

CSERC (Terms and Conditions for Determination of Generation Tariff and Related Matters for Electricity Generated by Plants based on Renewable Energy Sources) Regulations, 2017

HIGHLIGHTS

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| Tariff Period | 13 years | |
| Control Period | 3 years, of which the first year shall end on 31.03.2018. | |
| Useful Life of a Plant | Technology | No. of Years |
| | Biomass, non-fossil fuel based co-generation, MSW and RDF based power projects. | 20 |
| | Wind, solar PV, solar thermal. | 25 |
| | Small hydro | 35 |
| Technology-wise Net Tariff (Rs./kWh) | ---- | |

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| Capital Cost | All capital costs are for FY 2017-18, and the same for subsequent years is determined using indexation formula given in Regulations. | | |
| | Technology | Capital Cost (in Rs. lakh/MW) for FY 2017-18 | |
| | Small hydro below 5 MW. | 779.00 | |
| | Small hydro (5 MW to 25 MW). | 707.00 | |
| | Non-fossil fuel based cogeneration. | 492.50 | |
| | • Capital costs for all other technologies approved by MNRE shall be project specific. | | |
| Capacity Utilization Factor (CUF)/Plant Load Factor (PLF) | Technology | CUF/PLF (%) of Plant Capacity | |
| | Wind | Annual Mean Wind Power Density (W/M2) | |
| | | Up to 220 | 22 |
| | | 221-275 | 24 |
| | | 276-330 | 28 |
| | | 331-440 | 33 |
| | | >440 | 35 |
| | Small hydro | 30 or project specific, whichever is higher. | |
| | Biomass based on Rankine cycle technology | 80 | |
| | Non-fossil fuel based co-generation projects. | 38 | |
| | Solar PV* | 19 | |
| | Solar thermal* | 23 | |
| | MSW | 75 | |
| | RDF | 80 | |
| *Commission may deviate from the norms in case of project specific tariff determination. | | | |

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| Auxiliary Consumption | Technology | Aux. Cons. (% of Gross Generation) |
| | Small hydro | 1.00 |
| | Biomass based on Rankine cycle technology. | 10.00 |
| | Non-fossil fuel based co-generation projects. | 8.50 |
| | Solar PV* | 0.25 |
| | Solar thermal* | 10.00 |
| | MSW | 15.00 |
| | RDF | 15.00 |
| | *Commission may deviate from the norms in case of project specific tariff determination. | |
| Station Heat Rate | Technology | Heat Rate (kCal/kWh) |
| | Biomass based on Rankine cycle technology. | 4000 |
| | Non-fossil fuel based co-generation projects. | 3600 |
| | MSW | 4200 |
| | RDF | 4200 |
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| Calorific Value | Technology | Cal. Value (kCal/kg) |
| | Biomass based on Rankine cycle technology. | 3100 |
| | Non-fossil fuel based co-generation projects. | 2250 |
| | MSW | 2500 |
| | RDF | 2500 |
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| Fuel Cost | Technology | Cost (Rs./MT) FY 2017-18 |
| | Biomass based on Rankine cycle technology. | To be decided by independent study |
| | Non-fossil fuel based co-generation projects. | 1964.71 |
| | MSW | 0.00 |
| | RDF | 1800.00 |
| | • Fuel cost shall be escalated at the rate of 5% per annum. | |
| Operation and Maintenance (O&M) Expenses | Technology | O&M Cost (in Rs. lakh/MW) FY 2017-18 |
| | Small hydro below 5 MW. | 29.00 |
| | Small hydro (5 MW to 25 MW). | 21.00 |
| | Biomass based on Rankine cycle. | 40.00 |
| | Non-fossil fuel co-generation | 21.13 |
| | • O&M cost is escalated at 5.72% per annum. • O&M costs for all other technologies approved by MNRE shall be project specific. | |
| Interest Rate on Loans | State Bank of India Marginal Cost of Funds based Lending Rate (one-year tenor) prevalent on 1st October of the previous year plus 200 basis points. | |
| Depreciation | 5.28% for the first 13 years and remaining depreciation spread over the residual useful life of the project. | |
| Return on Equity | 14% to be grossed up by the prevailing minimum alternate tax, as on 1st April of the previous year, for the entire useful life of the project. | |
| Interest on Working Capital | State Bank of India Marginal Cost of Funds based Lending Rate (one-year tenor) prevalent on 1st October of the previous year plus 300 basis points. | |

OTHER PROVISIONS

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| Tariff structure and design | <ul style="list-style-type: none"> • Generic, levelised, single part tariff for the tariff period. • For project specific tariff, financial norms of these regulations shall be treated as ceiling norms. |
| Dispatch Principles | <ul style="list-style-type: none"> • Scheduling and deviation shall be governed by the intra-state ABT/deviation settlement mechanism/UI regulations notified by the Commission. • Banking - allowed for 3 months if full electricity is not supplied to the licensee. <ul style="list-style-type: none"> - Banking charges - 2% of energy banked. |
| Subsidy or/and incentives by government | <ul style="list-style-type: none"> • Any incentive or subsidy provided by the central or state government, including accelerated depreciation benefit, would be taken into consideration for determination of tariff. • Generation based incentives allowed over and above tariff shall not be factored into the tariff. |
| 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://www.cserc.gov.in/regulations.php?r_type=Draft |
| References | http://www.cserc.gov.in/admin/upload_regulation/071117_063652_.pdf |