

**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

**P.P.A.P.No.3 of 2017**

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

... Petitioner  
(Thiru M.Gopinathan  
Standing Counsel for TANGEDCO)

Vs.

Nil

... Respondent

**Date of hearing: 25-04-2017**

**Date of Order: 13-06-2017**

The P.P.A.P.No.3 of 2017 came up for hearing on 25-04-2017. 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 P.P.A.P.No.3 of 2017:-**

The prayer of the Petitioner in the above P.P.A.P.No.3 of 2017 is to approve for adopting the tariff of Rs.4.40 per unit offered by the following 16 bidders, arrived through reverse bidding process (e-tender) in respect of their proposed solar power

plants of combined capacity of 224 MW against solar tender specification CE/NCES/OT.No.3/2016-17 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.

Sl. No.	Name of the Firm	Capacity quoted in MW	Location of the project
1	V.Sathyamoorthy & Co.	10	Pottireddipatti Village, Namakkal District
2	SEH Solar LLP	2	Theadavur Village, Salem District
3	The Dream Homes	5	Ammamet Village, Salem District
4	RR Sun Power LLP	3	Attur Village, Salem District
5	LVC Alternative Energy LLP	2	Vannankulam Village, Madurai District
6	TSR Sun Energy LLP	2	Mallur Village, Salem District
7	GRT Firm	15	Sellur Village, Mudukulathur Taluk, Ramnad District
8	GRT & Sons	15	Sellur Village, Mudukulathur Taluk, Ramnad District.
9	Sparktra Power (P) Limited	1	Varalotti Village, Virudhunagar District
10	Adhiev India (P) Limited	7	Illuppakulam Village, Ramnad District
11	Indira Industries	5	Mosur Village, Arcot Taluk, Vellore District
12	Indira Damper Industries	5	Kaniyanur Village, Arcot Taluk, Vellore District.
13	Dev International	1	Kanurpudur Village, Avinashi Taluk, Tiruppur District
14	Anish Solar Systems (P) Ltd.	1	Palavanatham Village, Arupukkotai Taluk, Virudhunagar District
15	Rays Power Infra Pvt. Ltd.	50	Tirunelveli District
		50	Theni District
16	Tamil Nadu Energy Development Agency (TEDA)	50	Pannikarkulam, Therkuillanthaikulam & Ayyanaroothu Village, Kovilpatti Taluk, Tuticorin District
	<b>Total</b>	<b>224</b>	

## 2. Facts of the Case:-

The petition is being filed seeking approval for adoption of tariff of Rs.4.40 per unit offered by 16 bidders, arrived through reverse bidding process (e-tender) in respect

of their proposed solar power plants of combined capacity of 224 MW against solar tender specification CE/NCES/OT.No.3/2016-17, for a period of 25 years

**3. Contentions of the Petitioner in P.P.A.P.No.3 of 2017:-**

3.1. The Commission has fixed RPO targets of 2.5% and 5% for the year 2016-17 and 2017-18 to the Distribution Licensee. Based on the RPO targets, TANGEDCO requires approximately 1560 MW and 3275 MW for the year 2016-17 and 2017-18 respectively. 1600 MW of solar power plants are expected to be commissioned for the year 2016-17 and hence TANGEDCO requires approximately 1675 MW of solar power to meet the RPO target of 5% for the year 2017-18.

3.2. In order to meet RPO targets, a petition in M.P.No.13 of 2016 was filed before the Commission seeking permission for procurement upto 500 MW of solar power by TANGEDCO from the private developers through reverse bidding process with a bench mark rate of Rs.5.10 as fixed by the Commission in Order No.2 dated 28.03.2016, as upper limit. Based on the approval of the Commission in M.P.No.13 of 2016, e-tender (Phase I) was floated vide specification CE/NCES/OT.No.1/2016-17 for the procurement of 500 MW of solar power on 20.10.2016. 20 bidders have participated in the tender for the establishment of solar power plants of combined capacity of 122 MW. TANGEDCO have finalized only 2 bidders namely M/s.GRT & Sons and M/s.GRT Firm for the procurement of solar power at the rate of Rs.4.50 per unit from their proposed solar power plants of 10 MW each.

3.3. Since expected solar capacity has not received in phase 1 tender, a petition in M.P.No.30 of 2016 has been filed before the Commission seeking permission for procurement upto 500 MW of solar power by TANGEDCO from the private

developers through reverse bidding process with a bench mark rate of Rs.4.50 per unit, as upper limit and to approve the tender specification evolved by the TANGEDCO in line with the draft guidelines for "Tariff Based Competitive Bidding Process for Grid Connected Solar PV Power Projects", issued by the Central Government.

3.4. The Commission has accorded approval for the procurement of 500 MW of solar power under reverse bidding process through e-bidding (Phase II) and has accorded in principle approval for the draft tender document and draft PPA vide Order dated 29-12-2016.

3.5. The Commission in its order dated 29-12-2016 has issued the following directions to TANGEDCO:-

(i) TANGEDCO shall publish the notice inviting tender in atleast two daily newspapers, in English and Tamil, having wide circulation and host in the website. Clarifications/revised bidding documents shall be uploaded in TANGEDCO's website after the pre-bid meeting and minimum 15 days time granted for submission of bids. Model Power Purchase Agreement may also be amended based on inputs received from the parties and uploaded in TANGEDCO's website.

(ii) Bidding shall be conducted in a transparent manner. Evaluation of the bids shall be undertaken with a proper committee in place before the bidding process.

(iii) Notwithstanding the above, if the number of qualified bidders is less than two, the petitioner shall seek approval from the Commission to continue with the bidding process.

The Commission further directs that TANGEDCO shall seek approval for procurement of solar power on the basis of tariffs determined in the bidding process.

3.6. Based on the approval of the Commission, e-tender (Phase II) has been floated for the procurement of 500 MW of solar power through reverse bidding on 05.01.2017. As per the tender schedule, techno commercial bids and price bids were opened on 10.02.2017 and 18.02.2017 respectively.

3.7. The following 20 bidders participated in the e-bidding process for the establishment of solar power plants in Tamil Nadu for a combined capacity of 292 MW.

Sl. No	Name of the Firm	Capacity quoted in MW	Location of the project
1	Swelect Energy Systems Limited	10	Monjanur Village, Arvakurichi Taluk, Karur District
		2	Komarapalayam Village, Dharapuram Taluk, Tiruppur District.
2	V.Sathyamoorthy & Co.	10	Pottireddipatti Village, Namakkal District
3	SEH Solar LLP	2	Theadavur Village, Salem District
4	The Dream Homes	5	Ammamet Village, Salem District
5	VSR Solar (P) Limited	50	Shoolagari Village, Krishnagiri District
6	RR Sun Power LLP	3	Attur Village, Salem District
7	Green Energy Solar LLP	3	Unjanai Village, Namakkal District
8	LVC Alternative Energy LLP	2	Vannankulam Village, Madurai District
9	TSR Sun Energy LLP	2	Mallur Village, Salem District
10	GRT Firm	15	Sellur Village, Mudukulathur Taluk, Ramnad District
11	GRT & Sons	15	Sellur Village, Mudukulathur Taluk, Ramnad District.
12	Sparktra Power (P) Limited	1	Varalotti Village, Virudhunagar District
13	Adhiev India (P) Limited	7	Illuppakulam Village, Ramnad District

14	Indira Industries	5	Mosur Village, Arcot Taluk, Vellore District
15	Indira Damper Industries	5	Kaniyanur Village, Arcot Taluk, Vellore District.
16	Dev International	1	Kanurpudur Village, Avinashi Taluk, Tiruppur District
17	Anish Solar Systems (P) Ltd.	1	Palavanatham Village, Arupukkotai Taluk, Virudhunagar District
18	Rays Power Infra Pvt. Ltd.	50	Tirunelveli District
		50	Theni District
19	Dynamize Solar Pvt. Ltd.	3	Pasuvanthanai Village, Ottapidaram Taluk, Tuticorin District
20	Tamil Nadu Energy Development Agency (TEDA)	50	Pannikarkulam, Therkuillanthaikulam & Ayyanaroothu Village, Kovilpatti Taluk, Tuticorin District
	Total	<b>292</b>	

3.8. Out of the 20 bidders, 2 bidders have not satisfied the net worth criteria and 1 bidder has not furnished the required EMD (totaling 56 MW) and all the remaining 17 bidders have fulfilled all the terms and conditions of tender specification. Out of 17 bidders, M/s.Rays Power Infra (P) Limited has quoted the lowest rate of Rs.4.40 per unit in respect of their proposed solar power plants of combined capacity of 100 MW, against solar tender specification CE/NCES/OT.No.3/2016-17. The rate offered by M/s.Rays Power Infra (P) Limited is more competitive and accepted by the TANGEDCO. The remaining 16 bidders were requested to match their offer with that of lowest rate offered by M/s.Rays Power Infra (P) Limited i.e. Rs.4.40 per unit.

3.9. Out of the 17 bidders, the following 16 bidders have fulfilled all the terms and conditions of tender specification and have accepted to supply solar power to TANGEDCO at the rate of Rs.4.40 per unit from the proposed solar power plants of combined capacity of 224 MW, against solar tender specification CE/NCES/OT.No.3/2016-17.

Sl. No.	Name of the Firm	Capacity quoted in MW	Location of the project
1	V.Sathyamoorthy & Co.	10	Pottireddipatti Village, Namakkal District
2	SEH Solar LLP	2	Theadavur Village, Salem District
3	The Dream Homes	5	Ammamet Village, Salem District
4	RR Sun Power LLP	3	Attur Village, Salem District
5	LVC Alternative Energy LLP	2	Vannankulam Village, Madurai District
6	TSR Sun Energy LLP	2	Mallur Village, Salem District
7	GRT Firm	15	Sellur Village, Mudukulathur Taluk, Ramnad District
8	GRT & Sons	15	Sellur Village, Mudukulathur Taluk, Ramnad District.
9	Sparktra Power (P) Limited	1	Varalotti Village, Virudhunagar District
10	Adhiev India (P) Limited	7	Illuppakulam Village, Ramnad District
11	Indira Industries	5	Mosur Village, Arcot Taluk, Vellore District
12	Indira Damper Industries	5	Kaniyanur Village, Arcot Taluk, Vellore District.
13	Dev International	1	Kanurpudur Village, Avinashi Taluk, Tiruppur District
14	Anish Solar Systems (P) Ltd.	1	Palavanatham Village, Arupukkotai Taluk, Virudhunagar District
15	Rays Power Infra Pvt. Ltd.	50	Tirunelveli District
		50	Theni District
16	Tamil Nadu Energy Development Agency (TEDA)	50	Pannikarkulam, Therkuillanthaikulam & Ayyanaroothu Village, Kovilpatti Taluk, Tuticorin District
	<b>Total</b>	<b>224</b>	

3.10. Out of 17 bidders, only one bidder namely, M/s.Swelect Energy Systems Limited has refused to match their offer with that of lowest rate offered by M/s.Rays Power Infra (P) Limited i.e. Rs.4.40 per unit. Hence, the bid of M/s.Swelect Energy Systems Limited was rejected. The rate of Rs.4.40 per unit offered by the above 16 bidders is more competitive and accepted by TANGEDCO.

3.11. As the Commission in its order dated 29-12-2016 in M.P.No.30 of 2016 has directed TANGEDCO to get approval for procurement of solar power on the basis of tariffs determined in the reverse bidding process, the Petitioner is filing the present petition with the prayer as mentioned in para 1 above.

#### 4. Findings of the Commission:-

4.1. The petitioner, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), the Distribution licensee in the State has sought approval for adoption of the tariff of Rs.4.40, the lowest rate obtained through the reverse bidding process undertaken through e-tender, for procurement of solar power against the tender specification CE/NCES/OT No.3/2016-17, from 16 bidders for a combined capacity of 224 MW listed below, for an agreement period of twenty five years:

Sl.No.	Name of the firm	Capacity quoted in MW	Location of the project
1.	V.Sathyamoorthy & Co.	10	Pottireddipatti village, Namakkal District
2.	SEH Solar LLP	2	Theadavur village, Salem District
3.	The Dream Homes	5	Ammamet village, Salem District
4.	RR Sun Power LLP	3	Attur village, Salem District
5.	LVC Alternative Energy LLP	2	Vannankulam village, Madurai District
6.	TSR Sun Energy LLP	2	Mallur village, Salem District
7.	GRT Firm	15	Sellur village, Mudukulathur Taluk, Ramnad District
8.	GRT & Sons	15	Sellur village, Mudukulathur Taluk, Ramnad District
9.	Sparktra Power(P) Limited	1	Varalotti village, Virudhunagar District
10.	Adhiev India(P) Limited	7	Illuppaikulam village, Ramnad District
11.	Indira Industries	5	Mosur village, Arcot Taluk, Vellore District



12.	Indira Damper Industries	5	Kaniyanur village, Arcot Taluk, Vellore District
13.	Dev International	1	Kanurpudur village, Avinashi Taluk, Tiruppur District
14.	Anish Solar Systems(P) Ltd.	1	Palavanatham village, Arupukottai Taluk, Virudhunagar District
15.	Rays Power Infra Pvt. Ltd.	50	Tirunelveli District
		50	Theni District
16.	Tamil Nadu Energy Development Agency	50	Pannikarkulam, Therkuillanthaikulam & Ayyanaroothu village, Kovilpatti Taluk, Tuticorin District
	TOTAL	224	

4.2. Commission had accorded approval vide M.P No.30 of 2016 dt.29.12.2016 to the petitioner for procurement of solar power through reverse bidding process for a quantum of 500 MW accepting relaxations in certain conditions related to payment of EMD, financial criteria etc. made to the bid document that was previously approved vide Commission's order dt.29.08.2016 in M.P No.13 of 2016. In the order issued in M.P No.30 of 2016 dt.29.12.2016, the price of Rs.4.50 per unit obtained through the first reverse bidding conducted by TANGEDCO subsequent to the approval of the bid document CE/NCES/OT No.1/2016-17 in M.P No.13 of 2016 dt. 29.08.2016, was fixed as the upper limit to proceed with the reverse bidding process for the second time as TANGEDCO could garner only 20 MW of solar capacity through the first process of reverse bidding approved in M.P No.13 of 2016.

4.3. Through the second process of reverse bidding against tender specification CE/NCES/OT No.3/2016-17 floated on 05.01.2017, the petitioner states that 20 bidders have participated. Techno commercial bids and price bids were opened on

10.02.2017 and 18.02.2017 respectively. Of the 20 bidders, 17 bidders have fulfilled all the terms and conditions of the tender specification. Out of the 17 bidders, the lowest rate of Rs.4.40 was quoted by M/s.Rays Power Infra (P) Limited for a capacity of 100 MW. The rate being competitive, the petitioner has requested other 16 bidders to match their price with the lowest rate of Rs.4.40 quoted by M/s.Rays Power Infra (P) Limited. Except for 1 bidder, M/s.Swelect Energy Systems Limited, the other bidders have matched with the lowest quote of Rs.4.40 per unit. The bid of M/s.Swelect Energy Systems Limited was rejected and the other bids who matched their offer with the rate of Rs.4.40 per unit of M/s Rays Power Infra (P) Limited have been accepted.

4.4. Commission had issued the 'Comprehensive Tariff Order on Solar Power' vide Order No.2 of 2016 dt.28.03.2016 in accordance with the provisions of the Electricity Act, 2003 and the Electricity Policies of the Government of India for promoting renewable energy and the State's own policy of promoting solar power. In the Order No.2 of 2016 dt.28.03.2016, Commission had observed as follows:

*'11.1.1 The distribution licensee can purchase solar power at the rate determined by the Commission from SPG for his RPO requirement. It is open to the distribution licensee to procure the same through competitive bidding route following the guidelines of Government of India if it can realize a more competitive rate than the one determined by the Commission. For any procurement in excess of RPO, specific approval shall be obtained from the Commission.'*

4.5. The procurement of power from the 16 nos. of solar developers at a price of Rs.4.40 per unit is to fulfill the minimum renewable purchase obligation of the Distribution licensee.

4.6. Keeping in view of the promotional objects of renewable energy and of the facts stated above, Commission accords approval for procurement of solar power from the solar developers listed in para 4(1) above for the capacities noted against each, at the rate of Rs.4.40 per unit for the agreement period of twenty five years.

4.7. Orders issued in M.P No.13 of 2016 were equally made applicable to the case in M.P No.30 of 2016 dt.29.12.2016 viz. to align the Power Purchase Agreement with the provisions in the bid document amenable to changes after discussions with bidders, Electricity Act, 2003, Regulations/Orders of the Commission. Therefore, the Commission directs the petitioner to submit signed copies of the Power Purchase Agreements with changes if any incorporated on discussion with the successful bidders subject to the provisions of the bid document, within a month of this order. The petitioner shall publish the names of the successful bidders with tariffs and details of tariffs quoted by other bidders anonymously in their website. It may be seen that Power Purchase Agreements are honoured by both the parties, the petitioner and the solar power plant developers.

## 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