

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

**PRESENT:-**

**ThiruM.Chandrasekar**

**.... Chairman**

**and**

**ThiruK.Venkatesan**

**.... Member**

**P.P.A.P. 5 of 2022**

Tamil Nadu Generation and Distribution Corporation Ltd  
144, Anna Salai  
Chennai-600 002

**.... Petitioner**  
**(ThiruM.Gopinathan**  
**Standing Counsel for TANGEDCO)**

**Date of hearing : 19-09-2022**

**Date of order : 27-10-2022**

The P.P.A.P.No.5 of 2022 came up for hearing on 19.09.2022. The Commission upon perusing the affidavit filed by the petitioner and all other connected records and after hearing passes the following:-

**ORDER**

**1. Prayer of the Petitioner in P.P.A.P.No. 5 of 2022:-**

The prayer of the Petitioner in the above P.P.A.P.No.5 of 2022 is –

- i. for adoption of tariff of Rs.4.04 per unit under “FOO (Finance Own and Operate) Guidelines” for procurement of 102 MW RTC power from

M/s.GMRKamalanga Energy Limited through the aggregator M/s.PTC India Limited under Medium term for a period of five years as agreed by the parties in Power Supply Agreement in terms of Section 63 of the Electricity Act, 2003.

- ii. for approval of the trader margin of Rs.0.0173 per unit quoted by PTC for Pilot Scheme – II apart from transmission charges and
- iii. to pass such further or other orders as may be deemed fit and render justice.

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

The petitioner has filed this petition under Section 63 of the Electricity Act 2003 seeking adoption of tariff for procurement of 102 MW RTC power under Medium term contract for the period of five years from M/s.GMRKamalanga energy Ltd., through the aggregator M/s.PTC India Limited based on FOO Guidelines in line with the “Pilot Scheme-II as approved by the Commission in M.P.48 of 2021 dated 31.03.2022.

## **3. Contentions of the Petitioner in P.P.A.P.No.5 of 2022:-**

3.1. The petitioner has submitted that this petition is filed seeking approval from the Commission for adoption of Tariff in terms of Section 63 of Electricity Act 2003 determined through the DEEP e-Bidding process based on the guidelines issued by MOP/GOI for procurement of Power under “FOO (Finance, Own, Operate)” guidelines for medium term with M/s.PTC India Limited as Aggregator.

3.2. The Petitioner has further submitted that Ministry of Power, through a Resolution dated 29.01.2019 had issued revised guidelines and Model Bidding Documents (MBDs) for procurement of electricity for Medium Term from Power Stations set up on Finance, Own and Operate (FOO) basis under the provisions of Section 63 of the Electricity Act, 2003.

3.3. Section 63 of the Electricity Act 2003 states that

*“Notwithstanding anything contained in Section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government”.*

3.4. Initially TANGEDCO had proposed to procure 500 MW RTC Power through medium term for a period of three years under “Pilot Scheme-II” initiated by GoI/MoP. The Commission approved the proposal of TANGEDCO for such procurement vide order dated 09.06.2020 in MP No.12 of 2020. Out of 500 MW, TANGEDCO executed Power Supply Agreement for 400 MW RTC Power on 22.10.2021 at a discovered price of Rs. 3.26 per kWh. TANGEDCO is in receipt of 100 MW from 20.01.2022 and 50 MW from 10.02.2022 and the balance quantum is likely to commence in the coming months.

3.5. The TANGEDCO has further stated that it has proposed to procure additional 1000 MW RTC Power through medium term tender for a period of three years under

“Pilot Scheme-II” initiated by Gol/MoP for which the Commission approved the proposal of TANGEDCO vide order dated 16.11.2021 in MP No.41 of 2021.

However, they could not execute the Power Supply Agreement (PSA) for the balance quantum of 1100 MW as PTC had expressed inability to execute PSA since the generators did not extend their bid validity.

3.6. Considering the untied quantum of 1100 MW under Pilot Scheme-II, and expiry of Power Supply Agreement (PSA) executed for 550 MW as on 31.03.2022 under Pilot Scheme-I, TANGEDCO proposed to procure 1500 MW RTC power through competitive bidding process on medium term basis in line with the principles of Pilot Scheme-II from Power Stations set up on Finance, Own and Operate (FOO) for a period of five years from April 2022 to March 2027 appointing PTC as an Aggregator.

3.7. TANGEDCO Board through circulation approved to float a medium term tender under FOO guidelines with the deviations proposed in the Bidding Documents in line with Pilot Scheme-II for purchase of 1500 MW RTC power for a period of 5 years appointing M/s.PTC as an Aggregator on 18.12.2021. Further, TANGEDCO Board in its 105<sup>th</sup> meeting held on 19.01.2022 confirmed the same.

3.8. A Miscellaneous Petition M.P No.48 of 2021 was filed on 15.12.2021 seeking approval to float a medium term tender under FOO guidelines with the deviations proposed in the Bidding Documents in line with Pilot Scheme -II for purchase of 1500 MW RTC power for a period of 5 years appointing M/s.PTC as an Aggregator.

3.9. TANGEDCO floated medium term tender for procurement of 1500 MW RTC power for a period of five years through the Aggregator M/s.PTC India Ltd under FOO (Finance, Own, Operate) Guidelines with the proposed deviations sought in MP No.48 of 2021 on 20.12.21 in anticipation of approval from the Commission with the following schedule of Bidding Process:

S. No	Event Description	Date and Time
1.	Date and time of Start of e-Tender Stage	20.12.2021
2.	Last date and time for receiving Queries on RFQ and RFP	27.12.2021
3.	Pre-Bid Meeting	03.01.2022
4.	Utility response to queries latest by	07.01.2022
5.	Last date and time of submission of Application and Bids (including Section A and Section B) – <b>Bid Due Date</b>	17.01.2022 at 16:00 hrs.
6.	Opening of Application	17.01.2022 at 16:30 hrs.
7.	Intimation to Qualified Bidders for Opening of their Bids	22.01.2022
8.	Opening of Bids of those Qualified Bidders.	28.01.2022
9.	Start of e-Reverse Auction	[120 minutes after Opening of Bids]
10.	Close of e-Reverse Auction	[120 minutes from the start of e-Reverse Auction subject to Auto Extension of 10 mins]
11.	L-1 Matching	If needed at the close of the e-Reverse Auction Stage, there will be an L-1 Matching Round for 30 mins
12.	Letter of Award (LOA)	07.02.2022
13.	Validity of Bids	120 days of Bid Due Date
14.	Signing of APP	14.02.2022
15.	Signing of PSA	15.02.2022

3.10. The Commission vide its daily order dated 21.12.21 in MP No.48 of 2021 ordered “to go ahead with the process of inviting tender for procurement of power” and orally directed TANGEDCO to get approval of the Commission before finalizing the price discovered in the tender.

3.11. TANGEDCO had filed additional affidavit filed on 07.01.2022 intimating the queries/doubts raised by the generators in the Model Bid Documents during the pre bid meeting for the above tender held on 03.01.2022 through online and offline and TANGEDCO response for the queries and the same was uploaded in the DEEP Portal.

3.12. It is submitted that as some of the generators had requested extension of bid due date based on various restrictions enforced by both State and Central Government due to high increase in Covid-19 cases due to which it is difficult to prepare bid documents, bid security, Board Resolutions and other documentary evidences for participation with limited manpower.

Considering the genuine request of generators, TANGEDCO had extended the bid due date from 17.01.22 to 21.01.22 and again, on further request received from generators it was further extended from 21.01.22 to 31.01.22.

3.13. It is submitted that the technical bid of the medium-term tender was opened on 31.01.2022 at 14.30 Hrs. Eleven bidders had participated in the tender and the details are tabulated below:

<b>Sl. No.</b>	<b>Name of the Bidder</b>	<b>Location</b>	<b>Offered capacity</b>
1	GMR Kamalanga Energy Limited	Kamalanga, Odisha	150
2	Jindal Power Limited	Tanmar, Raigarh, Chhattisgarh	200
3	MB Power (Madhya Pradesh) Ltd	Anuppur, Madhya Pradesh	175
4	IL&FS Tamil Nadu Power Company Ltd	Cuddalore, TN	550
5	Shree Cement Limited	Ajmer, Rajasthan	285
6	D B Power Limited	Janjgir-Champa, Chhattisgarh	200
7	RKM Power Gen Pvt. Ltd	Janjgir-Champa, Chhattisgarh	350
8	Raipur Energen Ltd	Raipur, Chhattisgarh	300
9	Sembcorp Energy India Ltd	Nellore, Andhra Pradesh	150
10	OPG Power Generation Pvt. Ltd	Gummidipondi, Tamil Nadu	300
11	Surya Dev Alloy and Power Pvt Ltd	Thiruvallur, Tamil Nadu	104
	<b>TOTAL</b>		<b>2764</b>

3.14. It is submitted that since there was a problem in downloading the bid documents of M/s.SuryaDev Alloys Power Pvt. Ltd who participated in the tender from DEEP-e-Portal, clarification was sought to PFCCCL vide email dated 01.02.22 on the above issue. On repeated request, PFCCCL sorted out the matter only on 07.02.22.

3.15. It is submitted that as per the provisions of RFQ and RFP, the responsiveness check of technical bids submitted by all the bidders was carried out on 11 bidders participated in the tender. All the eleven bids were checked for compliance as per the requirement of qualification prescribed in RFQ and RFP. All the 11 bidders participated in the tender were selected as qualified bidders.

3.16. It is submitted that as there was an issue in downloading the bid documents of M/s.Suryadev and PFCCL took time to resolve the matter, the opening date of price bid was extended to 09.02.22 and the timelines of the following events were revised as below:

<b>EventDescription</b>	<b>Revised DateandTime</b>
Opening of Bids of those Qualified Bidders	09.02.2022 @ 11.00 Hrs
Start of e-Reverse Auction	120 minutes after Opening of Bids
Close of e-Reverse Auction	120 mins from the start of e-Reverse Auction subject to Auto Extension of 10 mins
L-1 Matching	If needed at the close of the e-Reverse Auction Stage, there will be an L-1 Matching Round for 30 mins.
Letter of Award (LOA)	Shall be intimated
Validity of Bids	120 days of Bid Due Date
Signing of APP	Shall be intimated
Signing of PSA	Shall be intimated



3.17. It is submitted that TANGEDCO had intimated all 11 bidders as qualified bidders on DEEP Portal on 09.02.2022 @ 11.00 Hrs and the price bid of 11 bidders were downloaded from DEEP Portal and the details are tabulated below:

Sl No	Name of the Bidder	Bid Quantity	Fixed Cost	Cost of Generation	Cost of Transmission Charges	Cost of Transmission Losses	Total Cost	
		MW	Rs/Kwh					
1	GMR Kamalanga	102	2.02	2.02	0.44	0.18	4.66	
2	IL&FS	430	2.135	2.135	0.44	0.19	4.99	
3	MB Power	175	2.25	2.25	0.44	0.20	5.14	
4	Jindal Power	200	2.29	2.29	0.44	0.20	5.22	
5	RKM Powergen	350	2.37	2.37	0.44	0.22	5.40	
6	Raipur Energen	300	2.5	2.5	0.44	0.22	5.66	
7	DB Power	100	2.62	2.62	0.44	0.23	5.91	
8	OPG Power Gen.	125	2.85	2.85	-	-	5.70	
9	Suryadev	104	2.95	2.95	-	-	5.90	
10	Sembcorp	100	3.1	3.1	0.44	0.27	6.91	
11	Shree Cement	100	3.63	3.63	0.44	0.31	8.01	
	<b>TOTAL</b>	<b>2086</b>						

3.18. It is submitted that the process of e-Reverse Auction was started at 13.00 Hrs on 09.02.2022 in the DEEP Portal with lowest tariff of Rs.4.66/Kwh (Inclusive of Transmission Charges and Losses). On closing of Reverse Auction Event, three Bidders had matched L1 rate of Rs.4.66/Kwh and the details are as below:

Sl No	Name of the Bidder	Bid Quantity	Fixed Cost	Cost of Generation	Cost of Transmission Charges	Cost of Transmission Losses	Total Cost
		MW	Rs/Kwh				
1	GMR	102	2.02	2.02	0.44	0.18	4.66
2	Jindal	200	2.02	2.02	0.44	0.18	4.66
3	DB Power	100	2.02	2.02	0.44	0.18	4.66
4	IL&FS	430	2.135	2.135	0.44	0.19	4.99
5	MB Power	175	2.02	2.02	0.44	0.18	4.66
6	Raipur	300	2.31	2.31	0.44	0.20	5.26
7	RKM	350	2.37	2.37	0.44	0.18	5.40
8	OPG Power	125	2.75	2.75	-	-	5.5
9	Suryadev	104	2.75	2.75	-	-	5.5
10	Sembcorp	100	3.1	3.1	0.44	0.27	6.91
11	Shree	100	3.63	3.63	0.44	0.31	8.01
	<b>TOTAL</b>	<b>2086</b>					

3.19. After closing of e-Reverse Auction, L1 matching Event appeared on the screen and at the end of the event the system generated report informed that three bidders matched the L1 rate with the revised quantum and the details of bidders are as below:

Sl No	Name of the Bidder	Bid Quantity	Fixed Cost	Cost of Generation	Cost of Transmission Charges	Cost of Transmission Losses	Total Cost
		MW	Rs/Kwh				
1	GMR	102	2.02	2.02	0.44	0.18	4.66
2	Jindal Power	200	2.02	2.02	0.44	0.18	4.66
3	DB Power	100	2.02	2.02	0.44	0.18	4.66
5	MB Power	175	2.02	2.02	0.44	0.18	4.66
	<b>TOTAL</b>	<b>577</b>					

3.20. It is submitted that letters were addressed to the four selected bidders requesting to negotiate the rate further and also to increase the quantum for two bidders (M/s.GMRKamalanga and M/s.DB Power). In response to the above, none of the bidders reduced the price and increased the quantum.

As per 1.1.7 of RFQ, *“In the event that none of the other Qualified Bidders match the Bid of the Lowest Bidder, the Utility may, in its discretion, (i) allocate the remaining capacity, if any, after completion of L-1 Matching round to the Bidders at the Tariff quoted cumulative in e-Tender Stage and e-Reverse Auction Stage in the order as they were at the end of L-1 Matching round or (ii) invite fresh Bids from the remaining Qualified Bidders or (iii) annul the Bidding Process. Further, it is clarified that any single Bidder cannot quote part capacity from different power stations”*.

Since only three bidders matched L1 rate, and the quantum tied up with L1 rate was only 577 MW, in order to procure the remaining capacity of 953 MW, letters were addressed to the remaining qualified bidders requesting to match L1 rate and to submit fresh bids matching L1 rate.

In response to the above M/s.OPG, M/s.Shree Cement and M/s.RaipurEnergen had replied their inability to match the L1 price and no reply was received from others.

But M/s.DB Power Ltd vide letter dated 16.02.2022 without reducing the price increased the quantum from 100 MW to 150 MW. The offer of M/s.DB Power after L1 matching process in the DEEP-e-Portal was accepted by TANGEDCO since the increased quantum is at the L1 rate of Rs.4.66 per unit. With this the offered quantum in the medium term tender is 627 MW @ Rs.4.66 per unit and the details are as below:

SI No	Name of the Bidder	Quantum	Fixed Cost	Cost of Generation	Cost of Transmission Charges	Cost of Transmission Losses	Total Cost	
		MW	Rs/Kwh					
1	GMR	102	2.02	2.02	0.44	0.18	4.66	
2	Jindal	200	2.02	2.02	0.44	0.18	4.66	
3	DB Power	150	2.02	2.02	0.44	0.18	4.66	
5	MB Power	175	2.02	2.02	0.44	0.18	4.66	
	<b>TOTAL</b>	<b>627</b>						

3.21. It is submitted that the rates discovered in the medium term tender in other states are detailed below:

**Medium Term Tender in other states:**

GUVNL's Tender Medium Term/Lumpsum Tariff/2021-22/ET-5:

During August 2021, GUVNL had finalized medium term tender for purchase of 1000 MW RTC power for a period of 23 months i.e from Sept'21 to July'23 and PPA signed. The details are as below:

Sl No	Name of the Bidder/Source	Bid Quantity	Fixed Cost	Cost of Generation	Cost of Trans. Charges	Cost of Trans. Losses	Total Cost
		MW	Rs/Kwh				
1	Adani Enterprises/ Essar Power	500	1.535	1.535	0.48	0.13	3.68
2	TATA Power Trading Co. Ltd / Jindal India Thermal Power Plant	200	1.535	1.535	0.48	0.13	3.68
3	Semcorp Energy India Ltd	100	1.545	1.545	0.48	0.11	3.68
4	GMR Warora Energy Ltd	150	1.535	1.535	0.48	0.13	3.68
5	Manikaran Power Ltd /DB Power Plant	50	1.54	1.54	0.48	0.12	3.68
	<b>TOTAL</b>	<b>1000</b>					

### REMCL Medium Term tender:

Railway Energy Management Company Ltd (REMCL) during December 2021 had finalized medium term tender for purchase of 600 MW RTC power for a period of three years and PPA signed. The details are as below:

Bid Result (e-Reverse Auction dated 28.12.2021)

Sl No	Name of the Bidder	State	Bid Quantity	Fixed Cost	Cost of Generation	Cost of Trans. Charges	Cost of Trans. Losses	Total Cost
			MW	Rs/Kwh				
1	Jindal Power	Uttar Pradesh	60	1.75	1.75	0.49	0.13	4.12
2	Jindal Power	Jharkhand	70	1.77	1.77	0.47	0.13	4.14
3	Jindal	Gujarat	90	1.77	1.77	0.46	0.13	4.13
4	Jindal Power	Madhya Pradesh	120	1.8	1.8	0.42	0.13	4.15
5	Dhariwal	Maharashtra	210	1.735	1.735	0.5	0.13	4.10
6	TPTCL	Karnataka	50	1.805	1.805	0.39	0.13	4.13
	<b>TOTAL</b>		<b>600</b>					

3.22. It is submitted that the details of power purchased by TANGEDCO through Short Term tenders and Power Exchanges are detailed below:

#### 1. Short Term Power Purchase

To meet out the demand, TANGEDCO had placed short term tender for the months from Oct'21 to Dec'21 and from Mar'22 to May '22 for RTC and peak power. Since the rate was high in some tenders, TANGEDCO had lodged the tenders and only for Mar'22 LOA was issued the details are tabulated below:

Tender No.	Period	Quantum floated (MW)	Quantum offered by Bidders (MW)	Rate offered by bidders (Rs/Kwh)	Remarks
Tender 14	Oct'21 / RTC	500	220	6.49 to 7.50	Lodged due to high price
	Oct'21 / Peak Power	600	40	14.00	
Tender 15	Nov'21 & Dec'21 / Peak Power	600	-	-	No response
Tender 16	Nov'21 / Peak Power	600	340	6.90 to 9.42	Lodged due to high price
	Dec'21 / Peak Power	600	340	7.00 to 9.42	
Tender 17	Mar'22 (RTC Power)	1000	515	5.02 to 8.95	*

\*After Negotiation, LOA was issued for purchase of 475 MW out of 515 MW at the rate of Rs.4.82 to Rs.4.84 per kwh.

## 2. Power Purchase through Exchanges:

In order to meet the demand in case of shortage of wind and solar power, outages of our plant, power purchase through exchange was made. The average cost of purchase during the months from Apr'21 to Jan'22 was Rs.5.51 per unit at TANGEDCO periphery. The details of power purchase made through exchanges and bilateral are tabulated below:

Month	Short Term Purchase		Exchange Purchase	
	Energy in MU	Avg Rate (Rs/Kwh)	Energy in MU	Avg Rate (Rs/Kwh)
April'21	649.017	3.29	407.81	4.09

May'21	464.733	3.30	301.43	3.55
June'21			428.33	4.45
July'21			243.33	4.03
Aug'21			483.71	4.82
Sept'21	107.506	4.50	381.52	6.25
Oct'21			961.38	8.15
Nov'21			396.37	4.68
Dec'21			250.30	5.74
Jan'22			286.79	4.63
<b>Total</b>	<b>1221.256</b>	<b>3.40</b>	<b>4140.96</b>	<b>5.51</b>

### 3. Short Term Tenders:

Further, to meet the summer demand, TANGEDCO floated short term tender for procurement of 1000 MW RTC power and 1000 MW Peak power (17 to 23 Hrs) for the months for March'22 to May'22. The price bids were opened on 16.02.2022 and the rates offered by the bidders of TANGEDCO Periphery (inclusive of transmission charges and losses) are too high as detailed below:

Period	RTC/Peak	Quantum Floated (MW)	Quantum offered by Bidders (MW)	Rate offered by bidders Rs/Kwh	Details of LOI issue in process after negotiation	
					Quantum (MW)	Rate (Rs/Kwh)
Mar'22	RTC	1000	350	5.24 to 6.75	50	4.82
Apr'22		1000	505	5.24 to 6.75	250	5.10 to 5.24
May'22		1000	445	5.24 to 6.75	150	5.10 to 5.24



Mar'22	Peak (17 to 23 Hrs)	1000	200	9.97	-	-
Apr'22		1000	300	8.95 to 9.97	-	-
May'22		1000	300	8.95 to 9.97	-	-

3.23. It is submitted that the per unit tariff of long term generators for the month Jan'22 is detailed below:

Sr. No.	Bidder Name	Offered capacity (MW)	Fixed Cost (Rs/Kwh)	Cost of Generation (Rs/Kwh)	Cost of Tr. Charges (Rs/Kwh)	Cost of Tr. Losses (Rs/Kwh)	Total Cost (Rs/Kwh)
<b>Long Term</b>							
1	PTC	100	2.9410	1.4161	0.4400	1.9312	4.87
2	Dhariwal	100	1.2003	2.8764	0.4400	3.4506	4.65
3	BALCO 1	100	1.0706	3.1424	0.4400	3.7274	4.80
4	BALCO 2	100	1.0707	3.1424	0.4400	3.7274	4.80
5	GMR	150	2.1762	2.2994	0.4400	2.8503	5.03
6	DB	208	2.1050	2.3474	0.4400	2.9002	5.01
7	Jindal	400	2.2540	2.1770	0.4400	2.7229	4.98
8	KSK	500	2.0000	2.4355	0.4400	2.9919	4.99
9	OPG	74	1.5000	4.5495			6.05
10	IL&FS	540	1.8012	3.1906	0.4400	3.7775	5.58
11	Coastal	558	1.4740	4.1647	0.4400	4.7911	6.27
<b>Medium Term</b>							
12	IL&FS (Pilot I)	550	0.1000	4.2300	0.4400	4.8590	4.96
	<b>TOTAL</b>	<b>3380</b>					

3.24. It is submitted that the reasonableness of the discovered tariff of Rs.4.66 per kwh in the present MTOA tender

- The tariff discovered under Pilot Scheme-II was for 3 years, GUVNL tender

was for 23 months only and REMCL tender was for 3 years i.e. at different timeframes and for different contract durations. Further, with the capacity being already tied up in these tenders, there is limited bid capacity based on domestic coal is available. Therefore, it may not be prudent to compare the tariff discovered under the subject tender with tenders floated earlier.

- It is well known fact that revision in coal prices and freight rates are due from some time and are expected to be revised once elections in five states are completed. At-least two such revisions are expected during a period of 5 years.
- It is pertinent to mention that domestic coal supply constraints are still prevailing and there is limited availability of coal in spot e-auctions leading to higher prices. Further, prices of imported coal are still very high and are not expected to reduce in the near future.
- Due to coal related issues as mentioned above, electricity prices at power exchanges are high and very volatile.
- Generators are generally inclined to have firm contract for longer duration with certainty of price and dispatch of power which helps them in meeting financial commitments to lenders and other mandatory expenses, instead of selling power on power exchanges on day ahead basis or on short term basis for few months.
- The tariff structure is purely based on the Coal price at the time of bidding, the period of supply and duration of payment of monthly bills.
- The cost of Domestic coal was Rs.640 PerTonne during Bid Due Date

(06.03.2013) which has increased to Rs.955 Per Tonne as on Dec'21.

- Each State have different financial structure and unique system of payment and some Discom make payment within 5 days of receipt of invoices after availing 1% rebate for early payment.
- In spite of advance payment made by TANGEDCO for purchase of power through Exchanges, the actual cost of expenditure incurred for purchase for the year 2021-22 was Rs.5.51 per unit (including tr. charges and losses).
- Supply through long term contracts commenced during August 2015, where the tariff of generators using domestic coal was less than Rs.4.00 per unit and with imported coal tariff was Rs.5.29 per unit excluding transmission charges and losses.
- The Exchange rate during March 2013 was Rs.53.46 per dollar and now it has reached to the extent of Rs.75.0153 per Dollar. The exchange rate determines the tariff of imported coal based plants and likely to increase further.
- Imported coal price of Indonesian coal jumped from \$60/tonne in March'2013 to \$200 in September'2021 / October'2021 of 5000 GAR (Gross as received) coal. The imports decreased in comparison to 2019-20 due to import substitution and rising prices. The reduction in imports is compensated by the domestic coal for power generation, hence increasing the demand for domestic coal further.
- Thermal power plant outages on account of coal shortage were reported for a capacity of about 13,000 MW which led to increase in power exchange prices

up Rs.20/kWh. After intervention of CMT, now the outage has come down to 6,960 MW and power exchange prices are at about Rs.7 per kWh.

- Under long term contract, tariff for the plant using domestic coal is computed by escalating the quoted tariff by the escalation rate notified by the CERC once in six months based on the increase in WPI index for cost of the coal and transportation cost notified by Railways.
- This has resulted in increase of tariff and the present tariff for the month of Jan'22 for domestic coal is in the range of Rs.4.65 to Rs.5.03 per unit and imported coal is in the range of Rs.5.58 to Rs.6.27 per unit including transmission charge and losses around 62 paise per unit which is likely to increase further in upcoming days till expiry of contract in 2028.
- Tariff under this medium term tender of Rs.4.66/Kwh at the Tamil Nadu State Periphery excluding trading margin of Rs.0.0173/Kwh is more competitive than the tariff at which TANGEDCO is getting power under long term PPAs and the negotiated tariff under short term tenders floated by TANGEDCO recently i.e on 16.02.22 is in the range of Rs.5.10 to Rs.5.24 per unit for RTC power and the tariff discovered is in the range of Rs. 8.95 to 9.97 per unit for supply of peak power from March'22 to May'22 including the transmission charges and losses.
- The tariff discovered in the present Medium term Tender under FOO guidelines is Rs.4.04 per unit (excluding transmission charges and losses) Every year, the base price of Fixed Charge and Variable Charge will be escalated to the extent of 20% and 50% of increase in the WPI index of all commodities respectively. It

is expected that the tariff will increase approximately five to six paise in the total tariff for every year.

- To sum up, the comparative statement of tariff at interconnection with CTU for all type of tenders is detailed below

<b>Type of tender</b>	<b>Tariff (Fixed and Variable charges at Interconnection point excluding Tr. charges and losses)</b>
	<b>Rs/Kwh</b>
Medium Term tender FOO method (RTC Power)	4.04
Long term tender (RTC Power)	4.07 to 6.05
Power purchased through Exchanges during 2021-22	5.39
Short term tender (RTC Power for March'22)	4.70
Discovered tariff in Short term tender (April '22 to May ' 22)	4.98 to 5.12

In view of the above points, the discovered tariff of Rs 4.66 per kwh at Tamil Nadu state periphery appears to be reasonable considering five years tenure with a nominal WPI escalation when compared to other short term, long term and purchase through Power exchanges.

3.25. It is submitted that TANGEDCO had intimated TNERC the price details of the tender and reasonableness of the discovered price by an additional affidavit No.2 filed on 04.03.2022 and prayed to allow TANGEDCO to finalize the tariff discovered in the

tender of Rs.4.66/Kwh including transmission charges and transmission loss and to issue Letter of Award (LOA) to successful bidders for procurement of 627 MW RTC Power and signing of Power Supply Agreements with the aggregator.

3.26. It is submitted that during the hearing held on 08.03.2022 in MP 48 of 2021 objections were raised by M/s. Manikaran Power Ltd and M/s.SaiWardha Power Generation Pvt. Ltd and the Commission vide its order dated 31.03.2022 in MP No.48 of 2021 accorded its approval on the deviations sought by TANGEDCO in the floated tender bidding document and also accorded approval to finalise the process and approach the Commission through a petition, namely P.P.A.P for adoption of tariff paying required fee.

3.27. It is submitted that TANGEDCO Board through circulation note approved to issue Letter of Award to four successful bidders M/s.GMRKamalanga Energy Ltd (102 MW), M/s.Jindal Power Ltd (200 MW), M/s.D.B.Power Ltd (150 MW) and M/s.MB Power Madhya Pradesh Ltd (175 MW). Further, TANGEDCO Board in its 106<sup>th</sup> meeting held on 19.03.2022 confirmed the same.

Based on the approval of Board and TNERC order dated 31.03.2022, TANGEDCO had issued Letter of Award to the four successful bidders M/s. M/s.GMRKamalanga Energy Ltd (102 MW), M/s.Jindal Power Ltd (200 MW), M/s.D.B.Power Ltd (150 MW) and M/s.MB Power Madhya Pradesh Ltd (175 MW) on 04.04.2022 requesting to commence supply of power under STOA from 01.05.2022 till the Medium Term Open Access (MTOA) becomes operational as per the terms of the Bidding Document.

3.28. It is submitted that An Appeal Petition No.127 of 2022 was filed along with Stay Application (IA 502 of 2022) and Urgent listing application (IA 503 of 2022) by third parties M/s.Manikaran Power Ltd and M/s SaiWardha Power Gen. Ltd before Hon'ble APTEL challenging the TNERC order dated 31.03.22 in MP No.48 of 2021. The said Appeal came up for hearing on 04.04.2022, wherein the Respondents were directed to file the reply to interim application before 08.04.2022.

3.29. It is submitted that the IA for stay was listed on 08.04.22, on which date, the matter was deferred to 22.04.22 due to paucity of time. No orders have been passed on the stay application.

During the hearing on 22.04.22, the appellant made an oral submission that they are not in position to meet the L-1 price discovered in the tender process in the current scenario of coal shortage in the country and were hence not pressing the Appeal. Accordingly, APTEL vide its daily order dated 22.04.22 ordered that the appeal along with pending application is dismissed as withdrawn.

3.30. The petitioner also stated that -

1. Out of four successful bidders only two bidders M/s.GMRKamalanga Energy Ltd and M/s.DB Power Ltd had accepted the LOA.
2. M/s. Jindal Power vied its letter dated 11.04.22 intimated that they are unable to accept the LOA due to the following two reasons:
  - LOA is received after expiry of date mentioned in tender documents and tender document cannot be changed after submission of bids.
  - Due to change in Government Policy for distribution of Coal to power sectors and change in law

3. No response received from MB Power regarding the LOA issued.

3.31. It is submitted that further M/s.DB Power Ltd vide letter dated 13.04.2022 requested concurrence to supply 150 MW power from 01.09.2022 instead of 01.05.2022 stating the following reasons:

Delay in issuing LOA: and associated uncertainties:

As per RFP, the LOA was to be issued on 07.02.2022 and supply of power was to be commenced from 01.04.2022, two months time period was available to participate in e-auction and arrangement of coal for generation and supply of power. But we received LOA only on 04.04.2022 after a delay of around 2 months with commencement date as 01.05.22.

Change in Coal Distribution Policy:

In the meantime, there has been a major change in coal distribution policy of coal companies, wherein special forward e-auction for power (SFEA) has been withdrawn by Govt. of India and a new clubbed e-auction scheme has been introduced and the separate coal allocation to power sectors was taken away.

3.32. Further, the captioned medium term supply is left with limited avenues for ensuring coal availability i.e., to participate either in

1. Upcoming unified e-auction (which is yet to be announced)
2. SHAKTHI B (iii) e-auction which is expected to be conducted shortly



Furthermore, participation, Receipt of Delivery Order (DO) and Lifting of coal under the above scheme is expected to take a minimum period of 4-5 months. Force Majeure affecting Seller.

It is evident that the above change in the policy by the Govt. having occurred after the Bid date is a change in Law Event in terms of the draft PPA circulated as part of Bid Documents.

The above change in Law amounting to Force Majeure under Article 17.4 (a) affects the performance of our obligations of supply of power which is beyond our reasonable control. On account of this Force majeure Event, DBPL is unable to commence supply of power from 01.05.2022.

#### Uncertainty in Regulatory Approval from TNERC

Due to the ongoing litigation filed by the third party in the matter of conduct of bid process, DBPL was not in a position to ascertain the time for commencement of supply of power under the medium term tender in the near term.

In view of the above, DBPL had arranged to undertake Capital Overhaul of Unit II during the months of July and August in the current year and hence it is not possible to supply power under this LOA.

3.33. Subject to the above reasons, DBPL had requested approval to commence the supply of power from 01.09.2022 in order to execute APP with PTC.

3.34. It is submitted that M/s.GMRKamalanga Energy Ltd vide letter dated 29.04.22

requested for extension of timeline for start of supply by end of July/early August, 2022 stating the following reasons.

- As per the draft APP to be signed with PTC, the condition precedent cannot be fulfilled by both the parties as only 2 days left for 01.05.2022.
- GMR had allocation of 4,00,000 tons of Shakthi Coal from MCL for which GMR has to submit a valid PPA within two years of auction process i.e by early Feb'2022. As per the original timeline, the APP was to be executed by mid Feb'2022. The delay in process did not help for getting extension of deadline.
- CIL has initiated Round-2 of ShakthiB(III) auction recently and is likely to be concluded by May'22. GMR is participating in the above auction to secure coal and coal supply is expected to start by July'22.
- Due to extreme shortage of coal in the country, GMR is unable to procure coal in any other market including imported coal in such a short time.
- Due to shortage of coal in GMR plant, GMR constrained to shutdown one of its units and the other two units are operational resulting in part fulfillment of existing PPA obligations currently.

3.35. It is submitted that considering the below points TANGEDCO vide its letter dated 07.05.22, intimated the revised date for commencement of power supply to M/s.GMRKamalanga Energy Ltd and M/s.DB Power Ltd for extension of time for commencement of supply of power from 01.05.22 to 01.08.22 and 01.09.22 respectively.

- Due to the unexpected change in allocation of coal to power sectors by the Govt., generating companies are facing hardest situation in arranging coal to fulfill their obligations as per PPA.
- Already many LTA generators stopped supplying power due to lack of fuel in their plant and due to payment security mechanism.
- In the subject tender, only two bidders accepted LOA and the remaining two generators not accepted the LOA due to non availability of fuel.
- As the country is out of Covid-19 lockdowns/restrictions all the commercial wings started their operation in full swing and the economy bounced back quickly, the electricity demand has shot up and is expected to surge further.
- Due to rising scarcity in supply of coal in the country, prices in exchanges are greater than ever as need for power is high.
- Wind generation in Tamil Nadu will be constant from end of May to mid of September and in order to avail the renewable source energy to its fullest many of our own generating stations will be under shutdown for Annual Overhauling.
- The tariff discovered in the subject tender of Rs.4.66/kwh inclusive of transmission charges and losses is cheaper when compared to the current power market rate and tariff discovered in short term tender which ranges from Rs.8.00 to Rs.12.00 per Kwh.

3.36. It is submitted that as per the Bid Documents, Clause 2.19.7 of RFP states “*The Bid Security shall be forfeited as Damages without prejudice to any other right or remedy that may be available to the Utility under the Bidding Documents and/ or under the APP, or otherwise, if,:*

*d. the Selected Bidder fails within the specified time limit-*

*i. to sign and return the duplicate copy of LOA;*

*ii. to sign the APP; or*

*iii. to furnish the Performance Security within the period prescribed therefore in the APP”*

As per the above Clause 2.19.7 (d) (i), since JPL and MBPL fails to sign and return the duplicate copy of LOA issued by TANGEDCO, the bid security submitted by them is eligible for forfeited.

3.37. Based on the above clause letters were addressed to the Bank on 14.07.22 requesting to invoke M/s. Jindal Power Ltd and M/s.MB Power (Madhya Pradesh) Ltd Bid security Bank Guarantee amounting to Rs.10 Crores and Rs.8.75 Crores respectively and transfer the amount through RTGS to TANGEDCO account.

In response to the above, Jindal Power had transferred an amount of Rs.10 Crores to directly to TANGEDCO account on 15.07.22 and requested TANGEDCO to intimate the Bank not to invoke their Bid Bond.

3.38. It is submitted that M/s.MB Power had filed WP No.18465 & 18469 of 2022 before Hon’ble High Court of Madras and the case came up for hearing on 15.07.22

and the Hon'ble Court has granted Status Quo and directed MB Power to keep the validity of the BG alive until the disposal of the Writ Petition and posted for next hearing on 04.08.22.

3.39. It is submitted that State Bank of India, Project Finance Branch, Mumbai vide email dated 15.07.22 had informed that "we received your invocation of MB Power BG No.1895622BG0000001 on 14.07.22 after the business hours".

On 15/07/2022, the petitioner had initiated the process of payment of BG in terms thereof. However, during the process, the Bank was duly intimated of the order of 'Status Quo' issued by the Hon'ble High Court of Madras in WP No.18465/2022, with respect to the invocation of BG 1895622BG0000001. The petitioner has stated that, therefore, at this juncture, they were forced to withhold the payment of BG till the order of 'Status Quo' is lifted or vacated.

3.40. It is submitted that, TANGEDCO had executed Power Supply Agreement (PSA) with the aggregator M/s.PTC India Ltd for supply of 102 MW RTC Power from M/s.GMRKamalanga Energy Ltd on 16.07.2022 and signing of PSA with M/s.DB Power Ltd is under process. Once the PSA got signed with M/s.PTC India Ltd for supply of power from M/s.DB Power Ltd, the copy of PSA will be submitted to Commission with applicable tariff fees.

3.41. It is submitted that as per the provisions of the Agreement, the date of commencement of the contract period shall be the date of Appointed Date and Appointed Date shall be the date on which Conditions Precedent are achieved and every condition is either satisfied or waived.

The following are the conditions precedent to be satisfied by the Aggregator within a period of 30 days from signing of Agreement (16.07.2022) subject to extension on request for a period not exceeding 90 (ninety) days.

1. To provide Performance Security to the utility.
2. Submission of legal opinion from the legal counsel of the Aggregator.
3. Deposit a certified true copy of the agreement with RLDC and SLDC.

Likewise, the following are the conditions precedent to be satisfied by the utility within 30 days after submission of Performance Security by the Aggregator.

1. Issue of Letter of Credit (LC).
2. Obtaining approval from the Commission for payment of Tariff.

3.42. It is submitted that, to fulfill the condition precedent with regard to procurer side, TANGEDCO has to Open Standby LC and to obtain adoption of tariff from the Commission.

TANGEDCO had already taken necessary actions for opening of Standby LC to PTC.

3.43. It is therefore prayed before the Commission to adopt the tariff of Rs.4.04 per unit under "FOO (Finance Own and Operate) Guidelines" for procurement of 102 MW

RTC power from M/s.GMRKamalanga Energy Ltd through the aggregator M/s PTC India Limited under medium term for a period of five years as agreed by the petitioner and the respondents in Power Supply Agreement in terms of Section 63 of the Electricity Act 2003 and render justice.

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

4.1. We have heard the submission of the learned Standing Counsel for TANGEDCO. This petition is sequel to the Orders issued in M.P. No.48 of 2021 dated 31-03-2022 wherein this Commission has accorded in principle approval for procurement of 1500 MW RTC power for a period of 5 years appointing M/s.PTC as an Aggregator; the Commission accepted certain deviations and directed to finalise the process and approach the Commission through a P.P.A.P. for tariff adoption.

4.2. The petitioner sought approval of the Commission, in M.P.No.48 of 2021, considering the deficit of (-)2115, (-)462, (-)886, (-)1751, (-)585 in the Year FY2022-23 to FY 2026-27 respectively, for floating of Medium term tender for the purchase of 1500 MW RTC power for a period of 5 years appointing M/s.PTC as an Aggregator.

4.3. In this connection, the process of e-Reverse Auction was done through DEEP portal by the Petitioner, and in result 11 bidders short-listed and among which L1 has quoted the lowest tariff of Rs.4.66 / kWh (inclusive of transmission charges and

losses). At the end of negotiation, three bidders had matched with the L1 rate of Rs.4.66/kWh for the revised quantum of 577 MW.

4.4. And the petitioner also stated that, while calling the other bidders to submit their bids matching with the L1 rate, 3 of them replied their inability to match with the L1 price and no reply received from others. TANGEDCO managed to increase the quantum from 100 MW to 150 by M/s.DB Power. The TANGEDCO finalized with the following quantum to purchase at a total tariff of Rs.4.66 per Unit.

Sl No	Name of the Bidder	Quantum	Fixed Cost	Cost of Generation	Cost of Transmission Charges	Cost of Transmission Losses	Total Cost
		MW	Rs/Kwh				
1	GMR Kamalanga	102	2.02	2.02	0.44	0.18	4.66
2	Jindal Power	200	2.02	2.02	0.44	0.18	4.66
3	DB Power	150	2.02	2.02	0.44	0.18	4.66
4	MB Power	175	2.02	2.02	0.44	0.18	4.66
	<b>TOTAL</b>	<b>627</b>					

Based on the above, TANGEDCO issued Letter of Award (LOA) to the four successful bidders on 04.04.2022 requesting to commence supply of power under STOA from 1.5.2022 till the Medium Term Open Access becomes operational as per the terms of the Bidding Document.



4.5. Out of four successful bidders only two bidders M/s.GMRKamalanga Energy Limited and M/s.DB power Limited had accepted the LOA issued by the TANGEDCO. M/s.Jindal Power and M/s.MB power has not accepted the LOA to supply the power.

4.6. As of now, TANGEDCO has executed Power Supply Agreement (PSA) with the Aggregator M/s.PTC India Limited for supply of 102 MW RTC Power from the supplier M/s.GMRKamalanga Energy Limited on 16.07.2022; and also stated that signing of PSA with the other bidder M/s.DB Power Limited is under process.

4.7. In this connection, TANGEDCO has stated the following on the tariff discovered under the MTOA tender –

- The revision of Coal prices and freight rates are due, and are expected to be revised once elections in five States are completed. Atleast two such revisions are expected during a period of 5 years.
- Domestic Coal supply constraints are still prevailing and there is limited availability of coal in spot e-auctions leading to higher prices. Further, prices of imported coal are still very high and are not expected to reduce in near future.
- Due to prevailing Coal related issues, electricity prices at Power Exchanges are high and very volatile.
- The Exchange rate determines the tariff of imported Coal based plants and likely to increase further. Recent exchange rate increase also a concern on cost of imported coal

This has resulted in increase of tariff and the recent tariff for the month of Jan'2022 for domestic coal was in the range of Rs.4.65 to Rs.5.03 / kWh and imported coal was in the range of Rs.5.58 to Rs.6.27 / kWh including Transmission charges and losses around 62 paise per kWh.

Tariff, under this medium term tender of Rs.4.66/kWh at Tamil Nadu State periphery excluding trading margin of Re.0.0173 / kWh, is more competitive than the tariff at which TANGEDCO is getting power under long term PPAs and the tariff under Short term tenders floated by TANGEDCO which is in the range of Rs.4.82 / kWh to Rs.5.24 / kWh for RTC power and the tariff discovered for supply of peak hour power is in the range of Rs.8.95 to Rs.9.97 / kWh from March 2022 to May 2022 (including Transmission charges and losses)

The tariff discovered in the present Medium Term Tender under FOO guidelines is Rs.4.04 per kWh (excluding Transmission charges and losses). The Base price of Fixed charges and Variable charges will be escalated every year to the extent of 20% and 50% of increase in the WPI index of all commodities respectively. Hence, the expected tariff increase would be five to six paise in the total every year.

And, in view of the above, TANGEDCO stated that the discovered tariff of Rs.4.66 / kWh at Tamil Nadu State periphery is reasonable considering 5 years tenure with a nominal WPI escalation compared to other STOA/LTOA and Power exchange purchases.

4.8. Though the Petitioner has floated the Medium Term Tender for the procurement of 1500 MW of power in line with the Pilot Scheme-II, it is able to tie up only to the quantum of 102 MW RTC power. But the petitioner has not stated about its plan to meet the remaining portion of unrealized quantum or projected deficit for upcoming 5 years.

4.9. As per the recently approved Power purchase quantum/rate in the Tariff Order No.7 of 2022 dated 9.9.2022, the average Power purchase rate under MTOA is Rs.5.64/kWh and Rs.5.14 / kWh in respect of LTOA (as per True up figure). Moreover, the power procured through Power Exchange during 2021-22 was around Rs.6.38 / kWh. Comparing to these approved prices and recent STOA procurement rate (Rs.4.82 to Rs.5.24), the rate discovered under this Medium Term Tender i.e., Rs.4.66 (including Re.0.44 towards Transmission charges and Re.0.18 towards cost of Transmission losses) seems to be reasonable.

4.10. From the submission of the petitioner, it is also found that TANGEDCO has to fulfill the Conditions precedent by way of opening the Standby Letter of Credit to PTC. In this connection the petitioner is directed to arrange for the same on obtaining this approval.

4.11. As far as the quantum for which in principle approval was given, TANGEDCO was able to mobilize only 10% (approx.) of the approved quantum (1500 MW), hence

the petitioner has to furnish its plan of action to meet the remaining portion of deficit over the Projected demand.

4.12. In view of the above, Commission adopts the tariff of Rs.4.04 / kWh (excluding Transmission charges & loss) for the purchase of 102 MW under FOO (Finance, Own and Operate) Guidelines from M/s.GMRKamalanga Energy Limited through the Aggregator M/s.PTC India Limited under Medium Term agreement for the period of five years as the tariff is discovered under competitive bidding mode in terms of Section 63 of the Electricity Act, 2003.

Commission also approves the trader margin of Re.0.0173 / kWh quoted by PTC for Pilot Scheme-II apart from Transmission charges.

(Sd.....)  
(K.Venkatesan)  
Member

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

/True Copy /

**Secretary**  
**Tamil Nadu Electricity**  
**Regulatory Commission**