# KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Present : Shri. Preman Dinaraj, Chairman

Adv. A.J Wilson, Member (Law)

OP No 12/2022

In the matter of : Petition seeking approval for 1.50 MWp Floating

Solar PV plant at W. Island, Cochin Port Trust under

RESCO model (BOOT) for 25 years.

Petitioner : Cochin Port Trust. Willingdon Island, Cochin 682009.

Petitioner represented by : Sri V Thoraipandyan, CME

Sri S K Sahu, FA&CAO

Smt Rajsree Dabke, Sr Dy CAO

Sri R S Ajayakumar, EE Sri Ajith kumar D, EE Smt. Jayalakshmi S, AEE

Smt. Mini V, AE

Respondent : Kerala State Electricity Board Ltd

Respondent represented by : Manoj G, AEE, TRAC

Date of hearing : 09.03.2022.

### Order dated 25.03.2022

1. M/s Cochin Port Trust (hereinafter referred to as the petitioner or CoPT) filed a petition dated 29.12.2021, before the Commission, seeking approval for the tariff of the electricity generated from 1.5 MWp Floating Solar PV plant at Wellington Island, Cochin Port Trust under RESCO Model (BOOT) for 25 years. The prayers of the petition are as extracted below.

"To approve the tariff of Rs 3.89 / kWh for the purchase of solar power from SPD, M/s Suryam International Ltd, H/o-M. Shivaji, 2<sup>nd</sup> Lane Gandhi Nagar, Berhampur, Ganjam Odisha - 760001, from the proposed 1.5 MWP grid connected floating solar PV project at W. Island Cochin Port Trust for 25 years under RESCO model (BOOT) for meeting the Renewable Power Purchase

Obligation (RPO) as per Regulation 4 of KSERC (Renewable Energy and Net Metering) Regulations 2020."

- 2. The background of the petition filed by the petitioner CoPT is given below:
  - 1) CoPT is a distribution licensee for the distribution of electricity within the port area in Willingdon Island, "Vallarpadam & Puthu Vypeen area".
  - 2) CoPT has submitted that for complying with the Renewable Purchase Obligation, it has installed and commissioned 150 kWP grid connected roof top solar power plant and 100 kWP ground mounted solar power plant during 2017 & 2019 respectively. The annual solar production from 250 kW power plants for the year 2020-21 is 3.55 lakhs units @ 16% CUF.
  - As per the initiative taken by the Ministry of Ports, Shipping and Waterways to implement solar power projects at Major Ports, CoPT had issued work order to M/s Suryam International Ltd (Solar Power Developer (SPD)) for site survey, design, manufacture, supply, engineering, civil works, erection, testing commissioning, operation and maintenance of 1.5 MWP grid connected floating solar PV project at W. Island Cochin Port Trust for 25 years under RESCO model (BOOT).
  - 4) According to CoPT, the Tender for the subject work was floated through etendering and tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.
  - 5) It is further submitted that M/s CoPT shall purchase 100 % of the solar power generated by the system at delivery point at a levelized tariff of Rs3.89/kWh for entire 25 years. The Tariff of Rs 3.89 for the solar power to be purchased from the SPD, M/s Suryam International Pvt. Ltd has been fixed through transparent process of bidding in accordance with guidelines issued by the Central Government.
  - 6) The Annual solar power purchase from 1.5 MWp Floating solar will be 18.9 lakhs units @14.3% CUF. CoPT submitted that the total solar power generation of CoPT will be around 22.45 lakh units during the year 2022- 23 (around 6-7 % of total power purchase during the FY2022-23) including the 250 kWp solar PV plant installed earlier.

#### 3. Hearing on the petition:

The Commission admitted the petition as OP 12/2022. Hearing on the petition was conducted on 09.03.2022. Smt. Jayalakshmi presented the petition on behalf of the

petitioner and Sri Manoj G, AEE, represented KSEB Ltd. in the hearing. The officials of CoPT responded to the queries of the Commission. The summary of discussions is given below:

- (i) CoPT submitted that Ministry of Shipping and Waterways has desired the solarisation of major ports into green ports and Maritime India Vision 2030 has fixed a target of above 60 % usage of renewable energy in the Indian Ports by the year 2030.
- (ii) As per KSERC (Renewable Energy and Net Metering) Regulations, 2020 (RE Regulation, 2020), CoPT is required to achieve a RPO target of 17% (10.25% non-solar and 6.75 % Solar) by 2021-22. The present RPO compliance of CoPT is only around 2%.
- (iii) CoPT is setting up its ambitious 1.5 MWp floating solar plant, first among other major ports in the country. CoPT has plans to further expand it based on success of this project. The floating solar plant is proposed to be set up in the backwaters near CoPT walkway arena between BOT Junction and Kannangat bridge at Wellington Island.
- (iv) CoPT submitted that they had invited tenders thrice. In the first two attempts, only single offer was received and during the 3<sup>rd</sup> time, 2 offers were received. Both the offers were qualified and LoA was issued to the lowest tenderer, M/s Suryam International Pvt Ltd who had quoted the lowest price among the two bidders with a tariff of Rs 3.89 per KWh, against the bid specified maximum levelized tariff of Rs 3.95 per KWh. The levelized tariff has been arrived in consultation with SECI and IREDA has sanctioned loan for the SPD.
- (v) The major challenge in implementing the project is the tidal waves and CoPT had consulted the IPA (Indian Ports Association), the nodal agency for all the ports and their Consultant. The project is green field one and the CRZ has classified the zone as CRZ4B, which is backwater with tidal waves. The petitioner also submitted that trenching is required to obtain the required depth for installing the plant.
- (vi) CoPT submitted that Statutory approval from Pollution Control Board has been obtained. CRZ clearance from KCZMA is expected by the end of March 2022. The SPD has started the soil testing works and the completion time of work is 12 months from the date of LOA.

- (vii) CoPT submitted that, as per Section 62 of the Electricity Act- 2003, the Appropriate Commission shall determine the tariff in accordance with the provisions of the Act for a supply of electricity by a generating company to a distribution licensee. Further, as per Section 63, notwithstanding anything contained in Section 62 the Appropriate Commission shall adopt the tariff, if such a tariff has been determined through a transparent bidding process in accordance with the Guidelines issued by the Central Government.
- (viii) CoPT therefore prayed for approval of the tariff of Rs.3.89/KWh for purchase of Solar Power from Suryam International Pvt Ltd. from 1.5 MWp floating Solar Plant for a period of 25 years. CoPT also submitted that this discovered tariff is lower than the bid notified ceiling of Rs. 3.95 per kWh.
- (ix) On a query by the Commission, CoPT clarified that they will take CEA clearance once the installation is complete.
- (x) CoPT further submitted that KSEB Ltd has mentioned that CoPT has to restrict the solar power generation from this plant to the CoPT Load Demand Level by using reverse power relay at CoPT Substation. CoPT is willing to do so by controlling the inverters. However, such a restriction will make CoPT liable to pay the SPD for deemed generation.
- (xi) The Commission observed that CoPT had never approached the Commission as required under Section 86(1) (b), before the tender was issued. Further, CoPT had floated the bid thrice, but did not consider it appropriate to approach the Commission for approval before the bid was finalised and LOA issued. The Commission also clarified that no post facto approval can be given to power purchase orders based on tender/bid issued without the prior approval of the Commission. Thus, CoPT has today presented the Commission with a fait-accompli.
- (xii) KSEB Ltd submitted that they had only two issues regarding installation of solar plant by CoPT.
  - (1) Connectivity issues with KSEB Ltd transmission wing have to be settled.
  - (2) Excess power, if any, will not be banked by KSEB Ltd. KSEB Ltd also pointed out that it is getting power at a much lower rate.
- (xiii) The Commission also pointed out that CoPT had in their tender notice mentioned the upper ceiling tariff of Rs 3.97 /kWh. Such a notification clearly vitiates the bidding process in favour of the possible bidders by indicating

- beforehand the approximate price anticipated. This, in turn affects the competitiveness of the bid with the possibility of the bidders quoting near to the indicative ceiling price.
- (xiv) MoP, Gol Guidelines and Orders issued thereof also clearly state that no indicative price/ceiling tariff shall be mentioned in any tenders/bids floated as per their guidelines.
- (XV) Further, MoP, GOI has also in a similar case of deviation informed the Govt. of Kerala that they will not give any post facto sanction for deviations. Deviations, if any has to be obtained from the Appropriate Commission by the tenderer prior to floating the bids and not after the process is complete.

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

- 4. The Commission has examined in detail, the petition filed by CoPT, as per the provisions of the Electricity Act, 2003, KSERC (Renewable Energy & Net Metering) Regulations, 2020, Orders and Guidelines issued by MNRE, Ministry of Power, Regulations issued by this Commission, arguments placed before the Commission during hearing and other documents and details presented before the Commission by CoPT.
- 5. The Commission has noted that CoPT has filed the petition under Section 63 of the Electricity Act, 2003, for approval of tariff of Rs 3.89 / kWh for the purchase of solar power from SPD, M/s Suryam International Ltd for a period of 25 years from COD. This power is sourced from the proposed 1.5 MWp grid connected floating solar PV project at W. Island under RESCO model (BOOT). CoPT in their petition and during the hearing has submitted that the SPD has been selected through a transparent process of bidding in accordance with the guidelines issued by Central Government.
- 6. The Commission after examining the documents submitted by the petitioner, the clarifications given during the public hearing, examination of the relevant provisions of the Electricity Act, 2003, Guidelines and Orders issued by the Govt. of India, KSERC (Renewable Energy and Net Metering) Regulations, 2020, have identified the following issues for consideration:
  - (a) Whether CoPT violated any of the Sections of the Electricity Act, 2003?
- 7. In this regard, the Commission first examined the relevant provision of the Electricity Act, 2003. Section 86 is relevant and is reproduced below:
  - "Section 86. (Functions of 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;"

The above Section makes the following requirements very clear-

- that the State Commission has the power to regulate the electricity purchase and its procurement process of its distribution licensees.
- the State Commission has the power to regulate the price for such electricity purchases through agreements and its source.

Hence, all power purchases by the distribution licensees including its source, quantum and price as per the Section 86(1) (b) can only be done with the prior approval of the Appropriate Commission. However, as revealed by the documents and submissions by the petitioner themselves, *CoPT unilaterally and in violation of the Section 86(1)(b) of the Electricity Act, 2003 proceeded to invite tenders, finalised the bid received and issued the LOA to the SPD and signed the PPA.* The Commission is well aware that an Act passed by the Parliament is the law of the land and the Commission does not have any authority whatsoever to condone or ignore this violation.

## (b) Whether the tenders/bids were floated by CoPT were in accordance with the guidelines issued by the Central Government?

8. In this context, the Commission noted that vide notification dated 3<sup>rd</sup> August 2017 (hereinafter referred to as the guidelines) and its subsequent amendments, the Ministry of Power (MoP), Government of India (GoI), has issued guidelines for procurement of power from grid connected solar power plants having capacity of 5 MW and above. No separate guidelines have been issued for procurement of power from grid connected floating solar plants or from solar plants having capacity below 5 MW. The Commission notes that the installed capacity of the present plant is 1.50 MwP only. Hence, such capacity plants do not come under the Central Govt. quidelines.

However, CoPT vide Para 9 of their petition has stated that, "Tariff of Rs. 3.89 for solar power purchase from the SPD, M/s Suryam International Pvt. Ltd. has been fixed through transparent process of bidding in accordance with the guidelines issued by the Central Government."

Hence, the Commission is at a loss to understand how CoPT has issued the bids under a non-existent Central Government guidelines. For the sake of argument, let

us assume that the guidelines adopted by CoPT was the MoP guidelines for plants having capacities over 5 MW. In this context, the Commission examined this guideline and identified the following clauses for further examination:

The Clause 3.1.1 of the guidelines provides as follows:

#### 3.1.1. Bid Documentation:

- a) Prepare the bid documents in accordance with these Guidelines and Standard Bidding Documents (SBDs) [consisting of Model Request for Selection (RfS) Document, Model Power Purchase Agreement and Model Power Sale Agreement], notified by the Central Government, except as provided in sub clause (c) below.
- b) Inform the Appropriate Commission about the initiation of the bidding process.
- c) Seek approval of the Appropriate Commission for deviations, if any, in the draft RfS draft PPA, draft PSA (if applicable) from these Guidelines and/ or SBDs, in accordance with the process described in Clause 18 of these Guidelines.

However, the Commission's examination of the tender/bid documents submitted with the CoPT's petition with reference to the above Clause revealed the following non-compliances:

- The bid documents were not prepared in accordance with the Standard Bidding Documents (SBD).
- The bid documents issued did not contain the required Model Request for Selection (RfS) Document, Model Power Purchase Agreement and Model Power Sale Agreement] as notified by the Central Government.
- CoPT did not inform the Commission regarding the initiation of the bidding process as required.

The Commission's examination of the bid documents further revealed that though the bid documents issued by CoPT was completely at variance with the Guidelines/SBD, no effort was made by CoPT to seek prior approval of the Commission for the deviation with full justification thereof as per Clause 18 of the Guidelines. From the foregoing it is very clear that the tender/bid floated by the petitioner CoPT was not issued as per the Guidelines/SBD issued by the Central Government. No effort was also made by CoPT to seek prior approval of the Commission to the deviations. It is also relevant to note that CoPT is a distribution licensee of this Commission. The licensee cannot also claim lack of knowledge of the applicable Act/ Rules/ Regulations/ Guidelines which are all available in the public realm.

- (c) In view of the above deviations/deficiencies can the Appropriate Commission issue post facto approval?
- 9. The Commission noted that Clause 18 of the Guidelines permits the licensee to make deviation to the guidelines to suit their specific requirements, but with the prior approval of the State Commission. The relevant paragraphs of the guidelines are extracted below:

### 18. DEVIATION FROM PROCESS DEFINED IN THE GUIDELINES

In case there is any deviation from these Guidelines and/or the SBDs, the same shall be subject to approval by the Appropriate Commission. The Appropriate Commission shall approve or require modification to the bid documents within a reasonable time not exceeding 90 (ninety) days.

The Commission noted that Clause 18 of the Guidelines permit deviations to be approved by the Appropriate Commission. However, deviations, if any, have to be sought for by the distribution licensee and the Appropriate Commission has to either approve or require modification to the bid documents within a reasonable time not exceeding 90 (ninety) days. Hence, it is clear that the deviations permitted under Clause 18 of the Guidelines are prior to the floating of bids and once a NIT is published, its terms and conditions cannot be altered and not at all after the bids are evaluated and the contract awarded. Such an exercise would destroy the level playing field for the participants and leave the bidder open to favoritism and legal challenges.

The Commission also noted that Ministry of Power, Government of India (GoI) vide letters dated 18.11.2016 and 11.12.2019 clarified that the deviation on bid documents has to be got approved before issuing the bid documents and not after inviting the tender. The relevant portion of the clarification is extracted below:

As per letter dated 18.11.2016, MoP has examined the issue and clarified as follows;

2. It is stated that the Guidelines for Procurement of Electricity from Thermal Power Stations set up on Design, Build, Finance, Own and Operate (DBFOO) basis issued by Ministry of power, Govt. of India dated 9.11.2013 stipulates that "Any deviation from the Standard Bidding Documents shall be made only with the prior approval of the Central Government. Provided, however, that any project specific modifications expressly permitted in the Standard Bidding Documents shall not be construed as deviations from the Standard Bidding Documents." These Guidelines have, however, been

further amended on 5<sup>th</sup> May, 2015 which provides that "Any deviation from the Standard Bidding Documents shall be made by Distribution Licensees only with the prior approval of the Appropriate Commission. Provided, however, that any project specific modifications expressly permitted in the Standard Bidding Documents shall not be construed as deviations from the Standard Bidding Documents." (copy enclosed).

- 3. The contention of Govt. of Kerala that KSEB had requested Ministry of Power (GoI) vide letter No. CE(C&T)/DBFOO/2013-14/211 dated 23.08.2014 to issue approval for deviation from the SBDs for tying up the required quantum of power by the utility, in the event the quantum offered by the lowest bidder is less than the bid quantity, does not appear in order. In this regard, it is submitted that KSEB had submitted the documents through email dated 30.7.2014 which was examined by the Ministry and structural incongruity was observed in SBDs uploaded by KSEB as the bids were proposed to be called using two fuel options i.e captive Coal and Linkage based projects in the same contract whereas the MBDs provides for separate bidding framework for the different fuel options. Accordingly vide letter No. 23/9/2014-R&R(part) dated 6.8.2014 (copy enclosed), it was suggested that KSEB Ltd to take appropriate action to make the SBDs framed by them in line with the MBDs notified by this Ministry.
- 4. The deviations as pointed out by KSERC would have been got vetted and approved by the Central Government before issuance of RFQ, RFP and PSA and not at this stage. As per the Guidelines, deviations on the provisions of the bidding documents are approved, if necessary, and not the actions taken by the Utility as per practice or precedent.
- 5. In view of the above, Govt of Kerala / KSEB Ltd may take action as appropriate in consultation with KSERC.

MoP, vide letter dated 11.12.2019 has further clarified as follows:

'......4. The matter has been further examined. The views of Ministry of Power as communicated earlier vide letter dated 18.11.2016 are reiterated. The deviations as pointed out by KSERC would have been got vetted and approved by the Central Government before issuance of RFQ, RFP, and PSA and not at this stage. Govt. of Kerala/KSEB Ltd may take action as appropriate in consultation with KSERC."

From the foregoing paras, it is clear that the Appropriate Commission cannot approve any deviations once the bids are floated post facto.

- (d) Whether the bid process was really "transparent" and the price discovered in the bid is really competitive?
- 10. In this context, the Commission examined the bid proceedings of the licensee. Apart from the deficiencies and unauthorized deviations pointed out in pre-paras, the Commission also examined the following factors and its impact on "transparency" and competitiveness of the price achieved.
  - Notification of the ceiling tariff of Rs. 3.97/kWh in the Notice Inviting Tender- The Commission notes that the Ministry of New and Renewable Energy (MNRE), vide notification dated 05.03.2020 has issued direction to all bidder that a cap or ceiling tariff shall not to be prescribed for bids for single or hybrid renewable energy source. However, CoPT's bid dated 08.09.2020 clearly violated this MNRE instruction.
  - It is an established fact that notifying the upper ceiling in a bid vitiates the competitiveness of the bid, since the bidder's price estimate stands revealed. In such cases, there is a general tendency for the prospective bidders to quote near such amount. In this case, there were only 2 bidders and the winning bidder had quoted a mere 08 paise below the ceiling price. From this fact itself, the Commission is of the view that the bids received were not "competitive."
  - Capacity Utilisation Factor (CUF) Regulation 54(3) of the KSERC RE Regulations, 2020 also stipulates that the Capacity Utilization Factor for Solar PV project shall be 19%. However, from the documents submitted by the licensee, the CUF of the plant is seen to be only 14.3%. CUF is an important parameter in arriving at the unit tariff and accepting such an abysmally low CUF disregarding the Commission's Regulation adversely impacts the tariff competitiveness.
  - Further, in OP 46/2019, "Petition for the approval of draft power sale agreement for 92MW floating solar project at Rajiv Gandhi Combined Cycle Power Project, Kayamkulam" the CUF adopted was 28% and the tariff fixed at Rs. 3.16 or lower as determined by CERC. This was in the year 2019, when the panel rates were relatively higher than the present rates.

From the above facts, it is clear that the bid floated by CoPT was neither "transparent" nor competitive.

- (e) Can CoPT issue an LOA/enter into a power purchase agreement without the approval of the Appropriate Commission?
- 11. As per the provisions of the Electricity Act, 2003, the State Commissions are empowered to determine/adopt their licensee's tariff as per Section 62 and 63 of the EA-2003. The relevant Sections are extracted below:

"Section 62. (Determination of tariff): --- (1) The Appropriate Commission shall determine the tariff in accordance with the provisions of this Act for –

(a) supply of electricity by a generating company to a distribution licensee:

.....

Section 63. (Determination of tariff by bidding process): 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."

The above Sections of the EA, 2003 specifies that power procurement by the distribution licensee can only be either through the tariff determined by the Appropriate Commission under Section 62 of the Act or through adoption of tariff under Section 63, if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. The deviations to this process has already been discussed in the preceding paras. Hence, the pertinent question that arises is whether the distribution licensee can enter into a PPA with a generator without the knowledge of and approval of the Appropriate Commission.

As per Section 86 (1)(b) of the EA, 2003 and provisions in the Tariff Regulation 2018, prior approval of the Commission is required for procurement of power. Further, Regulation 76 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 provides as follows:

76. Approval of power purchase agreement. – (1) Every agreement for procurement of power by the distribution business/licensee from the generating business/company or licensee or from other sources of supply entered into after the date of commencement of these Regulations shall come into effect only with the approval of the Commission.

Section 86 (1) (b) of the EA, 2003 read with KSERC's Regulation 76 makes it abundantly clear that the licensee cannot enter into any Power Purchase Agreement without the prior approval of the Commission. Since the PPA annexed to the petition has been signed without the knowledge and approval of the Commission, the same is not legally tenable as per the

## EA, 2003 and Regulations framed thereunder. Hence, the same is invalid and rejected.

### **Order of the Commission**

12. The Commission, after examining the Petition filed by CoPT dated 20.12.2021, the deliberations during the hearing held on 09.03.2022, the provisions of the Electricity Act 2003, other relevant Guidelines, Rules and Regulations, hereby orders that:

The petition filed by CoPT for purchase of solar power from the proposed 1.5 MWp grid connected floating solar PV project at W.Island, for 25 years under the RESCO mode from M/s Suryam International Ltd, H/o-M. Shivaji, 2<sup>nd</sup> Lane Gandhi Nagar, Berhampur, Ganjam, Odisha – 760001 is rejected, in view of the facts as brought out in paras 7, 8, 9, 10 and 11 of this Order.

The petition disposed off. Ordered accordingly.

Sd/- Sd/Adv A J Wilson Preman Dinaraj
Member (Law) Chairman

Approved for issue

C R Satheeshchandran
Secretary