

**KERALA STATE ELECTRICITY REGULATORY COMMISSION**  
**THIRUVANANTHAPURAM**

**Present: Adv. A.J Wilson, Member (Law)**

**OP No 46/2022**

- In the matter of : Petition under Regulation 78 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations 2021 seeking approval for entering into short term power procurement arrangement with NTPC Vidyut Vyapar Nigam Ltd (NVVNL) and PTC India Ltd (PTC) through DEEP portal for meeting power shortage for the months of March and April 2023.
- Petitioner : Kerala State Electricity Board Limited (KSEBL)
- KSEB Ltd represented by : Sri. M.P.Rajan, Deputy Chief Engineer  
Smt. Latha S.V, Asst: Executive Engineer
- Respondents
1. NTPC Vidyut Vyapar Nigam Ltd(NVVNL)  
1<sup>st</sup> Floor, Core-5, SCOPE Complex, Lodhi Road, New Delhi-110003.
  2. PTC India Ltd (PTC), 2<sup>nd</sup> Floor, NBCC Tower, 15-Bhikaji Cama Place, New Delhi – 110066.
- Respondents represented by:
1. Shri S.S.Chatterjee, Executive, NVVNL  
Shri Varun Virmani, Executive, NVVNL
  2. Shri Abhijith Pandey, Manager, PTC Ltd  
Shri Arunkumar, Head, Short Term Marketing, PTC
- Date of the hearing : 22.09.2022 (e-hearing through Video Conference)

**Order dated 23.09.2022**

1. KSEB Ltd on 15.09.2022, filed a petition before the Commission for seeking approval for entering into the following short term power procurement arrangement with NTPC Vidyut Vyapar Nigam Ltd (NVVNL)and PTC India Ltd

(PTC)through DEEP portal for meeting power shortage for the months of March and April 2023.

Table 1: Letter of Award to NTPC Vidyut Vyapar Nigam Ltd (NVVNL)

Period	Duration (Hrs)	Quantum (MW) (On firm basis)	Rate at Delivery Point i.e. Kerala Periphery	Source of Power
01.03.2023 to 31.03.2023	RTC	100	Rs. 8.03/- (Rupees Eight and Three paise only) per kWh	IL & FS Tamil Nadu Power Company Ltd, Tamil Nadu in the Southern Region.

Table 2 : Letter of Award to PTC India Ltd

Period	Duration (Hrs)	Quantum (MW) (On firm basis)	Rate at Delivery Point i.e. Kerala Periphery	Source of Power
01.04.2023 to 30.04.2023	RTC	100	Rs. 7.95/- (Rupees Seven and Ninety Five paise Only) per kWh	Jaypee Nigrie Super Thermal Power Plant, Madhya Pradesh in the Western Region.

2. The summary of the petition filed by KSEB Ltd is given below.

(1) KSEB Ltd expected to have a power shortage upto 500MW during the period from August 2022 to May 2023. In order to meet the power shortage, KSEB Ltd decided to invite short term tender through DEEP portal for meeting the power shortage and floated RfP on 05.07.2022 for the quantum as detailed below.

Details of RfP floated on 05.07.2022

Requisition No	Period		Required quantity MW	Duration hrs	Minimum Bid quantity MW
	From	To			
1	01-08-2022	31-08-2022	250	RTC	100
2	01-09-2022	30-09-2022	250	RTC	100
3	01-10-2022	31-10-2022	250	RTC	100
4	01-11-2022	30-11-2022	350	RTC	100
5	01-12-2022	31-12-2022	350	RTC	100
6	01-01-2023	31-01-2023	350	RTC	100
7	01-02-2023	28-02-2023	500	RTC	100
8	01-03-2023	31-03-2023	500	RTC	100
9	01-04-2023	30-04-2023	500	RTC	100
10	01-05-2023	31-05-2023	500	RTC	100

(2) The time lines specified in the bid for finalising the tender is detailed below.

Sl. No.	Event	Date
1	Publication of RfP/Activation of Event	05.07.2022
2	Last date for submission of queries if any	08.07.2022
3	Reply of queries	13.07.2022

4	Submission of RfP (on line digitally signed non-financial technical Bid and IPOs)	15.07.2022 02:00pm
5	Opening of non-financial technical Bids	15.07.2022 03:00pm
6	Clarification, if any, sought from Bidder(s)	18.07.2022
7	Evaluation of nonfinancial technical Bids	19.07.2022
8	Opening of IPOs (upto 1300 hrs)	20.07.2022 11:00am to 01:00pm
9	Start of e-RA	20.07.2022 01:00pm to 03:00pm

Further as requested by some of the traders/generators, and also for increasing the number of participants for competitive bids, the last date of submitting the bid was extended upto 21.07.2022.

- (3) The technical bid was opened on 21.07.2022. Six bidders submitted the bids, as detailed below.

Month/Period	Time Period	Required Quantum	NVVN/ITPCL	PTC			TPTCL	
				SEIL-P2	APNRL	JNSTPP	NBEIL	JPL
Aug-22	RTC	250			100		100	200
Sep-22	RTC	250		100	100		100	200
Oct-22	RTC	250		100	100			200
Nov-22	RTC	350		100	100	100		200
Dec-22	RTC	350		100	100	100		200
Jan-23	RTC	350	300	100	100			200
Feb-23	RTC	500	275	200	100			200
Mar-23	RTC	500	275	200	100			200
Apr-23	RTC	500	25	100	100	100		200
May-23		500	275	100	100	100		200
	RTC							
Name of the source			ITPCL	SEIL-P2	APNRL	JNSTPP	NBEIL	JPL
Name of the State in which source located			Tamil Nadu	Andhra Pradesh	Jharkhand	Madhya Pradesh	Telangana	Chhattisgarh
Type of fuel			Coal	Coal	Coal	Coal	Coal	Coal

- NVVN - NTPC Vidyut Vyapar Nigam Ltd
- TPTCL- Tata Power Trading Company Ltd
- PTC India Ltd-Power Trading Corporation India Ltd.
- NBEIL- Nava Bharat Energy India Limited
- JPL-Jindal Power Ltd
- ITPCL- IL & FS Tamil Nadu Power Company Ltd.
- SEIL-P2- Sembcorp Energy India Ltd-Project-2
- APNRL- Adhunik Power & Natural Resources Limited
- JNSTPP- Jaypee Nigrie Super Thermal Power Plant

- (4) KSEB Ltd further submitted that, the initial price offers submitted by the bidders were opened on 26.07.2022 at 11.00 AM, followed by e-RA auction at 1:00PM, and e-RA concluded at 03:30 PM. On completion of the e-bid, the following rates were discovered through bucket filling in DEEP portal, the details are given below.

Period	Duration (hrs)	Bid Qtm (MW)	Offered Qtm (MW)	Price discovered (Rs/Kwh)	Trader/
					Generator
Aug-22	RTC	250	100	6.24	TPTCL/JPL
			100	14	TPTCL/NBEIL
Sep-22	RTC	250	100	7.8	PTC/SEIL-P2
			100	7.8	TPTCL/JPL
			50	9	TPTCL/NBEIL
Oct-22	RTC	250	100	8.06	TPTCL/JPL
			100	8.3	PTC/SEIL-P2
Nov-22	RTC	350	100	7.27	PTC/SEIL-P2
			100	7.27	PTC/JNSTPP
			100	7.28	TPTCL/JPL
Dec-22	RTC	350	100	7.27	PTC/SEIL-P2
			100	7.27	PTC/JNSTPP
			100	7.28	TPTCL/JPL
Jan-23	RTC	350	200	7.8	TPTCL/JPL
			100	7.8	PTC/SEIL-P2
			50	7.94	NVVNL/ITPCL
Feb-23	RTC	500	200	7.8	TPTCL/JPL
			100	7.8	PTC/SEIL-P2
			200	7.94	NVVNL/ITPCL
Mar-23	RTC	500	275	8.03	NVVNL/ITPCL
			100	8.03	PTC/SEIL-P2
			125	8.83	TPTCL/JPL
Apr-23	RTC	500	100	7.95	PTC/JNSTPP
			275	7.95	NVVNL/ITPCL
			100	8.25	PTC/SEIL-P2
			25	8.83	TPTCL/JPL
May-23	RTC	500	100	7.95	PTC/JNSTPP
			275	7.95	NVVNL/ITPCL
			100	8.25	PTC/SEIL-P2
			25	8.83	TPTCL/JPL

(5) KSEB Ltd further submitted that, the Standing Committee for procurement of power in the meeting held on 27.07.2022 had recommended as follows;

- (i) Six bids were received as against ten requisitions for purchase of power from August 2022 to May 2023. However, the offer received for August 2022, October 2022, November 2022 and December 2022 were much less than the required quantum.
- (ii) Kerala received good south-west monsoon during the year 2022-23. With the current storage position and ongoing normal inflow for the rest of the year, the power procurement at high price from August 2022 to January 2023 is not required.

- (iii) The trend of peak demand during March, April and May 2023 is expected to be high and hence power deficit is expected to be high. During the last summer (2022), the power demand was very high and there was some scarcity of power in the market due to shortage of coal.
- (iv) In the recent bids invited by other States through DEEP portal from February 2023 to May 2023, the price discovered is comparatively higher than the rate of this bid. Further the coal price may increase further during the summer months of 2023. Also considering the increase in summer demand of the neighbouring States, the advance procurement of power at the rate discovered in this bid seems to be advantageous.
- (v) The power deficit anticipated during the February 2023 may be managed by procurement of power from daily market. Thus, the procurement of power in the month of February 2023 can be avoided.
- (vi) As per the Load Generation Balance (LGB) of summer 2022-23, the deficit during the peak hours varies between 450MW in March 2023 to 300MW in May 2023. Duly considering the SWAP purchase also, the revised power requirement to be met through DEEP portal during the summer months of the year 2023 is given below.

Particulars	Duration	Mar-23	Apr-23
Deficit in MW	RTC	100	250
	18:00 to 22:30	340	160
Purchase through DEEP	RTC	100	100
SWAP	14:00 to 22:00		
	RTC	200	200
	14:00 to 23:00	100	100

- (6) KSEB Ltd further submitted that, based on the load flow analysis of the summer seasons of the previous years, the power demand during summer months of the year 2023 will also drastically increase. The rate of power in the short-term and daily market is expected to be very high during summer months. Further, due to rise in demand and inadequate supply of domestic coal, the States and GENCOS based on domestic coal, has been directed by CERC to import coal for blending, and the incremental expenditure on account of coal would be pass through in the tariff. Considering these aspects, the anticipated per unit cost of power during summer 2023 is expected to be high.

3. KSEB Ltd also submitted that, the bid validity period of the tender is 30 days from the date of e-Reverse Auction, i.e., upto 30.08.2022, which was further extended upto 15.09.2022.
4. Considering the above reasons, KSEB Ltd requested to grant approval for issuing Letter of Award (LoA) to the successful bidders namely NVVNL for procurement of 100MW RTC power during March 2023 and Power Trading Corporation of India Ltd (PTC India Ltd) for procurement of 100MW RTC power during April-2023 as per the price discovered through bucket filling during eRA in the DEEP portal on 26.07.2022, as detailed in paragraph-1 above.
5. The Commission admitted the petition as OP No. 46/2022. The hearing on the petition was held on 22.09.2022 through video conference. Smt Latha S.V, presented the matter on behalf of KSEB Ltd. The representatives of the respondents M/s NVVNL and M/s PTC India Ltd also participated during the hearing.

### **Analysis and Decision of the Commission**

6. The Commission has examined in detail the petition filed by KSEB Ltd seeking approval for entering into short term power procurement arrangement with NTPC Vidyut Vyapar Nigam Ltd (NVVNL) and PTC India Ltd through DEEP Portal for meeting the power shortage during March and April-2023, as per the provisions of the Electricity Act, 2003 and KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021.
7. As per the Section 86(1)(b) of the Electricity Act, 2003 (Central Act 36 of 2003), regulating power purchase and procurement process of distribution licensees including the price at which electricity shall be procured through agreements and supply within the State, is one of the statutory functions of the State Electricity Regulatory Commissions. The relevant Section of the Electricity Act, 2003 is extracted below.

*“86 Functions of the State Commission. - (1) The State Commission shall discharge the following functions, namely: -*

*.....*

*(b) 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;”.*

8. The Commission, in exercise of the powers conferred on it under Section 61 read with Section 181 of the Electricity Act, 2003 notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 (herein after referred as Tariff Regulations 2021). The Regulation 78 of the Tariff Regulations 2021, deals with ‘Short-term power procurement’. The relevant Regulation is extracted below.

*“78. Short-term power procurement. –*

(1) *The distribution business/ licensee may, if it considers necessary undertake additional short-term power procurement to overcome any short-term deficiency in power requirement during the financial year, as per the short-term power procurement plan approved by the Commission, in accordance with this Regulation.*

(2) *Where there has been an anticipated shortfall or failure in the supply of electricity from any approved source of supply during the financial year, the distribution business/ licensee may enter into an agreement for additional short-term procurement of power: Provided that, if the total power purchase cost for any quarter including such shortterm power procurement exceeds by five percent the power purchase cost approved by the Commission for the respective quarter, the distribution business/ licensee shall have to obtain approval of the Commission by filing a petition.*

(3) *The distribution business/ licensee may enter into a short-term power procurement agreement or arrangement under the following circumstances subject to the ceiling tariff approved by the Commission for this purpose: -*

- (i) *where the distribution business/ licensee is able to source new short-term source of supply from which power can be procured at a tariff that reduces its approved total power procurement cost;*
- (ii) *when faced with emergency conditions that threaten the stability of the distribution system or when formally directed to do so by the State Load Despatch Centre to prevent grid failure;*
- (iii) *where the tariff for power procured under such agreement or arrangement is in accordance with the guidelines for short-term procurement of power by distribution licensees through tariff-based bidding process issued by the Central Government;*
- (iv) *when there is a contingency situation and power purchase price is within the ceiling price as prescribed by the Commission in the distribution licensee's ARR&ERC;*
- (v) *procurement of short-term power through power-exchange; and*
- (vi) *Procurement by way of exchange of energy under 'banking' transactions:*

*Provided that prior approval of the Commission and the ceiling rate; shall not be applicable to the short-term purchases under clause (ii).*

*Provided further that prior approval of the Commission is not required for short term purchases under clause (v) above, so long as the average rate is within the ceiling rate.*

(4) *The Commission may stipulate the ceiling quantum and ceiling rate for purchase of power from short-term sources.*

(5) *As far as practicable, approval for all power purchases must be sought in advance. Where it is not practicable due to any contingency situation, the distribution licensee shall within fifteen days from the date of entering into an agreement or arrangement for short-term power procurement shall file a petition for approval of the Commission by filing full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection, circumstances necessitating such a purchase and such other details as the Commission may require to assess that the conditions specified in this Regulation have been complied with:*

*Provided that where the Commission has reasonable grounds to believe that the agreement or arrangement entered into by the distribution business/ licensee does not meet the criteria specified in this Regulation, the Commission may disallow all such transactions from the annual revenue requirements, the net increase in the cost of power on account of such procurement apart from any other action that the Commission may initiate as per law against the distribution licensee."*

9. The Ministry of Power, Government of India, under the provisions of Section 63 of the Electricity Act, 2003, notified the '*Guidelines for short-term (i.e. for a period of more than one day to one year) Procurement of Power by Distribution Licensees through Tariff based bidding process*' vide the notification dated 30.03.2016.
10. The Commission has appraised the petition filed by KSEB Ltd in detail as per the provisions of the Electricity Act, 2003, Tariff Regulations, 2021 and also as per the provisions of the guidelines notified by the Ministry of Power, Gol, and noted the following.
  - (i) As extracted under paragraph 8 above, the Regulation 78 of the Tariff Regulations, 2021, KSEB Ltd can undertake additional short-term power procurement during the financial year, over and above the power procurement plan approved by the Commission to meet its increase in electricity demand.
  - (ii) In order to meet the anticipated power shortage upto 500MW during the period from August 2022 to May 2023, KSEB Ltd invited short-term tender through DEEP portal on 05.07.2022. The technical bid was opened on 21.07.2022. The rate discovered through the e-RA auction held on 26.07.2022 ranges from Rs 6.24/unit to Rs 14.00 per unit, as detailed under paragraph 2(4) of this Order.

However, Kerala received very good south-west monsoon during the year 2022-23. Considering the better storage position and anticipating normal inflow during the rest of the year 2022-23, KSEB Ltd decided not to procure power at high price from August-2022 to January-2023 from the short-term bid invited on 05.07.2022. KSEB Ltd further submitted that, the anticipated power deficit during February 2023 can be managed by procuring additional power from the daily market.

However, even after considering the power availability from all sources and also considering the power from the SWAP transactions, KSEB Ltd expected to have power shortage in the months of March, April and May 2023.

Even though the price discovered in the bid for March, April and May 2023 is comparatively high, the electricity price in the summer months may increase further during the coming summer in view of the coal shortages and likely increase in the electricity demand of the neighboring states.

- (iii) The anticipated power shortage in the months of March and April-2023 is proposed to meet as follows.

Particulars	Duration	Mar-23	Apr-23
Deficit in MW	RTC	100	250



	18:00 to 22:30	340	160
Purchase through DEEP	RTC	100	100
SWAP	14:00 to 22:00		
	RTC	200	200
	14:00 to 23:00	100	100

- (iv) KSEB Ltd further submitted that, based on the load flow analysis of the summer seasons of the previous years, the power demand during summer months of the year 2023 may drastically increase. The rate of power in the short-term and daily market is expected to be very high during summer months. Further, due to rise in demand and inadequate supply of domestic coal, the States and GENCOS based on domestic coal has been directed by CERC to import coal for blending, and the incremental expenditure on account of coal would be pass through in the tariff. Considering these aspects, the anticipated per unit cost of power during summer 2023 is expected to be high.
- (v) KSEB Ltd also submitted that, the bid validity period of the tender is 30 days from the date of e-Reverse Auction, i.e., upto 30.08.2022, which was further extended upto 15.09.2022.
- (vi) Considering the above reasons, KSEB Ltd requested to grant approval for issuing Letter of Award (LoA) to the successful bidders namely NVVNL for procurement of 100MW RTC power during March 2023 and Power Trading Corporation of India Ltd (PTC India Ltd) for procurement of 100MW RTC power during April-2023 as per the price discovered through bucket filling during eRA in the DEEP portal on 26.07.2022, as detailed in paragraph-1 above.
11. The Commission has examined the procedure followed by KSEB Ltd for selecting the bidders through DEEP portal for the procurement of power on short-term basis for the month of March 2023 and April-2023. The Ministry of Power, Government of India vide the notification dated 30.03.2016, notified the guidelines for short-term Procurement of Power by Distribution Licensees through Tariff based bidding process. The paragraph-5 of the bidding guidelines specifies the tariff structure to be quoted by the bidders, which is extracted below for ready reference.

*“5. Tariff Structure*

*5.1. The Procurer based on its requirement may invite the bids on round the clock (RTC) basis or for different time slots. Procurer may also provide flexibility to the Bidder(s) to bid for a part of the tendered quantity, subject to a given minimum quantity. Bid capacity offered by the Bidder shall have to be constant for the entire contract period.*

5.2. The Bidder shall quote the single tariff at the Delivery Point upto three (3) decimals which shall include capacity charge, energy charge, trading margin (in case of Bidder being a Trader), applicable Point of Connection (POC) charges upto Delivery Point and all taxes, duties, cess etc. imposed by Central Govt. / State Govt. / Local bodies. Tariffs shall be designated in Indian Rupees only.

5.3. For inter-State transmission of power, state/regional periphery of the Procurer to be taken as Delivery Point. For intra-state transmission of power, inter-connection point of seller with STU/ CTU to be taken as Delivery Point.

5.4. For avoidance of doubt, Intra-state open access charges, transmission charges and losses along with POC injection charges and loss up to the POC interface are on Seller's account and POC drawl charges and losses along with intra-state open access, transmission charges and losses are on Procurer's account.

5.5. The tariff should be constant and there shall be no escalation during the contractual period. If Bids are invited for different time slots, then tariff may be different for each time slot.

5.6. If the power is being supplied through alternate source, additional charges and losses if any, due to cancellation of existing corridor and booking of new corridor etc., shall be to the account of Bidders."

12. The Commission noted that, KSEB Ltd has followed the guidelines notified by the Ministry of Power, Government of India vide the notification dated 30.03.2016 for the selection of bidders.
13. The Commission has also examined the price discovered for the RTC power in the months of March 2023 and April-2023 with the rate of RTC power in the day ahead market of power exchanges and noted that the rates during March 2022 (15.03.2022 to 31.03.2022) and April-2022 (01.04.2022 to 30.04.2022) are as detailed below.

Particulars	Marh-2022	Apr-22
	(15.03.2022 to 31.03.2022)	(01.04.2022 to 30.04.2022)
	(Rs/ kWh)	(Rs/ kWh)
RTC	10.43	10.07
Evening	11.82	10.97
Day	8.99	8.36
Night	10.20	11.30
Morning	11.30	9.56

As above, the rate of RTC power in the day ahead market during the last summer 2022 was much higher than the rate of power derived in the recent bids for the months of March 2023 and April 2023.

14. Considering the entire aspects in detail as above, the Commission, approves the short-term power procurement made by KSEB Ltd for meeting the power

deficit during March 2023 and April-2023 as detailed below, subject to the conditions specified in this order.

**Letter of Award to NTPC Vidyut Vyapar Nigam Ltd (NVVNL)**

Period	Duration (Hrs)	Quantum (MW) (On firm basis)	Rate at Delivery Point i.e. Kerala Periphery	Source of Power
01.03.2023 to 31.03.2023	RTC	100	Rs. 8.03/-(Rupees Eight and Three paise only) per kWh	IL & FS Tamil Nadu Power Company Ltd, Tamil Nadu in the Southern Region.

**Letter of Award to PTC India Ltd**

Period	Duration (Hrs)	Quantum (MW) (On firm basis)	Rate at Delivery Point i.e., Kerala Periphery	Source of Power
01.04.2023 to 30.04.2023	RTC	100	Rs. 7.95/-(Rupees Seven and Ninety-Five paise Only) per kWh	Jaypee Nigrie Super Thermal Power Plant, Madhya Pradesh in the Western Region.

**Order of the Commission**

15. The Commission, after examining the petition filed by KSEB Ltd dated 15.09.2022, with provisions of the Electricity Act, 2003, Tariff Regulations, 2021 and other relevant guidelines and procedures, hereby orders the following;

- (1) Adopt the tariff discovered in accordance with Section 63 of the Electricity Act 2003, and also grant approval for entering into short term power procurement arrangement with NVVNL for procurement of 100MW RTC power during March 2023 and Power Trading Corporation of India Ltd (PTC India Ltd) for procurement of 100MW RTC power during April-2023 as per the price discovered through bucket filling during eRA in the DEEP portal on 26.07.2022, as detailed under paragraph-14 above.
- (2) The tariff shall be single part at the delivery point at Kerala periphery and include all charges such as capacity charge, energy charge, trading margin (if applicable), transmission charges upto the delivery point, and all taxes, duties, cess etc. imposed by the Central Government, State Government, Local bodies etc.
- (3) KSEB Ltd shall submit a copy of the signed PPA before the Commission for information and record.

The petition disposed of. Ordered accordingly.

**Sd/-  
Adv. A J Wilson  
Member (Law)**

Approved for issue

**Sd/-  
C R Satheeshchandran  
Secretary**