

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

**Present : Shri. Preman Dinaraj, Chairman
Adv. A.J Wilson, Member (Law)**

OP No: 40/2022

In the matter of : Petition seeking approval of tariff discovered in the tender under Component A of PM -KUSUM scheme and approve the PPA proposed to be entered with the selected bidders

Petitioner : Kerala State Electricity Board Limited

Petitioner represented by : Sri Suresh A, Executive Engineer, TRAC.

Date of Hearing : 12.07.2022

Order dated 13.07.2022

1. KSEB Ltd (hereinafter referred to as KSEB Ltd or the petitioner), filed a petition before the Commission on 02.06.2022 for the approval for the tariff discovered in the tender invited by KSEB Ltd for procurement of power from decentralized solar power plants having capacity of 500KW to 2MW to be set up under Component-A of PM-KUSUM scheme and approve the PPA proposed to be entered with the selected bidders.”
2. The summary of the petition filed by KSEB Ltd is given below.
 - (1) The Ministry of New and Renewable Energy (MNRE) Government of India (Gol), as part of commitment before UNFCC to increase share of installed electric power from non-fossil fuel sources to 40 % by 2030 as part of nationally determined contributions, has launched the new scheme for farmers named '**Pradhan Mantri - Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM KUSUM)**' Scheme on 22.07.2019.
 - (2) The new scheme has following components:
 - (i) Component-A: Setting up of 10,000 MW of Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants
 - (ii) Component-B: Installation of 17.50 Lakh Stand-alone Solar Agriculture Pumps

- (iii) Component-C: Solarization of 10 Lakh Grid Connected Agriculture Pumps.

The Component-A and Component-C will be implemented initially on pilot mode for 1000 MW capacity and one lakh grid connected agriculture pumps respectively and Component-B will be implemented in full-fledged manner with total Central Government support of Rs. 19,036.5 Crore. All three components of the scheme aim to add Solar capacity of 25,750 MW by 2022 with the total Central Financial Support of 34,422 crore

- (3) MNRE vide Order dated 09.12.2019 sanctioned 10 MW capacity to KSEB Ltd under the Component A of PM KUSUM scheme. MNRE vide Order dated 13.01.2021 sanctioned 30 MW capacity to KSEB Ltd under the Component A of PM KUSUM scheme. Altogether, KSEB Ltd has obtained sanction for 40 MW capacity.

- (4) The Commission vide Order dated 04.10.2021 in OP No 43/ 2021 filed by KSEB Ltd has approved the procurement of power from decentralized solar power of capacity of 500kW to 2 MW to be set up under Component A of PM -KUSUM scheme of MNRE. The relevant portion of the Order is extracted below:

(1) Approve the tariff for procurement of power from decentralized solar power plants having capacity between 500kW to 2MW to be set up under Component-A of PM-KUSUM scheme of MNRE, Government of India @Rs 3.66/unit, i.e the generic tariff is determined by the Commission in the RE Regulations, 2020 instead of Rs 3.50/unit as proposed by KSEB Ltd.

(2) Approve the lease rent @Rs 0.20/unit as proposed by KSEB Ltd during the hearing, for payment to farmers, who lease out/ enter into right to use agreement with KSEB Ltd for a period of 25 years under the PM-KUSUM Scheme

- (5) In line with the Order of the Commission, KSEB Ltd invited tender based on the same on 05.11.2021 and opened on 11.02.2022. The following 3 bidders participated;

- (1) M/s Luster Solar projects, VP.No10/547, Idukki Colony, Cheruthoni, Idukki 585602: 2MW
(2) M/s Solaria Energy Solutions, P. No10/548, Idukki Colony, Cheruthoni, Idukki 685602: 2MW
(3) Mrs. Pearl Mithun, 378, Edassery House, Angadikkadavu Road, Angamaly, Ernakulam 683 572: 1.5MW

- (6) The details of bidders and price discovered after opening price bid on 07.04.2022 are as follows:

Sl.No	Bidder details	Details of the bidder	Capacity offered (MW)	Distance from the substation	Price quoted in the bid (Rs)	Price offered after negotiation (Rs)
1	M/s. Luster Solar Projects	(Group of farmers) – 4 farmers in partnership deed for investment. (Koshy P Jacob, Parathode Antony, Soma Prince, PM Varkichan) Managing Partner – Koshy P Jacob	2	1 to 1.5 km	3.66/kWh	3.50/kWh
2	M/s. Solaria Energy Solutions	(Group of farmers) – 4 farmers in partnership deed for investment. (Grace Antony, Ashwin Antony, Albert Antony, Ishrine Sayed Fathima - Managing Partner – Grace Antony	2	1 to 1.5km	3.66/kWh	3.50/kWh
3	Mrs. Pearl Mithun	Individual farmer	1.5	2.5km	3.59/kWh	3.50/kWh
	Total capacity (MW)		5.5			

- (7) KSEB Ltd further submitted that the quoted tariff is below the upper ceiling rate of Rs 3.66/unit approved by the Commission. The total bidded capacity comes to 5.5MW
- (8) Under the scheme, KSEB Ltd is eligible to get Procurement Based Incentive (PBI) @ 0.40 per unit or Rs 6.6Lakh/MW, whichever is lower. PBI will be available for 5 years from CoD.
- (9) The time line for project completion is 24 months from date of sanction of MNRE Further, MNRE has extended till 31.12.2022 to complete the projects sanctioned during 2019-20. Hence KSEB Ltd submitted that the project can be implemented within time limits.

- (10) KSEB Ltd further submitted that all projects proposed by bidders comes under Transmission Circle, Thodupuzha. KSEB Ltd submitted that the connectivity can be done through 110kV substation, Rayonpuram. The connectivity can be established through Vazhathode substation after expansion of control room.
- (11) KSEB Ltd has also submitted the PPA for approval. KSEB Ltd submitted that KSEB Ltd has adopted the model PPA approved by MNRE with necessary modification in the clause relating to minimum CUF limits, rights of contracted energy, billing and payment etc. The duration of PPA is for 25 years.

Hearing on the petition:

3. The Commission admitted the petition as OP No: 40/2022. The hearing of the petition was held on 12.07.2022 through video conference. Sri Suresh A, Executive Engineer, TRAC presented the petition on behalf of KSEB Ltd. The summary of the deliberations during the hearing is given below.
- (i) KSEB Ltd submitted that the MNRE has allotted 40 MW capacity under the PM-KUSUM Scheme to KSEB Ltd, out of which, 10 MW was sanctioned on 09.12.2019 and 30MW on 13.01.2021.
- (ii) KSEB Ltd further submitted that the Commission vide Order dated 04.10.2021 in OP 43/ 2021 has approved the procurement of power from decentralized solar power of capacity of 500kW to 2 MW to be set up under Component A of PM -KUSUM scheme. In the said order, the Commission approved the ceiling tariff at Rs 3.66/unit. The Commission also approved the lease rent payable @Rs 0.20/unit. In line with the order of the Commission, KSEB Ltd invited a tender for implementing Component A of PM-KUSUM Scheme. The bid was floated on 05.11.2021 and opened on 11.02. 2022.Three bidders participated in the bid namely M/s. Luster Solar Projects (2 MW), M/s. Solaria Energy Solutions (2 MW), Mrs. Pearl Mithun(1.5MW). All the bidders agreed to match the rates at Rs 3.50/units.
- (iii) KSEB Ltd submitted that the quoted rate is below the ceiling rate of Rs 3.66/unit approved by the Commission vide Order dated 04.10.2021 in OP 43/2021. KSEB Ltd is also eligible for a PBI @ 0.40 per unit or Rs 6.60Lakh/MW, whichever is lower for a period of 5 years from CoD.
- (iv) KSEB Ltd has also submitted that they have also filed the draft PPA to be signed with the successful bidders for procurement of power and

clarified that the draft PPA was in line with the model PPA notified by MNRE as part of PM KUSUM Scheme.

Analysis and Decision of the Commission:

4. The Commission has examined in detail the petition filed by KSEB Ltd, the deliberations and clarifications during the hearing of this petition on 12.07.2022 and other relevant details and documents, provisions of the Electricity Act 2003, the guidelines for implementing Component - A of PM KUSUM Scheme notified by the MNRE, Government of India and other Rules and Regulations in force, decides as follows.
5. The Commission vide the Order dated 04/10/2021 in petition OP No: 43/2021 has approved the tariff for procurement of power from decentralized solar power plants having capacity between 500kW to 2MW to be set up under Component-A of PM-KUSUM scheme of MNRE, GoI @ Rs 3.66/unit. The Commission has also approved the lease rent @Rs 0.20/unit for payment to the farmers who lease out/enter into agreement. The relevant portion of the Order is extracted below:

“The Commission, after examining the petition filed by KSEB Ltd as per the provisions of the Electricity Act, 2003, KSERC (Renewable Energy & Net Metering) Regulations, and other details presented before the Commission during the hearing held on 29.09.2021, hereby orders the following.

- (1) *Approve the tariff for procurement of power from decentralized solar power plants having capacity between 500kW to 2MW to be set up under Component-A of PM-KUSUM scheme of MNRE, Government of India @Rs 3.66/unit, i.e., the generic tariff is determined by the Commission in the RE Regulations, 2020 instead of Rs 3.50/unit as proposed by KSEB Ltd.*
 - (2) *Approve the lease rent @Rs 0.20/unit as proposed by KSEB Ltd during the hearing, for payment to farmers, who lease out/ enter into right to use agreement with KSEB Ltd for a period of 25 years under the PM-KUSUM Scheme*
6. The Commission further noted that KSEB Ltd on 5.11.2021 invited tariff based competitive bid for implementing ground mounted Solar plants with capacity of 40MW with the ceiling tariff of Rs 3.66/unit. The bid was opened on 11.02.2022. Three bidders participated in the bid. The details of the bidders, the quoted price, the price offered after negotiation are given in the table below:

Sl.No	Bidder details	Details of the bidder	Capacity offered (MW)	Distance from the substation	Price quoted in the bid (Rs)	Price offered after negotiation (Rs)
1	M/s. Luster Solar Projects	(Group of farmers) – 4 farmers in partnership deed for investment. (Koshy P Jacob, Parathode Antony, Soma Prince, PM Varkichan) Managing Partner – Koshy P Jacob	2	1 to 1.5 km	3.66/kWh	3.50/kWh
2	M/s. Solaria Energy Solutions	(Group of farmers) – 4 farmers in partnership deed for investment. (Grace Antony, Ashwin Antony, Albert Antony, Ishrine Sayed Fathima - Managing Partner – Grace Antony	2	1 to 1.5km	3.66/kWh	3.50/kWh
3	Mrs. Pearl Mithun	Individual farmer	1.5	2.5km	3.59/kWh	3.50/kWh
	Total capacity (MW)		5.5			

7. KSEB Ltd further submitted that all projects proposed by bidders comes under Transmission Circle, Thodupuzha and are feasible.
8. The Commission also noted that the tariff finally offered by the bidders for the total capacity of 5.5 MW under the PM KUSUM Scheme is Rs 3.50/unit which is less than the ceiling tariff approved by the Commission. In addition to this, KSEB Ltd also gets a PBI @ Rs 0.40 per unit or Rs 6.60 Lakh per MW whichever is lower for a period of 5 years. Accordingly, the effective tariff for procurement of power by KSEB Ltd from 5.5 MW plants under PM KUSUM Scheme is Rs 3.10/unit only.
9. The Commission has examined the entire facts and circumstances in detail and noted that the effective rate of procurement of 5.5 MW under the Component A of PM-KUSUM scheme @ Rs 3.10/unit is on the lower side when compared with the generic tariff mentioned above at Rs 3.66/unit and a lease rent component of Rs 0.20 per unit. The Commission however notes that the negotiated price has been arrived at after conducting competitive bidding by KSEB Ltd. It is also pertinent to mention here that though KSEB Ltd had

tendered for 40MW under this scheme, they were able to obtain only three bids totaling 5.5MW. It is also not clear as to whether the lease rent @Rs 0.20 per unit would be paid by KSEB Ltd in addition to the negotiated price of Rs 3.50/unit. The Commission would also like to caution KSEB Ltd that in view of the very poor response to this competitive bid and comparing the relatively higher capital cost for RE projects in Kerala, the sustainability of this project has to be ensured by KSEB Ltd.

10. The Commission noted that KSEB Ltd has followed the Competitive Bidding process as per Section 63 of the Electricity Act, the bidding guidelines and documents notified by MNRE, Gol for the implementation of the PM-KUSUM Scheme. Considering these aspects in detail, the Commission hereby adopts the negotiated tariff of Rs. 3.50/unit after the Competitive Bidding Process. KSEB Ltd may also clarify whether this negotiated tariff of Rs 3.50/unit is inclusive of the Commission determined generic lease rent of Rs 0.20/unit.
11. KSEB Ltd has also requested to approve the draft PPA submitted along with the petition. The Commission observed that KSEB Ltd has not submitted the initialed PPA between the Renewable Energy Generator and KSEB Ltd. Further, the issue of lease rent is required to be addressed and appropriately incorporated in the PPA. MNRE, Government of India, has also notified the model PPA to be signed with the distribution licensees and the farmers/generators under PM-KUSUM scheme. KSEB Ltd may, if required make changes in the model PPA issued by MNRE and re-submit the same to the Commission for consideration and approval. While submitting this PPA KSEB Ltd is required to ensure that it is initialed by both parties and the RE generators are made respondents in the petition.

Order of the Commission

12. The Commission, after examining the petition filed by KSEB Ltd dated 02.06.2022, the deliberations during the hearing held on 12.07.2022 and other documents and details produced, as per the provisions of the Electricity Act 2003, other relevant guidelines, Rules and Regulations, hereby orders the following.
 - (1) The negotiated tariff after its discovery through competitive bidding process at the rate of Rs 3.50 per unit is hereby adopted under Section 63 of the Electricity Act, 2003.
 - (2) KSEB Ltd shall clarify as to whether the above tariff of Rs 3.50/unit is inclusive of the Rs 0.20/unit lease rent approved by the Commission vide the Order dated 04/10/2021 in petition OP No: 43/2021.

- (3) KSEB Ltd shall submit the draft initialed PPA between the Renewable Power Generators and KSEB Ltd for approval.

The petition is disposed of. Ordered accordingly.

Sd/-
Adv A J Wilson
Member (Law)

Sd/-
Preman Dinaraj
Chairman

Approved for issue

C R Satheeshchandran
Secretary