

Jammu and Kashmir Renewable Energy Tariff Regulations - 2013

HIGHLIGHTS

Tariff period	Technology	Years
	Small hydro below 5 MW	35
	Solar PV and solar thermal	25
	Municipal solid waste (MSW), refuse derived fuel (RDF), biomass gasifier and biogas	20
	Any other technologies	13
Control Period	5 years, of which the first year shall be FY 2013-14.	
Useful Life of a Plant	Technology	Years
	Wind, solar PV, solar thermal	25
	Small hydro	35
	Biomass based on Rankine cycle technology, non-fossil fuel based cogeneration, biomass gasifier, biogas, MSW and RDF	20

Technology-wise Tariff	Technology	Net Tariff (Rs./kWh)
	Wind zone 1 (CUF - 20%)	5.81
	Wind zone 2 (CUF - 22%)	5.28
	Wind zone 3 (CUF - 25%)	4.65
	Wind zone 4 (CUF - 30%)	3.87
	Wind zone 5 (CUF - 32%)	3.64
	Small hydro below 5 MW	4.01
	Small hydro 5 MW to 25 MW	3.38
	Solar PV	4.98
	Solar thermal	10.34
	MSW	6.29
	RDF	7.57
	Biomass using rice straw and juliflora and travelling grate boiler with water cooled condenser.	6.95
	Biomass using rice straw and juliflora and travelling grate boiler with air cooled condenser.	7.20
	Biomass using rice straw and juliflora and AFBC boiler with water cooled condenser.	6.87
	Biomass using rice straw and juliflora and AFBC boiler with air cooled condenser.	7.13
	Biomass using other than rice straw and juliflora and travelling grate boiler with water cooled condenser.	6.83
	Biomass using other than rice straw and juliflora and travelling grate boiler with air cooled condenser.	7.08
	Biomass using other than rice straw and juliflora and AFBC boiler with water cooled condenser	6.76
	Biomass using other than rice straw and juliflora and AFBC boiler with air cooled condenser.	7.02
Non-fossil fuel based cogeneration.	5.48	
Biomass gasifier.	7.35	
Biogas	4.80	

Capital Cost	Technology	Capital Cost (in Rs. lakh/MW)
	Wind	575
	Small hydro below 5 MW.	770
	Small hydro (5 MW to 25 MW).	700
	Biomass based on Rankine cycle technology (with water cooled condenser using other than rice straw and juliflora).	540
	Biomass based on Rankine cycle technology (with water cooled condenser using rice straw and juliflora).	590
	Biomass based on Rankine cycle technology (with air cooled condenser using other than rice straw and juliflora).	580
	Biomass based on Rankine cycle technology (with air cooled condenser using rice straw and juliflora).	630
	Non-fossil fuel cogeneration	420
	Solar PV	1000
	Solar thermal	1300
	Biomass gasifier	550
	Biomass gasifier (after considering capital subsidy)	400
	Biogas	1100
	Biogas (after considering capital subsidy)	800
	MSW	1500
RDF	900	
<ul style="list-style-type: none"> • All capital costs (Rs.lakh/MW) are for FY 2013-14 except those for MSW and RDF. Capital costs for subsequent years are determined based on indexation formula. • Capital costs for solar thermal and solar PV for subsequent years are subject to annual reviews. 		

	Technology	Cost (in Rs. lakh)
Operation and Maintenance Expenses (O&M)	Wind	9.00
	Small hydro below 5 MW	25.00
	Small hydro (5 MW to 25 MW)	18.00
	Biomass based on Rankine cycle technology.	40.00
	Non-fossil fuel based cogeneration	16.00
	Solar PV (1.5% of approved capital cost for FY 2016-17 and FY 2017-18).	11.00
	Solar thermal	15.00
	Biomass gasifier and biogas	40.00
	MSW and RDF	6% of normative capital cost
Interest Rate on Loans	Average Jammu and Kashmir Bank base rate prevalent during the first six months of the previous year plus 300 basis points.	
Depreciation	5.83% for the first 12 years and remaining depreciation spread over the residual useful life of the project.	
Return on Equity	<ul style="list-style-type: none"> • 18% per annum for first 10 years. • 22% per annum for 11th year onwards. 	
Interest on Working Capital	Average Jammu and Kashmir Bank base rate prevalent during the first six months of the previous year plus 350 basis points.	

OTHER PROVISIONS

Tariff structure and design	Generic, single part, levellised tariff for the tariff period.
Merit order despatch principle	All renewable energy power plants with certain exceptions are treated as 'Must run' power plants.
Subsidy or/and Incentives by government	Any incentive or subsidy provided by the central or state government, including accelerated depreciation benefit, would be taken into consideration.

Rebate	<ul style="list-style-type: none">• 2% - for payment through letter of credit.• 1% - for payments not through letter of credit but within 1 month from the date of presentation of bills.
Late payment surcharge	1.25% per month for payment of bills beyond a period of 60 days from the date of billing.
Links	http://jkserc.nic.in/rn.html
References	http://jkserc.nic.in/Renewable%20Energy%20Sources%20Reg.2013.BR.pdf http://jkserc.nic.in/JKSERCRES%20first%20amendment.pdf http://jkserc.nic.in/JKSERC.RES2Amendment%202016.pdf