

Madhya Pradesh Renewable Energy Tariff Orders - 2017

HIGHLIGHTS

Tariff Period	Technology	No. of Years
	Wind, solar PV, solar thermal	25
	Small hydro	35
	Biomass, bagasse based cogeneration, biogas, MSW.	20
Control Period	Technology	Period
	Wind, solar, MSW	From date of issue to 31.03.2019
	Small hydro	14.05.2013 to 31.03.2017
	Biomass	02.03.2012 to 31.03.2017
	Bagasse based cogeneration	01.04.2013 until new order
	Biogas	From date of issue to 31.03.2018
Useful Life of a Plant	Technology	No. of Years
	Wind, solar thermal, solar PV.	25
	Small hydro	35
	Biomass, bagasse based cogeneration, biogas, MSW	20
Technology-wise Net Tariff	Technology	Tariff (in Rs./kWh)
	Wind	4.78
	Solar PV	5.45
	Solar thermal	10.52
	Small hydro below 5 MW (first five years)	6.39, 6.26, 6.14, 6.01, 5.89
	Small hydro (5 MW to 25 MW) (first five years)	6.25, 6.12, 5.99, 5.86, 5.74
	Biomass (first five years)	6.58, 6.31, 6.49, 6.68, 6.89
	Bagasse based cogeneration	6.28
	Biogas	4.20
	MSW	6.39

Capital Cost	Technology	Capital Cost (in Rs. lakh/MW)
	Wind	575.00
	Solar PV	530.00
	Solar thermal	1200.00
	Small hydro below 5 MW	650.00
	Small hydro (5 MW to 25 MW)	635.00
	Biomass	450.00
	Bagasse based cogeneration	436.00
	Biogas	925.00
	MSW	1500.00
Operation and Maintenance (O&M) Expenses	Technology	O&M Cost
	Wind	1% of capital cost in first year
	Solar PV	Rs.7 lakh/MW in first year
	Solar thermal	1% of capital cost in first year
	Small hydro andbagasse based cogeneration	3% of capital cost in first year
	Biomass	4% of capital cost in first year
	Biogas	4% of capital cost in first year
	MSW	5% of capital cost in first year
	• O&M escalation @ 5.72% per annum for all technologies except bagasse based cogeneration which is 5% per annum.	
Interest Rate on Loans	Technology	Rate (%)
	Wind, solar, biomass, MSW	12
	Small hydro, bagasse based cogeneration	13
	Biogas	12.7
Depreciation	7% per annum for first 10 years and remaining depreciation spread over residual useful life of the project.	
Return on Equity	Technology	Return on Equity
	Small hydro, bagasse based cogeneration, biogas, wind, solar,MSW	20% pre-tax
	Biomass	16% pre-tax
Interest on Working Capital	Technology	Interest Rate (%)
	Bagasse based cogeneration, small hydro	13.5
	Biomass	13
	MSW, wind, solar	12.5
	Biogas	13.2

OTHER PROVISIONS

Tariff structure and Design	Generalized tariff shall be decided for all technologies.		
		Year-wise	Levelling
	Single part	Small hydro project	Wind, solar, MSW, biogas, bagasse
	Two-part	Biomass	--
Merit order dispatch principle	No merit order dispatch for solar plants and biogas power plants, whereas biomass power plants with more than 2 MW capacity shall be subject to merit order dispatch principles.		
Subsidy or/and Incentives by the government	Distribution licensees are entitled to subsidy on wheeling charges at the rate of 4% of energy injected.		
Rebate	Not available		
Late payment surcharge	Not available		
Links	http://www.mperc.nic.in/index.htm		
References	http://www.mperc.nic.in/310316-Wind-tariff-SMP-74-15.pdf http://www.mperc.nic.in/020312-SMP-77-2011-BiomassMarch-12.pdf http://www.mperc.nic.in/010413-Bagasse-tariff-order.pdf http://www.mperc.nic.in/180416-Ext-order-Baggase-based.pdf http://www.mperc.nic.in/301116-SMP-08-2013.pdf http://www.mperc.nic.in/140815-SMP-No-08-2013.pdf http://www.mperc.nic.in/030513-SMPNo-08-2013.pdf http://www.mperc.nic.in/080816-SMP-25-16-solar.pdf http://www.mperc.nic.in/040416-SHP-Small-Hydro.pdf http://www.mperc.nic.in/170513-SMP-19-2013.pdf http://www.mperc.nic.in/SMP-10-2016.pdf http://www.mperc.nic.in/050215-Biogas-tariff-order-smp-27-14.pdf		