

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

**Present : Shri T K Jose, Chairman**  
**Shri B Pradeep, Member**  
**Adv. A.J Wilson, Member**

**Petition: OP No. 48/2024**

In the matter of : Petition under the KSERC (Renewable Energy and Net Metering) Regulation, 2020 and KSERC (Terms and Conditions for Determination of Tariff) Regulations 2021, seeking approval for the implementation of 6 MW Solar Project at Moongilmada in the land of Irrigation department in CAPEX model.

Petitioner : Kerala State Electricity Board Ltd (KSEBL)

KSEBL represented by

1. Smt. Latha S V, Executive Engineer
2. Shri. Noushad, Asst: Executive Engineer
3. Shri. Shine Raj, Asst: Executive Engineer
4. Smt. Biji Christhudas, Asst: Executive Engineer.
5. Smt. Asha A V, Assistant Engineer, TRAC

Respondent : Chief Engineer, O/of the CE, Irrigation & Admn. Government of Kerala

Date of hearing : 19.12.2024, 11:00 AM

Venue : Court hall of the commission

**Order dated 11.03.2025**

1. M/s Kerala State Electricity Board Ltd (hereinafter referred as petitioner or KSEBL) filed a petition on 06.12.2024 with the prayer to “*approve the implementation of 6 MW Solar Project at Moongilmada in the land of Irrigation department in CAPEX model and to include in the CAPEX plan of SBU-G.*”
2. Summary of the petition filed by the Petitioner is given below.
  - (1) The Ministry of New and Renewable Energy (MNRE) launched the Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM-KUSUM) Scheme on 22nd July 2019, aimed at ensuring energy security for farmers across India. The scheme guidelines specify that feeder-level solar power plants may be installed to supply power for either a single feeder or multiple agricultural feeders emanating from a distribution sub-station (DSS), providing power at 11 kV or the higher

voltage side of the DSS depending on factors such as land availability and technical feasibility.

- (2) The Government of Kerala (GoK) has granted permissive sanction to the Kerala Water Authority for the installation of a 6 MW solar power plant at Moongilmada in the Palakkad District. Approximately 36 acres of non-uniform land owned by the Irrigation Department has been identified for this project. KSEBL intends to implement the project on this land, with lease rent fixed at 3% of the APPC rate to be paid to the Irrigation Department as their share from the Moongilmada 6 MW project in exchange for land use over a 25-year term.
- (3) Government of Kerala vide GO dated 25.10.2024 approved the rent as 3% of the APPC rate approved by the KSERC for the total electricity generated from the plant as lease rent of the land, which may vary depending on the change in the APPC rate fixed by KSERC.
- (4) The expected CUF of the plant is 19 to 21% and can generate 10 million units annually. The project report submitted to MNRE also submitted along with the petition.
- (5) KSEBL had invited tender for project execution in CAPEX mode on 16.01.2023. Three bidders participated in the bid, namely M/s Everest Agencies, M/s MBH Power Private Limited and M/s Inkel Limited.

Out of the three bidders, M/s Everest Agencies was not qualified in the technical bid. Hence price bids were opened for the two qualified firms. The lowest bid was received from M/s MBH Power Private Ltd, Vadodara amounting to Rs. 28.825 Crores (excluding GST). The other bidder M/s Inkel Limited quoted for 31.50 Crore (excluding GST).

- (6) The work is awarded conditionally to L1 bidder M/s MBH Power Private Ltd, Vadodara vide the LoA on 21.08.2024, subject to the approval of KSERC. The completion of the project is 9 months from the date of agreement.
- (7) Project Implementation details for approval:
  - (i) Project Sanction: The MNRE has sanctioned this project under the PM-KUSUM Component C feeder-level solarization scheme, entitling KSEBL to receive a Central Financial Assistance (CFA) amount of Rs. 6.3 Crores (i.e., Rs. 1.05 Crore per MW) for this 6 MW project.
  - (ii) Land Use and Maintenance: KSEBL will manage and maintain the 36 acres of land for the plant's useful life, which is expected to be a minimum of 25 years. All operation and maintenance (O&M) expenses related to this upkeep will be borne by KSEBL.

- (iii) Power Evacuation Infrastructure: To facilitate power evacuation, a 33 kV line from the project site to the Vannamada 33 kV substation, located approximately 4 km away, is required. The cost estimate for constructing the 33 kV bay and laying a 33 kV underground cable is Rs. 3.7 Crores.
  - (8) The lowest bid received amounts to Rs 28.825 Crores (excluding GST) for the 6MW plant. With the Central Financial Assistance (CFA) the project cost is reduced to Rs. 22.525 Crores, which includes O&M costs for five years.
3. The Commission admitted the petition as OP No. 48/2024. Hearing on the petition was conducted on 19.12.2024. Smt. Latha S.V, Executive Engineer and Shri. Noushad, Asst Executive Engineer, presented the matter on behalf of KSEBL. Shri Sinosh, Chief Engineer (Projects), Irrigation Department, GoK, appeared through video conference. The summary of the deliberations during the hearing is given below.
- (1) KSEBL submitted the following during the hearing;
    - (i) The petition is filed for seeking approval for the implementation of the 6 MW solar power project at Moongilmada in Palakkad under CAPEX model. The land for the project is located in Moongilmada, Chittoor taluk and the land is in the proximity of feeders having agricultural load. Government of Kerala (GoK) in March 2024 has accorded sanction to KSEBL for using 36 acres of land of irrigation department for installing the solar plant.
      - GoK vide the Order dated 25.10.2024 has approved the lease rent for the land as 3% of the Average Pooled Power Purchase Cost(APPC) approved by Commission from time to time as lease rent of the land. This project is sanctioned by MNRE under PM Kusum Component C, feeder level solarization scheme and KSEB Ltd is entitled for Central Financial Assistance (CFA) of around Rs. 6.3 Cr at the rate of 1.05 Cr/MW.
      - Subsequently, MNRE has extended the validity of the PM-KUSUM scheme till 31<sup>st</sup> of March 2026. KSEB Ltd invited the tender on 16<sup>th</sup> of January 2023 for implementation of the project in CAPEX mode. Earlier KSEBL had invited two tenders based on RESCO model, however there was no participation. Since the VGF available from MNRE is getting expired, KSEBL has decided to implement the project through CAPEX model.
      - Three bidders participated in the tender, Everest Agencies, MBH Power Private Ltd and Inkel Ltd. However, Everest Agencies was not qualified in the technical bid and hence only the other price bids of the other two bidders were opened. MBH Power Private Ltd became the lowest bidder and they quoted Rs.

28.825 Cr excluding GST. The Inkel Limited quoted for Rs.31.50Cr excluding GST.

- LoA was issued to the lowest bidder, MBH Power Pvt Ltd on 21<sup>st</sup> of August, 2024, subject to the approval of the Commission. The completion and implementation period are 9 months from the date of execution of the agreement. For the power evacuation, 33KV line from the project site to the Vannamada 33KV substation is proposed. The estimated cost for constructing the 33KV bay and laying a 33KV UG cable is 3.7Cr. The lowest bid is 28.825Cr excluding GST, including 5 year O&M cost.
  - After deducting the CFA, the project cost comes to 22.525 Cr. In addition to the above, KSEBL has to incur Rs 3.70 crore towards power evacuation cost.
  - On a query to the Commission, KSEBL submitted that, the DPR was not prepared as per the guidelines specified in the Tariff Regulations, 2021. The DPR enclosed is the one submitted to the MNRE for getting CFA for the project. KSEBL requested permission to submit the DPR along with the petition for Mid-term Performance Review.
- (2) Shri Sinosh, Chief Engineer (Project), Irrigation Department, Government of Kerala submitted that, the land allotted to the project is yet to be earmarked and handed over to KSEBL. The Chief Engineer further submitted that, the irrigation department has proposed to levy Rs 25 lakh/year as lease rent instead of the APPC rate.
- (3) The Commission during the hearing clarified the following to the petitioner KSEBL.
- (i) Present tender was floated in January 2023. About two years were elapsed now from the date of the tender. The capital cost quoted by the L1 bidder is Rs 4.80 Crore/MW as against the benchmark cost of Rs 3.50 Crore/MW adopted by MNRE for providing CFA. With the inclusion of GST also, the cost gets much above the benchmark cost.
  - (ii) Though the tendering of the project was started in January, 2023, the tender was finalised and LoA was issued on 21.08.2024, but the petition for the approval for the implementation of the project was submitted before the Commission only on 06.12.2024, almost two years after inviting the tenders and about 3 ½ months after issuing LoA to the lowest bidder. It appears that, KSEBL is not very serious on implementing the project.

- (iii) The Commission further observed that, since January 2023, the 'solar panel cost' had reduced by more than 50% from the 2022-23 level. Obviously, the subsequent reduction in panel cost is not reflected in the capital cost quoted by the bidders.
- (iv) The Commission further noted that, even after accounting the CFA, the indicative tariff of the project including power evacuation cost is about Rs 3.70/unit. This is very much on the higher side. On considering GST also, the tariff is bound to be still higher and uneconomical.
- (v) The Commission also pointed out that, the minimum CUF specified in the recent bids in the State is more than 21%, however the CUF specified herein is 19% only. A higher CUF leveraging on the sharp fall in panel prices can significantly improve the viability of the project. Being a CAPEX model project, KSEBL is required to design the project in the most optimal manner and the DPR of the project shall justify the same.
- (vi) The State Government vide the Order dated 25.10.2024 has fixed the lease rent for the land as 3% of the APPC rate fixed by the Commission. It is also stated in the Order that, the APPC rate may vary year to year as determined by the KSERC.

The Commission clarified that, the concept of APPC is likely to be discontinued in the upcoming years. Hence, the lease rent may be fixed on a firm basis. KSEBL and Irrigation department may after mutual consensus approach the State Government to fix the lease rent by modifying the Order dated 25.10.2024.

- (vii) The Commission further clarified that, for the investment approval and for the approval of the capital cost, the detailed project report along with cost benefit analysis as per the guidelines specified in the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 is required. Hence, KSEBL shall submit the revised DPR before the Commission for the approval for the implementation of 6MW Solar Project at Moongailmada, Palakkad.
- (viii) The Commission has also noted that, as per the Guidelines for Implementation of New Scheme for Farmers for Installation of Solar Pumps and Grid Connected Solar Power Plants, PM-KUSUM Scheme is extended till 31.03.2026 only. For availing the CFA @Rs 1.05 crore per MW, KSEBL has to implement the scheme and start commercial operation on or before 31.03.2026.

- (4) Based on the deliberations, the Commission directed petitioner KSEBL and the respondent Irrigation Department to comply the following within two weeks.
- (i) KSEBL may communicate its decision, on whether to continue with the present tender or not?
  - (ii) Consensus between KSEBL and Irrigation Department on the lease rent on firm basis for the 36 acres of land owned by Irrigation department for the utilisation of land for the installation of 6 MW Solar Plant under PM-KUSUM Scheme.
  - (iii) Measures to implement the project by 31.03.2026, without lapsing the CFA allotted to the project by MNRE, GoI?
  - (iv) Irrigation Department shall comply with the Order of the State Governments dated 16.03.2024 and 25.10.2024, and shall hand over the land to KSEBL for implementing the Solar project under PM-KUSUM Scheme within two weeks . Any delay in handing over the land may delay the implementation of the project and lapse of the CFA allotted to the project.

KSEBL Management shall also follow it up with irrigation department, Water resource department and Power department, for handing over of the land from irrigation department to KSEBL.

- (v) KSEBL shall submit the revised DPR of the project with all relevant details including cost benefit analysis.

4. As discussed in the paragraph-3 above, though the petition was received only on 06.12.2024, the Commission has conducted the hearing on the matter on 19.12.2024, and directed the KSEBL to submit the clarifications sought within two weeks from the date of hearing, latest by 05.01.2025.

The representatives appeared before the Commission on behalf of KSEBL assured that, they shall submit the details within the time limit with the approval of the KSEBL Management.

The Commission is also concerned about the possible lapse of CFA available to the project in the event the commissioning of the project is delayed beyond 31.03.2026.

Though more than two months elapsed since then, KSEBL is yet to submit the details and clarifications sought by the Commission as detailed in paragraphs 3(3) and 3(4) above.

5. Since KSEBL is yet to submit the details sought by the Commission as discussed in paragraphs 3(3) and 3(4) above, the Commission decided to dispose the petition for want of details. However, KSEBL, at its liberty, may submit the details as and when available with the approval of the KSEBL

Management as a fresh petition. KSEBL is exempted from remitting fee for filing such petition.

With the above observations, the Commission hereby orders to dispose the petition for want of additional details.

The petition disposed of. Ordered accordingly.

**Sd/-  
T K Jose  
Chairman**

**Sd/-  
Adv. A J Wilson  
Member**

**Sd/-  
B Pradeep  
Member**

Approved for issue

Sd/-

C.R.Satheesh Chandran

Secretary