

Renewable Energy Tariff Orders, 2018

HIGHLIGHTS

Tariff Period	Technology	No. of Years
	Wind, Solar PV	25
	Biomass and Bagasse based co-generation	20
Control Period	Technology	No. of Years
	Wind	2 years from 13 April 2018
	Solar PV	1 year from 28 March 2018
	Biomass based generation	2 years from 28 March 2018
	Bagasse based co-generation	2 years from 1 April 2018
Useful Life of a Plant	Technology	No. of Years
	Wind and Solar	25
	Biomass and Bagasse based co-generation	20

Technology-wise Tariff	Technology	Net Tariff (Rs./kWh)
	Wind	2.80
	Solar PV	3.05
	Biomass (1st year)	5.89
	Biomass (2nd year)	6.11
	Bagasse based co-generation (1st year)	5.36
	Bagasse based co-generation (2nd year)	5.53
Capacity Utilization Factor (CUF)/Plant Load Factor (PLF)	Technology	CUF/ PLF(%)
	Wind	29.15
	Solar PV	19.00
	Biomass	80.00
	Bagasse based co-generation	55.00
Auxiliary Consumption	Technology	Aux. Cons. (%)
	Biomass	10.00
	Bagasse based co-generation	8.50
Capital Cost	Technology	Capital Cost (in Rs. lakh/MW)
	Wind	525.00
	Solar PV	350.00
	Biomass	550.00
	Bagasse based co-generation	520.00

Operation and Maintenance (O&M) Expenses	Technology	O&M Expenses
	Wind	1.1% on 85% of capital cost and 0.22% on balance 15% of capital cost with escalation of 5% per annum.
	Solar PV	1.4% of capital cost with 5.72% escalation per annum.
	Biomass	5% on 85% of capital cost and 0.9% on balance 15% of capital cost with 5.72% escalation per annum.
	Bagasse based co-generation	Rs.22.34 lakh/MW with 5.72% escalation per annum.
Interest Rate on Loan	9.95%	
Depreciation	Technology	Depreciation
	Wind	3.6% of capital cost.
	Solar PV	3.6% on 95% of capital cost.
	Biomass and Bagasse co-generation	4.5% on 85% of capital cost.
Return on Equity	Pre-tax @ 17.56% per annum.	
Interest on Working Capital	10.95%	
Station Heat Rate (SHR)	Technology	SHR (kCal/kWh)
	Biomass	3840
	Bagasse based co-generation	3240
Gross Calorific Value (GCV)	Technology	GCV (kCal/kg)
	Biomass	3200
	Bagasse based co-generation	2300

	Technology	SFC (kg/kWh)
Specific Fuel Consumption (SFC)	Biomass	1.20
	Bagasse based co-generation	1.41

OTHER PROVISIONS

	Technology	Tariff Structure
Tariff Structure and Design	Wind and solar	Single part, levelised tariff
	Biomass and bagasse co-generation	Two part tariff
Merit Order Despatch Principle	--	
Subsidy or/and Incentives by Government	--	
	Technology	Rebate
Rebate	Biomass	1% for payment within 1 month of presentation of bills.
	Bagasse based co-generation	

Late Payment Interest	Technology	Interest
	Wind	1% per month for payment made beyond 60 days of presentation of bills.
	Solar PV	
	Biomass	
Bagasse based co-generation		
Banking of Power	<ul style="list-style-type: none"> • New wind energy generating machines in the normal category or under REC schemes are eligible for banking energy for a period of one month. • Price of unutilized banked energy will be 75% of wind energy tariff for normal captive users. • Price of unutilized banked energy will be 75% of pooled cost of power purchase under REC schemes. • No banking for third party sale. 	
Transmission, Wheeling, Scheduling and System Operation charges and losses	Technology	Charges (% of charges applicable to conventional power)
	Wind	50
	Solar PV	40
	Biomass	60
	Bagasse based co-generation	70
<ul style="list-style-type: none"> • For projects registered under REC scheme, charges will be equal to that applied to conventional power. • Generators will have to bear actual losses in kind. 		
Cross Subsidy Surcharge	Technology	Charges (% of charges applicable to conventional power)
	Wind, solar PV, biomass and bagasse based co-generation	60
Metering	As per following regulations: - <ul style="list-style-type: none"> • Central Electricity Authority (Installation and Operation of Meters) Regulations. • Tamil Nadu Electricity Distribution and Supply Codes. • Tamil Nadu Electricity Grid Code. • Tamil Nadu Electricity Regulatory Commission Grid-connectivity and Intra-state Open Access Regulations, 2014. • Tamil Nadu Electricity Regulatory Commission Intra-state Open Access Regulations, 2005 (Bagasse based co-generation). 	
Links	http://www.tnerc.gov.in/	
References	http://www.tnerc.gov.in/	

