Central Electricity Regulation Commission (Terms and conditions for Tariff Determination from RE sources Regulations 2020)

HIGHLIGHTS

Issued By	Central Electricity Regulatory Commission.	
Issued On	23rd June 2020.	
Control Period	01st July 2020 to 31st March 2023.	
Eligibility	• Wind power projects. • Small hydro projects (lower than or equal to 25 MW at a single location). • Biomass power plant based on Rankine cycle technology (without use of fossil fuel). • Non-fossil fuel based co-generation. • Solar PV and solar thermal power projects. • Renewable hybrid project. • Biomass gasifier-based power projects (using 100% producer gas engine, coupled with gasifier technologies). • Biogas based power projects (using 100% biogas fired engine coupled with biogas technology for co-digesting agriculture residues, manure and other bio waste). • Municipal solid waste (MSW) based power projects. • Refuse derived fuel (RDF) based power projects. • Renewable energy with storage project.	
Tariff period	Wind	25 years
	Solar PV and thermal project	25 years
	MSW and RDF power projects	20 years
	Small hydro power (SHP)	35 years
	Biomass gasifier, biogas power projects, Non-fossil fuel cogeneration project, Bio mass power project with Rankine cycle technology	20 years

Generic tariff	Tariff of projects is determined by commission year on year basis. • Small hydro project. • Biomass power project with Rankine cycle technology. • Non-fossil fuel based co-generation project. • Biomass gasifier based power project. • Biogas based power project • .
Project specific tariff	• Solar PV power projects, floating solar projects and solar thermal power projects. • Wind power projects (both on-shore and off-shore). • Biomass gasifier based power projects and biogas based power projects – if a project developer opts for project specific tariff. • Municipal solid waste based power projects and refuse derived fuel based power projects. • Renewable hybrid energy projects. • Renewable energy with storage projects. • Any other project based on new renewable energy sources or technologies approved by MNRE.
Component of tariff determination	• Return on Equity. • Interest on Loan. • Depreciation. • Interest on working capital. • Operation and maintenance expenses.
Capital Cost	• All capital works including plant and machinery, civil works, erection and commissioning, financing, interest during construction, and evacuation infrastructure up to inter connection point. • For project specific tariff, the generating company shall submit the break-up of capital cost items along with its petition.
Debt Equity Ratio	For generic tariff based ratio of debt ratio is 70:30. For project specific tariff: • If equity is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan. • If equity is less than 30%, actual equity to be considered for determination of tariff. • Equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
Loan Tenure	15 years.

Interest Rate	Calculation for interest to be worked out on gross normative loan. • Normative loan outstanding as on 1st April of every year shall be worked out by deducting the cumulative repayment up to March 31st of the previous year, from the gross normative loan. • For the computation of tariff, the normative interest rate shall be considered as average of State Bank of India (SBI) Marginal Cost of Funds based Lending rates prevalent during the first six months of the previous year plus 200 basis points. • The payment of loan to commence from 1st year of commercial operation of the project and shall be equal to the annual depreciation allowed.	
Depreciation	• Depreciation shall be allowed up to 90% of capital cost with salvage value as 10%. • Depreciation – 4.67% per annum for first 15 years of tariff period. Remaining depreciation to be spread over the residual useful life of the project. • Depreciation to be charged from the first year. In case commercial operation is for part of the year, depreciation to be charged on pro-rata basis.	
Interest on Working Capital for power plant	Solar PV and thermal, SHP, wind and RE project with storage	a) O&M expenses – for 1 month. (b) Receivables – 45 days of energy charges for sale of electricity calculated on the normative CUF. (c) Maintenance spares – 15% of O&M expenses
	Biomass, Biogas, RDF,MSW	a) Fuel cost –4 months equivalent to normative PLF. (b) O&M expenses – for 1 month. (c) Receivables – 45 days of fixed and variable (fuel) charges for sale of electricity calculated on the target PLF. (d) Maintenance spares – 15% of O&M expenses.
	Hybrid project	Sum of working capital of individual project
	Interest on working capital shall be, interest rate equivalent to the normative interest rate of 350 basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months for the determination of tariff.	
Calculation of CUF/PLF	Number of hours for calculation of CUF/PLF is 8766 (wherever applicable) for various RE technologies.	
Operation and Maintenance Expenses	• Comprises repair and maintenance (R&M), establishment (including employee expenses), and administrative and general expenses. • Determined, based on normative O&M expenses for the first year of Control Period. • Normative O&M expenses allowed during first year of Control Period (i.e. FY 2020-21) with escalation @ 3.84% per annum over the Tariff Period	

Rebate	• For payment of bills of generating companies through letter of credit within 5 days from generation of bill – 1.5%. • Payment other than through letter of credit but within 1 month of presentation of bills by generating companies – 1%.
Late Payment Surcharge	Payment of bills beyond 60 days from the date of billing – 1.50% per month.
Subsidy or Incentive Central/State government	For income tax benefit on account of accelerated depreciation, if availed, the following principles to be considered: • Assessment of benefit shall be based on normative capital cost, accelerated depreciation rate as per relevant provision under income tax Act, and corporate income tax rate. • Capitalization of RE projects during second half of the fiscal year • Per unit benefit shall be derived on levellised basis at discount factor equivalent to post tax weighted average cost of capital.
Link	http://www.cercind.gov.in/2020/regulation/159_reg.pdf
References	http://www.cercind.gov.in/Current_reg.html