

TAMIL 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.9 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.9 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.9 of 2018:-

The prayer of the Petitioner in the above M.P.No.9 of 2018 is to grant permission to TANGEDCO to float tender (Phase 4) for procurement of 1500 MW solar power from the solar power developers through reverse bidding process with

Rs.3.00 per unit as upper limit and 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 upto 1500 MW solar power by TANGEDCO from the private developers through reverse bidding process considering the tariff of Rs.3.00 per unit. as upper limit.

3. Contentions of the Petitioner:-

3.1. The present petition is being filed seeking permission for procurement of 1500 MW solar power by TANGEDCO from the private developers through reverse bidding process (e-tender) considering the tariff of Rs.3.00 per unit, as upper limit.

3.2. 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:

<i>Sl. No.</i>	<i>Year</i>	<i>Minimum quantum of total renewable purchase obligation in percentage (in terms of energy in KWh)</i>	<i>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)</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
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."

3.3. Further, the Ministry of Power in their guidelines for long term RPO growth trajectory of Renewable Purchase Obligations (RPOs) for non-solar as well for solar has issued the following:-

Long term Trajectory	2016-17	2017-18	2018-19
Non-solar	8.75%	9.50%	10.25%
Solar	2.75%	4.75%	6.75%
Total	11.50%	14.25%	17.00%

3.4. The obligation will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power. Further, MNRE has issued the following solar RPO in respect of Tamil Nadu as follows:-

State	2016-17 Solar RPO in MW	2017-18 Solar RPO in MW	2018-19 Solar RPO in MW	2019-20 Solar RPO in MW	2020-21 Solar RPO in MW	2021-22 Solar RPO in MW
Tamil Nadu	1983	3282	4553	6223	8051	9398

3.5. In compliance with the above said RPOs, fixed by the TNERC and MNRE, the required capacity of the solar power plant is as follows:

Sl. No.	Year	Solar RPO target	Total capacity of solar power generation required to meet out solar RPO as per TNERC order	Expected capacity of solar power generation to be available (in MW)	Capacity of solar power generation require to be added (MW)	Capacity commissioned as on date
1	2	3	4	5	5	7
1	2017-18	5%	3275 MW	NLC - 500 NHPC - 50 Total 550	965 MW	1760 MW
2	2018-19	MNRE target-4553 MW		Tender 3 – 1500 MW	743 MW	

The above tabular column reveals that approximately 743 MW of solar power required further to meet solar target of 4553 MW fixed by MNRE for the year 2018-19 for the State. Further 6223 MW of solar power is required by TANGEDCO to meet its RPO target fixed by the MNRE for the year 2019-20. Hence, additional capacity of 2413 MW of solar power is required by the State to meet its RPO target fixed by the MNRE for the year 2019-20.

3.6. TANGEDCO has already floated two tenders in two phases, one with an upper limit of Rs.5.10 per unit and another tender with an upper limit of Rs.4.50 per unit. In Phase 1 tender, only 20 MW was finalized and the projects were commissioned. Phase 2 tender floated for a capacity of 500 MW was lodged by TANGEDCO. TANGEDCO floated Phase 3 tender for the procurement of 1500 MW of solar power to meet its RPO requirement with an upper limit of Rs.4.00 per unit. The tariff arrived in Phase 3 tender is Rs.3.47 per unit and TANGEDCO have issued Letter of Intent to 16 developers for the procurement of solar power at the rate of Rs.3.47 per unit on long term basis. The entire 1500 MW is expected to be commissioned during 2018-19.

3.7. The Solar Tariffs in India are declining day to day mainly due to the reduction in the cost of solar PV panels. The very lowest Solar tariff is Rs.2.44 per unit, which was quoted by Acme Solar Holdings and SBG Cleantech, the joint venture of SoftBank, Foxconn and Bharti Enterprises, in the auction for 500 MW of projects in Rajasthan. However, the fact that is to be accepted is that these low rates have been possible due to the fact that the tenders floated have been very unique as it had offered almost complete payment and evacuation risk protection, two biggest challenges of this sector.

3.8. The above factor of dwindling prices of solar PV modules throughout India and also the fact that in respect of tenders floated in TANGEDCO for purchase of power from solar developers wherein the entire responsibility i.e. right from land to evacuation lies with the developers, TANGEDCO has proposed to fix an upper ceiling limit of Rs.3.00 per unit in this tender (Phase 4) to be floated now for procurement of solar power from the developers establishing solar power plants in Tamil Nadu for a total quantum of 1500 MW.

3.9. As per the provisions under section 86 (1) (b) of Electricity Act 2003, the State Commission shall regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State.

3.10. The Ministry of Power has issued guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid connected Solar PV Projects vide Resolution dated 03-08-2017. TANGEDCO has proposed to float this tender (Phase 4) based on the guidelines issued for Tariff based Competitive Bidding Process for Procurement of Power from Grid connected Solar PV Projects, issued by Ministry of Power. However, separate petition would be filed before the Commission seeking approval for the specification and draft PPA.

3.11. The Central Government has fixed RPO target of 6223 MW for the year 2019-20 to the State. In order to meet this RPO target, the State requires additional capacity of approximately 2413 MW of solar power. Hence, TANGEDCO has

proposed to float tender (Phase 4) for the procurement of 1500 MW of solar power through reverse bidding process with upper ceiling limit of Rs.3 per unit.

4. Findings of the Commission:-

4.1. We have heard the Petitioner. The Petitioner TANGEDCO has sought permission from the Commission to float tender for procurement of 1500 MW of Solar Power from Solar Power Developers through reverse bidding process with Rs.3.00 per unit as upper limit. In support of the proposal for the present procurement, the TANGEDCO has cited the Renewable Purchase Obligation specified by the Commission for the year 2018-19 which works out to 2413 MW of additional capacity of solar power and the target of 4553 MW fixed by MNRE for the year 2018-19. In this connection, the Petitioner TANGEDCO has also referred to the tenders issued in the earlier three phases as stated in Para.3.6 of this order and has now sought the approval for the present procurement of 1500 MW at a ceiling limit of Rs.3 per unit through competitive bidding as laid down in the MoP guidelines to satisfy the obligations arising out of the SPO fixed by the Commission and the target fixed by the MNRE. It is also noted that the Petitioner has proposed for an upper ceiling limit of Rs.3 per unit for the present procurement considering the fact that the entire responsibility right from the land to evacuation rests with the developers. However, Commission has noticed certain discrepancies in the averments made in Para.3.6 and is of the view that the averments are not factually correct, Firstly, the averment that a tender was floated with an upper limit of Rs.5.10 per unit is not factually correct. To the information of the Commission, the said procurement was made by way of feed in tariff to M/s.NLC. Secondly, the procurement of power at a ceiling limit of Rs.4.40 for 224 MW, to the understanding of the Commission, has

been lodged and not proceeded with. Without further going deep into the factual aspects relating to the earlier procurements, Commission is inclined to grant approval for procurement of power of 1500 MW through competitive bidding to meet the SPO target.

4.2. However, the Commission is of the opinion that the power procurement may be taken up in stages considering appropriate bid size for the reason that 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 SPO target even in case any of its tender gets entangled due to legal issues. Therefore, instead of inviting tenders for 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 as per GOI guidelines with a ceiling price of Rs.3 per unit and submit the rates discovered in the Competitive Bidding for approval of the Commission after completion of each stage. 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 ones sought for and approved by the Commission in the earlier Phases.

4.3. 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