



**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**  
#11-4-660, 5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad - 500 004  
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## **DISCUSSION PAPER**

### **IN THE MATTER OF DETERMINATION OF GENERIC TARIFF FOR WIND POWER PLANTS IN TELANGANA STATE**

#### **INTRODUCTION:**

Electricity being an essential commodity is generated from several sources, which form part as raw material. As such generation is based on both conventional fuels and non-conventional fuels. Non-conventional fuels are based on renewable sources, which are available in abundance and can be used time and again.

2. Electricity is governed by the Electricity Act, 2003 (Act, 2003) at present and the rules and regulations are issued under the said Act, 2003 including but limited to policy framed by the government. Section 86 (1) (e) of the Act, 2003 requires the Appropriate Commission to promote renewable sources of energy and provide for connectivity with the grid and declare mandatory purchase of such energy to a minimum level of consumption in the area of the distribution licensee.

3. Towards this objective, the Government of India has been issuing policy statements from time to time exercising the power under the relevant Acts and at present Act, 2003. The latest policy announcement has been made in the National Tariff Policy of 2016.

4. Government of India has issued guidelines for tariff based competitive bidding process for procurement of power from wind power projects vide resolution No. 23 / 54 / 2017 - R & R dated 08.12.2017. The Ministry of New and Renewable Energy (MNRE) in a communication dated 12.01.2018, has clarified that the States / UTs can consider procuring power from solar and wind projects of less than the defined threshold specified in the competitive bidding guidelines (25 MW for wind, 5 MW for solar) through feed in tariff to be determined by concerned State Electricity Regulatory Commissions

(SERC).

5. Section 62 and section 63 of the Electricity Act, 2003 provide that the SERC is bestowed with statutory powers to determine tariff for procurement of power by the distribution licensees either by tariff determined under sec 62 or approving the price discovered under sec 63 of the Act, 2003. The policies and notifications of government act as guidelines for the SERC in the above exercise.

6. Though bidding guidelines have been notified by the MNRE, in view of the fact that the projects are sanctioned before the notification of the bidding guidelines, the Commission is of the view that a feed in tariff that reflects the prevailing market price is necessary for the State. Thus, to facilitate investment made already to be honoured and in exercise of the powers conferred on it to determine tariff u/s 62 of Act 2003, the Commission hereby notifies the discussion paper for the said purpose.

7. The NTP 2016 at sub clause 2 of clause 6.4 has provided for the same which is extracted below.

"(2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government. However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers."

8. Some of the wind power projects in the State of Telangana like M/s Clean Wind Power (Ananthapur) Private Limited and others have filed the petitions before the Commission specifically praying for determination of the tariff for the wind power projects being set up by them.

9. Noticing the above position and in view of the tariff policy notified by the Government of India, the Commission has now undertaken determination of the generic

tariff for wind based power projects in the State of Telangana.

10. The operating norms for determination of generic tariff which are considered for the purpose of this discussion paper by the Commission are given below and resulting working sheet for generic tariff is placed at Annexure I. The Table I shown below discloses the parameters that are proposed by the Commission.

**Table - I**

SI No	Particulars	TSERC	Units
1	Capacity	1	MW
2	Capital Cost	575.00	Lakhs / MW
3	Project Cost	575.00	lakhs
4	Debt	70%	of project cost
5	Equity	30%	of project cost
6	Debt	402.50	Lakhs
7	Equity	172.50	Lakhs
8	ROE	17.56%	Since tax is already grossed up in RoE Reimbursement is not considered
9	CUF	27.50%	
10	Total units generated per year	2.411	MU
11	Project life	25	years
12	Depreciation allowed	90%	of project cost
13	Loan Repayment	13	years
14	Depreciation till loan repayment	5.28%	per year
15	Depreciation after loan repayment	1.78%	per year
16	O & M cost	6.00	Lakhs / MW / year
17	Annual Escalation rate	5.72%	
18	Interest on Working Capital	11.15%	
19	Interest on Loan	10.15%	
20	Discount Rate	9.24%	
21	Maintenance Spares	15.00%	of O&M cost

11. The Commission invites comments suggestions and objections from all the stakeholder and public at large on the above said discussion paper, so as to reach the Commission on or before **07.08.2018 by 5.00 PM**. In addition to the above, the Commission desire to hear the views on the following also -

"Whether to determine Generic tariff for useful life of the plant."

12. Based on the above material, the Commission proposes to determine the tariff for Wind power projects for the control period 2018-2020.

Sd/-

COMMISSION SECRETARY [FAC]

Place: Hyderabad  
Date: 20.07.2018.

