Tamil Nadu Electricity Regulatory Commission
(Constituted under section 82 (1) of the Electricity Act, 2003)
(Central Act 36 of 2003)

PRESENT:

ThiruM. Chandrasekar .... Chairman
Dr. T. Prabhakara Rao .... Member
and
ThiruK. Venkatasamy .... Member (Legal)

M.P. No. 1 of 2020

Tamil Nadu Generation and Distribution Corporation Limited
Represented by Chief Engineer /
Non-Conventional Energy Sources
144, Anna Salai
Chennai – 600 002.

… Petitioner
(ThiruM. Gopinathan, Standing Counsel for TANGEDCO)

Date of hearing : 28-01-2020
Date of Order : 17-02-2020

The M.P. No. 1 of 2020 came up for final hearing on 28-01-2020. The Commission upon perusal of the petition and connected records and after hearing the submissions of the petitioner hereby makes the following:-

ORDER

1. Prayer of the Petitioner in M.P. No. 1 of 2020:-

The prayer of the petitioner in this petition is to grant permission to TANGEDCO for procurement of 440.64 MW of wind power from the prospective wind power generators selected through the Tranche-VIII tender floated by Solar
Energy Corporation of India (SECI) for 25 years at the rate of Rs.2.84 + Rs.0.07 as trading margin to meet TANGEDCO’s RPO requirement from the year 2021-22 and to achieve target fixed by MoP and MNRE.

2. **Facts of the Case:-**

   The petition has been filed seeking permission for procurement of 440.64 MW of wind power through the Solar Energy Corporation of India (SECI) for 25 years at the rate of Rs.2.84 + Rs.0.07 as trading margin totalling to Rs.2.91 per unit to meet TANGEDCO’s Non-Solar RPO requirement from the year 2021-22.

3. **Contentions of the Petitioner:-**

   3.1. 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 3500 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 08-12-2-17. For achieving the ambitious target of 60 GW of Wind Power capacities for India and 3500 MW to Tamil Nadu, the additions from Wind Energy may have to be increased.

   3.2. This Commission vide draft notification of the amendment to regulation (3) of TNERC (Renewable Energy Purchase Obligation) Regulations, 2010 has fixed minimum quantum of non-solar RPO as specified below:-
“(1A) The following percentage of Renewable Purchase Obligation is fixed:-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Minimum quantum of total renewable purchase obligation in percentage (in terms of energy in KWh)</th>
<th>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)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2018-19</td>
<td>14.00%</td>
<td>5.00%</td>
</tr>
<tr>
<td>2</td>
<td>2019-20</td>
<td>16.25%</td>
<td>6.00%</td>
</tr>
<tr>
<td>3</td>
<td>2020-21</td>
<td>18.25%</td>
<td>8.00%</td>
</tr>
<tr>
<td>4</td>
<td>2021-22</td>
<td>21.00%</td>
<td>10.50%</td>
</tr>
</tbody>
</table>

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.”

3.3. In compliance with the above said RPO, the required capacity of the Wind Power Plant as on date is as follows:-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Non solar RPO target in %</th>
<th>Total electricity units sold / expected to be sold to different category of consumers (in MU)</th>
<th>Non solar RPO required in (MU)</th>
<th>Generation / expected generation from co-gen, biomass &amp; Mini hydro in (MU)</th>
<th>Balance Non solar RPO required in (MU) (5-6)</th>
<th>Total capacity of wind power generation required to meet out non solar RPO (MW)</th>
<th>Total installed capacity under PPA in (MW)</th>
<th>Expected capacity of wind power addition through Ph-I Tender (MW)</th>
<th>Capacity of wind power generation required to be added (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2018-19</td>
<td>9.00</td>
<td>107007</td>
<td>9630.63</td>
<td>738.05</td>
<td>8892.58</td>
<td>1840</td>
<td>1642</td>
<td>2367</td>
<td>2177</td>
</tr>
<tr>
<td>2</td>
<td>2019-20</td>
<td>10.25</td>
<td>112357</td>
<td>11516.63</td>
<td>774.95</td>
<td>10741.68</td>
<td>4207</td>
<td>1840</td>
<td>400</td>
<td>2177</td>
</tr>
<tr>
<td>3</td>
<td>2020-21</td>
<td>10.25</td>
<td>117975</td>
<td>17092.43</td>
<td>813.70</td>
<td>11278.76</td>
<td>4417</td>
<td>1840</td>
<td>400</td>
<td>2177</td>
</tr>
<tr>
<td>4</td>
<td>2021-22</td>
<td>10.50</td>
<td>123874</td>
<td>13006.77</td>
<td>854.39</td>
<td>12152.38</td>
<td>4759</td>
<td>2240</td>
<td>2177</td>
<td></td>
</tr>
</tbody>
</table>

* - on the assumption of 29.15% PLF / CUF
3.4. The above table reveals that 2177 MW under Sale to Board category WEG to be achieved before 2021-22 to meet Non solar RPO. The energy generated from the captive generators is not taken into account to meet Non solar RPO in view of the pending Writ Petition No.4558 of 2012 filed before the Hon'ble High Court of Madras by the captive stake holders.

3.5. TANGEDCO has already floated tender in phase-I for 500 MW at a rate of 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 with M/s.RegenPowertechPvt. Ltd., (for 200 MW) on 19.10.2017 and M/s.Corolla Green Power Pvt. Ltd., (for 250 MW) on 16.10.2017 for supplying wind power for 25 years at a rate of Rs.3.42 per unit. As per the terms and conditions of PPA, the entire 450 MW has to be commissioned before March 2019. But so far, M/s.RegenPowertechPvt. Ltd., had commissioned only 49.5 MW out of 200 MW allotted and M/s. Corolla Green Power Pvt. Ltd., has so far not yet started the project. Now both M/s.RegenPowertechPvt. Ltd and M/s. Corolla Green Power Pvt. Ltd., have approached the Commission and filed DRP No.5 & 6 of 2019 with a prayer to extend the time for commissioning the project with waiver of Liquidated Damages (LD) clause and the case is pending before this Commission.

3.6. To meet the Non solar 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 Non solar RPO, if need be, TANGEDCO proposed to initially procure
wind power to a total capacity of 1500 MW from WEGs within the State of Tamil Nadu vide M.P. No.8 of 2018.

3.7. The Commission vide its order dated 24.04.2018 had issued the following orders:-

"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."
3.8. As per the orders issued by this Commission, TANGEDCO had floated Tender in Phase-I for procurement of 500 MW of wind power through reverse e-bidding process by fixing an upper limit of Rs.2.65 per unit. But there is a lack of response from the bidders even after extension of last date twice for participating in the bid. Hence, procurement of 500 MW under Phase-II & III could not be processed. Further, there is an Appeal pending at Hon’ble APTEL vide Appeal No. 232 of 2018 filed by Indian Wind Turbine Manufacturer Association (IWTMA) against the order dated 24.04.2018 in M.P.No.8 of 2018 of this Commission disputing fixing the upper limit of Rs.2.65 per unit for the reverse e-auction process for procurement of 500 MW of power under Phase-I.

3.9. The Board of TANGEDCO has approved the proposal to procure 440.64 MW of wind power through the Solar Energy Corporation of India (SECI) at the rate of Rs.2.84 + Rs.0.07 as trading margin to meet TANGEDCO’s RPO requirement from the year 2021-22 as offered by the SECI vide letter dated 17.09.2019.

3.10. The rate of Rs.2.91 per unit offered by SECI for supplying 440.64 MW of wind power for 25 years may be considered on the following grounds.

(1) The rate of Rs.2.91/- (Rs.2.84+ Trading margin Rs.0.07) offered by SECI for 440.64 MW is less than Rs.3.42/- per unit arrived through the tender process by TANGEDCO in the first Wind Tender during 2017.

(2) In view of lack of response to the earlier Tender by TANGEDCO from the wind generators, the chances of favourable response to any new tender to be floated by TANGEDCO may be less.
3) The present feed in tariff arrived by this Commission vide Order No. 6 of 2018 which is valid till 31.03.2020 is Rs.2.86 per unit (without availing AD benefit) is very much comparable to Rs.2.91 per unit offered by SECI.

3.11. As per the provisions under Section 63 of Electricity Act, 2003, the State Commission is conferred with power to adopt tariff, if 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.

3.12. Hence, the approval of this Commission is sought for procurement of 440.64 MW of wind power through the Solar Energy Corporation of India (SECI) at the rate of Rs.2.84 + Rs.0.07 as trading margin to meet TANGEDCO’s RPO requirement from the year 2021-22 and also to meet the target set by Ministry of Power (MoP) and MNRE.

4. Findings of the Commission:-

4.1. We have heard the petitioner. The petitioner TANGEDCO has sought permission for procurement of 440.64 MW of wind power from the prospective wind power generators selected through the Tranche-VIII tender floated by Solar Energy Corporation of India (SECI) for 25 years at the rate of Rs.2.84 + Rs.0.07 as trading
margin to meet TANGEDCO’s RPO requirement from the year 2021-22 and to achieve target fixed by MoP and MNRE.

4.2. The petitioner has submitted that Ministry of Power has fixed a target of 175 GW of RE Power by 2022, in which 60 GW is for Wind Power and out of which TANGEDCO has to achieve 3500 MW additional capacity before 2022. The petitioner has also submitted that as per the TNERC (Renewable Energy Purchase Obligation) Regulations, 2010, the required capacity of the Wind Power Plant as on date is as follows:-

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>3482 MW</td>
</tr>
<tr>
<td>2019-20</td>
<td>4207 MW</td>
</tr>
<tr>
<td>2020-21</td>
<td>4417 MW</td>
</tr>
<tr>
<td>2021-22</td>
<td>4759 MW</td>
</tr>
</tbody>
</table>

4.3. The petitioner has also stated that 2177 MW under Sale to Board category WEG to be achieved before 2021-22 to meet Non-solar RPO. The energy generated from the captive generators is not taken into account to meet Non-solar RPO which is pending in Writ Petition No.4558 of 2012 filed before the Hon'ble High Court of Madras by the captive stakeholders.

4.4. The petitioner has already floated a tender in Phase-I for 500 MW at a rate of Rs.3.46 Per 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 with M/s.RegenPowertechPvt. Ltd., (for 200 MW) on 19.10.2017 and M/s.Corolla Green Power Pvt. Ltd., (for 250 MW) on 16.10.2017 for supplying wind
power for 25 years at a rate of Rs.3.42 per unit. But so far, M/s. RegenPowertech Pvt. Ltd. had commissioned only 49.5 MW out of 200 MW allotted and M/s. Corolla Green Power Pvt. Ltd., has so far not yet started the project. These two companies have approached the Commission and filed DRP No. 5 & 6 of 2019 with a prayer to extend the time for commissioning the project with waiver of Liquidated Damages in M.P. No. 5 & 6 of 2019 and the same are pending.

4.5. The petitioner has also submitted that in order to meet the Non-Solar RPO target for the year 2018-19 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 Non-solar RPO, if need be, TANGEDCO originally initiated to procure 1500 MW from WEGs within the State of Tamil Nadu in M.P. No. 8 of 2018, wherein this Commission in its order dated 24-04-2018 had permitted the petitioner 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.

4.6. As per the orders issued by this Commission in the said M.P. No. 8 of 2018, the petitioner had floated Tender in Phase-I for procurement of 500 MW of wind power through reverse e-bidding process by fixing an upper limit of Rs.2.65 per unit. But there was lack of response from the bidders even after extension of last date twice for participating in the bid. The petitioner further stated that in view of the poor response of the bidders, further procurement of 500 MW under Phase-II & III could not be processed and also there is an Appeal pending before Hon’ble APTEL
in Appeal No. 232 of 2018 filed by Indian Wind Turbine Manufacturer Association (IWTMA) against the said order of this Commission fixing upper limit of Rs.2.65 per unit for the reverse e-auction. The petitioner has stated that in the above circumstances, the Board of the petitioner has approved the proposal to procure 440.64 MW of wind power through the Solar Energy Corporation of India (SECI) at the rate of Rs.2.84 + Rs.0.07 as trading margin to meet TANGEDCO’s RPO requirement from the year 2021-22 as offered by the SECI vide letter dated 17.09.2019.

4.7. The petitioner has also justified that the procurement of 440.64 MW of wind power taking into account for the following grounds:-

   (1) The rate of Rs.2.91/- (Rs.2.84+ Trading margin of Rs.0.07) offered by SECI for 440.64 MW is less than Rs.3.42/- per unit arrived through the tender process by TANGEDCO in the first Wind Tender during 2017;

   (2) Lack of response to the earlier tender floated by TANGEDCO from the wind generators;

3) The present feed in tariff arrived by this Commission vide Order No. 6 of 2018 which is valid till 31.03.2020 is Rs.2.86 per unit (without availing AD benefit) is very much comparable to Rs.2.91 per unit offered by SECI.

4.8. As per the provisions under Section 63 of Electricity Act, 2003, the State Commission is conferred with power to adopt tariff, if 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.

4.9. We have carefully considered the above submissions made by the petitioner and the Commission approves the present proposal of procurement of 440.64 MW of wind power through Solar Energy Corporation of India for 25 years at the rate of Rs.2.84 + (Rs.0.07 as trading margin) totalling to Rs.2.91 per unit to meet TANGEDCO’s Non-Solar RPO requirement from the year 2021-22.

4.10. As the quantum as well as rate is approved by the Commission in this petition, the petitioner is directed to remit the court fees applicable for approval of the power procurement process of Non-Conventional and Renewable fuel based plant as specified in the Commission’s Fees and Fines Regulations, 2004 (i.e. @ Rs.2,000/- per MW) within 15 days from the date of this order.

With these orders, the petition is finally disposed of.

(Sd.......)
(K.Venkatasamy)
Member (Legal)

(Sd......)
(Dr.T.PrabhakaraRao)
Member

(Sd......)
(M.Chandrasekar)
Chairman

/True Copy /

Secretary
Tamil Nadu Electricity Regulatory Commission