

## TNERC DECLARES ELEVATED WIND ENERGY TARIFF

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After an exhaustive consultative process initiated in July 2008, the Tamil Nadu Electricity Regulatory Commission (TNERC) on 20 March 2009, announced a comprehensive order on wind energy tariff to be applicable from 19 September 2008. Highlights of the comprehensive wind tariff order 2009 are as follows:

**Tariff:** Projects commissioned between 19 September 2008 and 19 March 2009 are liable to receive the tariff of Rs.2.90 per unit till 19 March 2009 and a tariff of Rs.3.24 per unit for the period 20 March 2009 to 31 March 2009. These projects will receive tariff of Rs.3.39 per unit from 1 April 2009 onwards.

Projects commissioned between 20 March 2009 and 31 March 2009 will receive tariff of Rs.3.24 per unit upto 31 March 2009 and Rs.3.39 per unit from 1 April 2009. Projects to be commissioned on or after 1 April 2009 will receive tariff of Rs.3.39 per unit.

### Benchmark Parameters for Tariff Computation

- **Capital Cost:** Taking into consideration the infrastructure development charges of Rs.25 lakh per MW recovered earlier from the project developers, the Commission considers Rs.5.35 crore per MW as capital investment.
- **Capacity Utilization Factor (CUF):** Commission has estimated CUF of 27.15% for new machines.
- **Derating of Machines:** Commission decides that derating of machines shall be 1% per annum after the first ten years of operation
- **Debt-Equity Ratio:** The Commission has decided to retain the earlier ratio of 70:30 for this order.
- **Term of Loan:** The Commission has fixed the tenure of term loan as ten years with moratorium of one year.
- **Rate of Interest:** In the absence of preferential rate of interest for renewable energy generators, the Commission has considered interest rate of 12%.
- **Return on Equity (RoE):** Taking a practical view while determining RoE and bearing in mind large number of small renewable energy generators, the Commission has decided RoE as 17.63% pre-tax upto 31 March 2009 and 19.85% pre-tax after 31 March 2009.
- **Life period:** The Commission has considered a plant life of 20 years.
- **Rate of Depreciation:** The Commission proposes to retain the prevailing rate of 4.5% per annum with the modification that

depreciation shall be calculated on 85% of the capital investment, which represents the cost of plant and machinery.

- **Operation and Maintenance expenses:** The Commission has laid down 85% of the capital investment as the basis for calculating O & M expenses. The present rate of 1.1% per annum is retained with escalation of 5%, commencing from the second year. The Commission has also allowed 0.22% of 15% towards maintenance of land and civil works.
- **Insurance:** Modifying the existing procedure, the Commission has directed that insurance charges will be computed with reference to 85% of the capital investment. The Commission proposes an insurance rate of 0.75% of the machinery cost for the first year, to be reduced by half a percent of the previous year's insurance cost every year thereafter.

### Relevant Issues

TNERC has decided to continue with the present methodology of cost plus, single part, average tariff; which does not take the time value of money into consideration. Through an elemental ruling, the Commission had denied preferential treatment to wind energy generators in the matter of cross subsidy surcharge and imposed 50% of the cross subsidy surcharge to them.

The Commission had further decided that CDM benefits should be shared on gross basis, starting from 100% to developers in the first year and thereafter reducing by 10% every year, till the sharing becomes equal (50:50) between the developer and the consumer and constant thereafter.

### Renewable Purchase Obligation (RPO)

The Forum of Regulators (FOR) has suggested that renewable purchase obligation should be computed with reference to the energy input into the system and not the energy consumed. In the same context, our recommendation was that open access consumers (captive and third party) should also be considered under RPO along with the distribution licensees. (GE Jan-Feb 2009, Pg.23). Accordingly, vide this order, TNERC has raised the Renewable Energy Purchase Obligation at minimum of 13% for 2009-10 and minimum of 14% for 2010-11, as against the earlier obligation of 10%.

Many other issues such as project specific tariff, banking and wheeling agreement and various associated charges are also detailed in the order. Views of the authority in these aspects seem to be practical.

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