	Mini, Micro and Small hydro	35
<b>Tariff for FY 2020-21</b>	<ul style="list-style-type: none"> <li>• Due to COVID-19 outbreak a field study cannot be conducted. Hence the Commission decided to set the tariff as per FY 2019-20 until further notice.</li> </ul>	
	<b>Technology</b>	<b>Tariff (Rs./kWh)</b>
	Rooftop Solar (Net metering)	2.83
	Biomass	5.55
	Non-fossil fuel based co-generation	4.38
<b>Capital Cost</b>	Capital costs for FY 2020-21 RE projects are project-specific and must be approved by the Commission.	

<b>Capacity Utilization Factor</b>	<b>Technology</b>	<b>CUF</b>		
	Wind*	30%		
	Small hydro*	30%		
	Solar PV	28%		
	Solar thermal	23%		
	Biomass	<b>Time Period</b>	<b>PLF</b>	
		During stabilization (max. 6 months)	60%	
		1 year after stabilization	70%	
	Non-fossil fuel	Onwards	80%	
		Operating period (240 days)	60%	
* For tariff purpose.				
<b>Auxiliary Consumption</b>	<b>Technology</b>	<b>Power Consumption</b>		
	Small hydro	1%		
	Solar thermal	10%		
	Non-fossil fuel based projects	8.50%		

	<b>Technology</b>	<b>O&amp;M Cost for FY 2020-21</b>		
<b>Operation and Maintenance (O&amp;M) Expenses</b>	Wind	Rs.7.72 Lakh/MW		
	Hydro:			
	Up to 500 kW	4% of capital cost		
	500 kW ≤ 1 MW	4% of capital cost		
	1 MW ≤ 5MW	3.60% of capital cost		
	5 MW ≤ 25 MW	2.80% of capital cost		
	Solar PV	Rs.6 Lakh/MW		
	Solar thermal	Rs.15 Lakh/MW		
	Biomass	5.32 % of capital cost		
	Non-fossil fuel	3.54% of capital cost		
	<b>Interest Rate on Loans</b>	<ul style="list-style-type: none"> <li>• Average State Bank of India marginal cost of funds based lending rate (one-year tenor) prevalent during the last available six months plus 200 basis points.</li> <li>• For SHP, the interest on loan is calculated at 10.51%</li> </ul>		
<b>Depreciation</b>	<ul style="list-style-type: none"> <li>• 5.28% for the first 13 years and the remaining depreciation is spread over the residual useful life of the project taking 10% of the project cost as the salvage value.</li> <li>• SHP rate of depreciation is 5.28% for the first 13 years and 1.425% for the remaining life of the project.</li> </ul>			
<b>Return on Equity</b>	14%, to be grossed up by the prevailing minimum alternate tax as on 1 April of the previous year, for the entire useful life of the project.			
<b>Interest on Working Capital</b>	Average State Bank of India marginal cost of funds based lending rate (one-year tenor) prevalent during the last available six months plus 300 basis points.			
<b>Station Heat Rate for Non-fossil fuel based Projects</b>	3600 kcal/kWh			
<b>Calorific Value</b>	Biomass project (Existing plant) : 3611 kcal/kg Biomass project (New plant): 3100 kcal/kg Non-fossil fuel based plant: 2250 kcal/kg			
<b>Fuel Cost</b>	Biomass fuel cost will be based on a study by the Commission.			

## OTHER PROVISIONS

Tariff Structure and Design	Generic or project specific: <ul style="list-style-type: none"><li>• Levelised</li><li>• Single part tariff for technologies not using fuel.</li><li>• Single part with fixed cost and fuel cost component for technologies that are using fuel.</li></ul>
Despatch Principles	<ul style="list-style-type: none"><li>• All renewable energy power plants shall be treated as 'MUST RUN' power plants.</li><li>• Scheduling of wind and solar energy shall be governed by MERC Forecasting, Scheduling and Despatch of solar and wind generation 2018.</li><li>• Biomass and co-generation projects are covered as per scheduling and dispatch of the State grid code, as amended from time to time.</li></ul>
Links	<a href="https://www.merc.gov.in/faces/merc/common/outputClient.xhtml">https://www.merc.gov.in/faces/merc/common/outputClient.xhtml</a>
References	<a href="https://www.merc.gov.in/">https://www.merc.gov.in/</a>