

eTAMIL NADU ELECTRICITY REGULATORY COMMISSION
(Constituted under section 82 (1) of the Electricity Act, 2003)
(Central Act 36 of 2003)

PRESENT:

Thiru S.Akshayakumar	Chairman
Thiru G.Rajagopal	Member
	and	
Dr.T.Prabhakara Rao	Member

M.P.No.8 of 2018

Tamil Nadu Generation and Distribution
Corporation Limited
Rep. by the Chief Engineer /Non-Conventional
Energy Sources
No.144, Anna Salai
Chennai – 600 002.

... Petitioner
(Thiru M.Gopinathan ,
Standing Counsel for the Petitioner)

Vs.

Nil

...Respondent

Date of hearing : 13-03-2018

Date of Order : 24-04-2018

The M.P.No.8 of 2018 came up for hearing on 13-03-2018. After hearing the learned Counsel for the Petitioner and after perusing the records, the Commission passes the following:-

ORDER

1. Prayer of the Petitioner in M.P.No.8 of 2018:-

The prayer of the Petitioner in the above M.P.No.8 of 2018 is to grant permission to TANGEDCO for procurement of 1500 MW wind power from the wind power projects with minimum capacity of 25 MW and above through reverse bidding

process considering the tariff of Rs.2.65 per unit as upper limit and to pass such further or other orders as the Commission may deem fit and proper in the facts and circumstances of the case and thus render justice.

2. Facts of the Case:-

The petition has been filed by the Petitioner to seek permission for procurement of wind power by TANGEDCO for a capacity of 1500 MW through reverse bidding process considering the tariff of Rs.2.65 per unit, as upper limit and processing the tender based on the Guidelines for Tariff based Competitive bidding process for procurement of power from Grid Connected Wind Power Projects issued by Ministry of Power, Resolution dated 08-12-2017.

3. Contentions of the Petitioner:-

3.1. The present petition is being filed seeking permission for procurement of 1500 MW wind power by TANGEDCO from the developers through reverse bidding process considering the tariff of Rs.2.65 (Two Rupees Sixty Five Paise only) per unit as upper limit.

3.2. TNEB started to develop wind power generation from the year 1986 by erecting demonstration wind farm of capacity 55 KW to 250 KW totaling 17.465 MW. Subsequently, due to the encouragement and generator supportive policy, large number of private developers have started to invest in wind energy and erected WEGs.

3.3. Due to continuous encouragement and support, the installed capacity of wind mills in Tamil Nadu stands at number one since 1986 to till date with an installed capacity as on 31.01.2018 as 7962.215 MW with 12082 Nos. WEG's which constitutes 22.53% of total installed capacity of India.

3.4. TNEB started giving banking facility for captive users of wind energy from 1990 which encouraged the Industrial and Commercial HT consumers in the State to setup their own WEG for captive use which helps the industrialization of the State.

3.5. Due to the banking facility and the preferential wheeling and transmission charges extended to the captive consumers, the share of captive consumers in the total installed capacity of the State has gone from 40% to now above 70%.

3.6. The Ministry of Power (MoP) has fixed a target of 175 GW of RE Power by 2022, in which 60 GW is for Wind Power of which 4500 MW additional capacity is to be achieved before 2022 by TANGEDCO. Further, the Guidelines for Tariff based Competitive bidding process for procurement of power from Grid Connected Wind Power Projects has been issued by MoP vide Resolution No.23/54/2017-R&R, dated 08.12.2017. For achieving the ambitious target of 60 GW of Wind Power capacities for India and 4500 MW to Tamil Nadu, the additions from wind energy has to be increased and while doing so, the competitive rate has also to be arrived at.

3.7. The Commission vide notification dated 07.03.2016 has issued following amendment to the Renewable Energy Purchase Obligation Regulations, 2010:

“(1) Every obligated entity shall purchase not less than defined minimum percentage of its consumption of energy from renewable energy sources

under the Renewable Purchase Obligation (RPO) during a year as specified below:-

(IA) The following percentage of Renewable Purchase Obligation is fixed:

Sl. No.	Year	Minimum quantum of total renewable purchase obligation in percentage (in terms of energy in KWh)	Minimum quantum of solar renewable purchase obligation in percentage out of the total renewable purchase obligation mentioned in Column (3) (in terms of Energy in KWh)
(1)	(2)	(3)	(4)
1.	2015-16	9.50%	0.50%
2.	2016-17	11.50%	2.50%
3.	2017-18	14.00%	5.00%

The Renewable Purchase Obligations as specified for the year 2011-12 in sub-regulation (1) shall be applicable for the years 2012-13, 2013-14 and 2014-15 to the distribution licensee."

In compliance with the above said RPO, the required capacity of the Wind power plant as on date is as follows:

Sl. No.	Year	Non-solar RPO target in %	Total electricity units sold and expected to be sold to different category of consumers as approved by TNERC vide T.P.No.2, dt. 11-08-2017 (in MU)	Non-Solar RPO required in (MU)	Generation expected from cogen, biomass & Mini hydro (in MU)	Balance Non Solar RPO require (in MU) 5-6	Total capacity of wind power generation required to meet out non solar RPO (MW)	Total installed /Expected capacity (in MW)	Expected capacity of wind power generation to be available (MW)	Capacity of wind power generation require to be added (MW)
1	2	3	4	5	6	7	8(*)	9	10(**)	11
1	2016-17	9	89834.53	8085	94	7991	3360	7849	2355	
2	2017-18	9	98821.22	8894	99	8795	3698	8100	2430	
3	2018-19	10.25 @	106791.69	10946.1	104	10842	4599	--	2880	1679

* - on the assumption of 27.15% PLF

** - on the assumption that of 70% of the capacity are under captive generation

@ - Considering the RPO growth trajectory of RPO for Non solar, fixed by MoP vide Order No.23/3/2016-R&R, dated 22.07.2016.

The above tabular column reveals that 1679 MW under sale to Board category WEG have to be achieved to meet RPO. The energy generated from the captive generators is not taken into account to meet RPO in view of the Writ Petition No.4558 of 2012 filed at Hon'ble High Court by the captive stake holders.

3.8. To meet the RPO target for the year 2018-2019, which is to be fixed by the Commission in line with MNRE trajectory which is 10.25% and to avoid purchase of Renewable Energy Certificate in power exchange, to meet the compliance of RPO, if need be, TANGEDCO has to consider to procure wind power of 1679 MW from the developers. Hence it is decided to initially procure wind power to a total capacity of 1500 MW from WEG's within the State of Tamil Nadu.

3.9. TANGEDCO has already floated tender in phase-I for 500 MW at a rate of Rs.3.46/Unit as upper limit based on the all India Wind Tender floated by SECI. In Phase-I tender, out of 500 MW only 450 MW was finalized and PPA signed on 16.10.2017 at a rate of Rs.3.42 per unit. The entire 450 MW is expected to be commissioned before March 2019, and TANGEDCO has further prayed and filed a Petition vide P.P.A.P No.7 of 2017 before the Commission for approval of additional quantum of 125 MW over and above the 500 MW already approved to sign PPA for 175 MW with M/s. NLC India Ltd at a rate of Rs.3.42 per unit who is one of the participants in the tender, and the approval is awaited. Hence, it will be appropriate to procure Wind power through bidding route for the shortfall capacity of 1679 MW for the RPO target fixed by MNRE for the year 2018-19 to the State of Tamil Nadu. As against the short fall capacity of 1679 MW to meet out the RPO obligation fixed

by MNRE for the year 2018-19, it is now proposed to float a tender in Phase -II for purchase of Wind power of 1500 MW through bidding route.

3.10. For the first time in India, during February 2017, the Solar Energy Corporation of India (SECI) has floated all India Tender for procurement of 1000 MW of Wind power through auction process and arrived a rate of Rs.3.46/Unit. Based on the rate of Rs.3.46 per unit arrived by SECI, the TANGEDCO has floated the tender for procurement of 500 MW of Wind Power at the rate of Rs.3.46 per unit as upper limit, and arrived at a rate of Rs.3.42/Unit. The SECI, in the second phase has floated another tender for procurement of 1000 MW wind power during the month of October 2017 and arrived a rate of Rs.2.64 / Unit. The Gujarat Urja Vikas Nigam Ltd. (GUVNL) during the month of December 2017 has floated tender for procurement of 500 MW of wind power through reverse e-auction process and arrived a rate of Rs.2.43/Unit.

3.11. It is a fact that the Wind Tariffs in India are Competitive. The lowest Wind tariff arrived so far is Rs.2.43 per unit, and this rate was quoted by M/s.Spring Energy Pvt Ltd., in the auction for procurement of 500 MW of wind power by Gujarat Urja Vikas Nigam Ltd (GUVNL). The tariff arrived in TANGEOCO's Phase I tender (CE/NCES/OT.No.2/2017-2018) is Rs.3.42 per unit, applicable for a period of 25 years from the date of signing of PPA. In the SECI tender floated during the month of October 2017, a rate of Rs.2.64 per unit was discovered. Therefore, it is proposed to fix an upper limit of Rs.2.65 per unit in this tender.

3.12. As per the provisions under Section 63 of Electricity Act 2003, the State Electricity Commission is conferred with power to adopt tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. While so, section 86 (1) (b) of the said Act, inter-alia, provides that the State Commission shall regulate electricity purchase and procurement process of distribution licensee including the price at which electricity shall be procured.

It is further submitted that in the National Tariff Policy issued by MoP Resolution dated 28.01.2016, it is stated:

“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 modified by the Central Government.”

3.13. Hence, approval of the Commission is sought for floating of tender to purchase 1500 MW of Wind power from Wind Projects developers based on final guidelines issued by the MoP, GoI issued in the Resolution No.23/54/2017-R&R, dated 08-12-2017. TANGEDCO is of the firm view that by virtue of such approval/permission by the Commission, the TANGEDCO will be achieving the objects of sourcing power from WEGs meeting RPO and also at a competitive rate which will be in public interest.

3.14. The (Tender Specification) Request for Submission document (RFS document) format to be prepared generally in line with final guidelines for procurement of wind power through bidding issued by the MoP vide Resolution No.23/54/2017-R&R, dated 08-12-2017 and it is to be approved by the Board of

TANGEDCO. After getting approval from the Board, separate petition will be filed if any modification from the guidelines is required in the Commission for approval of the Request for Submission (RFS) document.

4. Findings of the Commission:-

4.1. We have heard the Petitioner. The present proposal of TANGEDCO is for procurement of 1500 MW of wind power from the Wind Power Projects with a minimum capacity of 25 MW and above through reverse bidding process with a ceiling tariff of Rs.2.65 per unit. The Petitioner, TANGEDCO, in support of the present procurement, has referred to the target of 175 GW of RE power by 2022 fixed by MOP in which wind power constitutes 60 GW of which 4500 MW additional capacity is to be achieved by TANGEDCO before 2022. The Petitioner also refers to RPO target of 10.25% fixed by MNRE for the year 2018-19 to the State of Tamil Nadu towards which a capacity of 1679 MW need to be added by TANGEDCO. As against the shortfall capacity of 1679 MW, the Petitioner now proposes to float a tender under Phase-2 for purchase of wind power of 1500 MW fixing an upper limit of Rs.2.65 per unit.

4.2. In this connection, it is noted that the Petitioner has finalized 450 MW out of the tendered quantity of 500 MW in Phase-1 at the rate of Rs.3.42 per unit against the upper ceiling limit fixed at Rs.3.46 per unit which was based on the rate arrived by SECI against the all India tender floated for procurement of 1000 MW at that time. For the purpose of present procurement under Phase-2, the Petitioner has invited the attention of the Commission to the second phase of tender for procurement of 1000 MW called for by SECI during October 2017 wherein a rate of Rs.2.64 per unit

was discovered and the rate of Rs.2.43 per unit discovered in the reverse auction process held by Gujarat Urja Vikas Nigam Limited in the month of December 2017.

4.3. Based on these happenings, the Petitioner has sought the Commission to fix an upper limit of Rs.2.65 per unit in the tender for the present procurement of 1500 MW. The Commission agrees with the contention of the petitioner that the present procurement is necessitated in view of the ambitious target of 175 GW of RE set by the GOI which requires procurement of 4500 MW of additional capacity of wind power by the Petitioner by 2022 and has also taken into consideration the ceiling price fixed which is well comparable with the variable cost of power availed by the Licensee from conventional fuel based sources.

4.4. Under the above context, though the Commission is inclined to grant approval for procurement of 1500 MW of power through reverse auction competitive bidding, it is of the opinion that if power procurement is taken up in stages considering appropriate bid size, it would induce more competition in the bidding process thereby facilitating TANGEDCO to get the real benefit of discovering a competitive price in the reverse bidding process. The stage wise procurement would also enable TANGEDCO to achieve its target even in case any of its tender gets entangled due to legal issues. Therefore, instead of inviting tenders for the entire quantum of 1500 MW at one go, the Petitioner is advised to go for procurement in three stages of 500 MW each through reverse bidding process as per GOI guidelines with a ceiling price of Rs.2.65 per unit. The three stages shall be entitled as Phase- 2,3 & 4. Accordingly, the present procurement under Phase-2 shall be restricted to 500 MW in the first instance. The Petitioner is directed to submit the rates discovered in the

competitive bidding for approval of the Commission and thereafter go for procurement of 500 MW each in Phase-3 and so on. The Petitioner may straight away go for such reverse bidding process without seeking fresh approval from the Commission in case there is no new deviation in the present procurement other than the ones sought for and approved by the Commission in the earlier Phase.

4.5. The Petitioner is directed to file a separate petition for approval of the tariff obtained in each stage on completion of the respective stage bidding process furnishing full details of the tendering process including details of Evaluation Committee, tariff quoted by the other bidders and a copy of the Power Purchase Agreement to be signed with the developers.

With these observations, the petition is disposed of.

5. Appeal

An appeal against this Order shall lie before the Appellate Tribunal for Electricity under section 111 of the Electricity Act, 2003, within a period of 45 days from the date of receipt of a copy of this order by the aggrieved person.

(Sd)
(Dr.T.Prabhakara Rao)
Member

(Sd.....)
(G.Rajagopal)
Member

(Sd.....)
(S.Akshayakumar)
Chairman

/ True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission