

# Haryana Tariff Determination of Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate Regulation, 2017, 2nd Amendment

## HIGHLIGHTS

<b>Tariff Period</b>	<ul style="list-style-type: none"> <li>• Generally corresponding to project life or period provided in the PPA.</li> <li>• Tariff period: 12 months from COD thereafter on a year-to-year basis.</li> </ul>	
<b>Control Period</b>	From FY 2017-18 to FY 2020-21.	
<b>Useful Life of a Plant</b>	<b>Technology</b>	<b>No. of Years</b>
	Non-fossil fuel-based co-generation, Biomass, Municipal Solid Waste to Energy, Biogas	20
	Wind, Solar PV, Solar thermal	25
	Small Hydro	35

<b>Capital Cost for FY 2017-18</b>	<b>Technology</b>	<b>Rs. Crore/MW</b>
	Wind	*
	Small Hydro below 5 MW	7.79
	Small Hydro between 5 MW and 25 MW	7.07
	Biomass with water cooled condenser	5.59
	Biomass with air cooled condenser	6.00
	Biomass using rice straw with water cooled condenser	6.10
	Biomass using rice straw with air cooled condenser	6.52
	Non- fossil fuel co-generation	4.925
	Solar PV polycrystalline	*
	Solar PV thin film and rooftop solar PV	*
	Solar PV canal-top	*
	Solar thermal	*
	Biomass gasifier	4.43
	Biogas power plant	8.86
	MSW based on Rankine cycle	15.00
	*Allcapital costs will be project specific	

<b>Operation and Maintenance (O&amp;M) Expenses (FY 2017-18)</b>	<b>Technology</b>	<b>O&amp;M Cost (Rs. Crore/MW) for First Year</b>
	Wind	Project specific
	Small Hydro below 5 MW	0.29
	Small Hydro between 5 MW and 25 MW	0.21
	Biomass	0.40
	Non-fossil fuel co-generation	0.21
	Solar PV	project specific
	Solar thermal	project specific
	Biomass gasifier	0.53
	Biogas power plant	0.53
	MSW WtE	6.5% of normative capital cost.
	<i>O&amp;M cost for FY 2018-19 shall be escalated at percentage specified in Regulation.</i>	
<b>Interest Rate on Loans</b>	The normative interest rate shall be considered as the average marginal cost of funds based lending rate (MCLR) (one-year tenor) of SBI prevailing during the last available six months plus a margin of up to 200 basis points, i.e. 2%.	
<b>Depreciation</b>	Rate for the first 13 years of the tariff period shall be 5.38% per annum and the remaining depreciation shall be spread over the residual useful life of the project from the 14 <sup>th</sup> year onwards.	
<b>Return on Equity</b>	<ul style="list-style-type: none"> <li>• 14% per annum on normative equity capital.</li> <li>• MAT/Corporate tax shall be separately invoiced.</li> </ul>	
<b>Interest on Working Capital</b>	Interest on working capital, for the purpose of tariff determination, shall be computed at the average marginal cost of funds based lending rate (MCLR) (one-year tenor) of SBI prevailing during the last available six months plus an appropriate margin not exceeding 200 basis points, i.e. 2%.	

Renewable Purchase Obligation (RPO)	Year	Minimum Quantum of Purchase (in %) excluding Hydro		
		Solar	Non-solar	Total
	2016-17	1.00	2.75	3.75
	2017-18	2.75	2.75	5.25
	2018-19	4.00	3.00	7.00
	2019-20	5.50	3.00	8.00
	2020-21	7.00	3.00	10.00
	2021-22	8.00	3.00	11.00
	<ul style="list-style-type: none"> <li>• RPO for fossil fuel based CPP of capacity 5 MW and above installed after FY 2018-19 is fixed to RPO target of commissioning year.</li> <li>• Obligation to purchase renewable energy shall be inclusive of purchase of renewable energy already being made by obligated entity.</li> <li>• Renewable energy purchase under power purchase agreement already entered into shall continue to be made until its validity even if the total renewable energy purchase exceeds RPO.</li> </ul>			
<b>Obligated Entities</b>	Distribution licensees, captive users and long term open access consumers.			
<b>Ways to Meet RPO</b>	<p>Through purchase of renewable energy or Renewable Energy Certificates or a combination thereof.</p> <ul style="list-style-type: none"> <li>• Solar and non-solar purchase obligations shall be fulfilled by purchase of solar and non-solar certificates, respectively.</li> <li>• Certificates purchased shall be submitted to the Commission by the obligated entity as per detailed procedure issued by the Central Agency.</li> </ul>			

## OTHER PROVISIONS

Tariff Structure and Design	<ul style="list-style-type: none"> <li>• Single-part tariff — Return on equity, Interest, O&amp;M etc.</li> <li>• Generic tariff — Levelised tariff for entire tariff period.</li> </ul>
-----------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Despatch Principles	“MUST RUN” — All renewable energy plants, except biomass, with capacity of 10 MW and above and non-fossil fuel based co-generation plants.
Subsidy or/and Incentives by Government	Any incentive or subsidy provided by the Central or State government.
Rebate	<ul style="list-style-type: none"> <li>• 2% — for payment through letter of credit.</li> <li>• 1% — for payments not through letter of credit but made within 1 month from the date of presentation of bills.</li> </ul>
Late Payment Surcharge	1.25% per month for payment beyond 60 days from the date of billing.
State Agency	Haryana Renewable Energy Development Agency (HAREDA).
Effect of Default	<ul style="list-style-type: none"> <li>• The Commission may direct obligated entities who fail to fulfill obligation and do not purchase certificates, to deposit an amount into a separate fund to be created and maintained by the obligated entity.</li> <li>• The amount to be deposited shall be determined based on the shortfall in RPO and forbearance price.</li> </ul>
Banking of RE	<ul style="list-style-type: none"> <li>• Banking charges + T&amp;D losses.</li> <li>• Priority for settlement of wheeled energy at consumer end: <ul style="list-style-type: none"> <li>- RE generator</li> <li>- Captive power</li> <li>- Banked energy</li> <li>- OA power through exchange</li> <li>- DISCOM power</li> </ul> </li> </ul>
Wheeling ,T&D Charges and Cross Subsidy Surcharge	<ul style="list-style-type: none"> <li>• Exemption for captive solar plants installed until 13 February 2019.</li> <li>• No exemption to IPP/generators for third party sale.</li> </ul>
Links	
References	<a href="https://herc.gov.in/writereaddata/pdf/r20180724.pdf">https://herc.gov.in/writereaddata/pdf/r20180724.pdf</a> <a href="https://herc.gov.in/writereaddata/pdf/r20180827.pdf">https://herc.gov.in/writereaddata/pdf/r20180827.pdf</a> <a href="https://herc.gov.in/writereaddata/pdf/r20190614.pdf">https://herc.gov.in/writereaddata/pdf/r20190614.pdf</a>

