

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

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

OP No 13/2022

In the matter of : Petition seeking approval for grid connectivity to
Cochin Port Trust for renewable energy system
at Vallarpadam

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
Smt. Surya Madhu
Sri. Manoj Kumar, Manager, DP World
Sri. Rajan V, DP World

Respondent : Kerala State Electricity Board Ltd

Respondent represented by : Sri. Manoj G, AEE, TRAC
Sri. Lajju M S, AEE, TRAC

Date of hearing : 09.03.2022.

Order dated 29.03.2022

1. Cochin Port Trust (hereinafter referred to as the petitioner or CoPT) filed a petition dated 18.02.2022, before the Commission, seeking approval for grid connectivity to Cochin Port Trust for renewable energy system at Vallarpadam. The prayers of the petition are as extracted below.

“1. To allow grid connectivity and net metering facility to CoPT for 1000 kWp solar power system at Vallarpadam & PuthuVypin with 11kV grid of M/s KSEBL.

2. To fix tariff for accounting solar export between CoPT and KSEBL and the APPC to be paid to the consumers by CoPT and the Seller Licensee, M/s KSEBL.”

2. The summary of the petition filed by M/s CoPT is given below.

- (1) Cochin Port Trust is a distribution licensee at Vallarpadam & Puthu Vypin and is availing 3000 KVA, 11 kV supply from M/s KSEBL at Bulk supply Tariff (Consumer no. 5/5403).
- (2) M/s India Gateway Terminal Pvt. Limited (herein after referred to as M/s D.P World) is a 11 kV consumer of Cochin Port Trust with a contract demand of 3000 KVA. M/s D.P. World is operating the Container Terminal at Vallarpadam on BOOT basis. They had submitted a formal application for 1000 kWp grid interactive ground mounted solar power plant to the petitioner on 10.10.2019.
- (3) There are only 8 consumers (both HT and LT) in Vallarpadam including M/s D.P World. The power demand of M/s D.P World is very minimal during NO SHIP OPERATION days and hence it is proposed to export the excess solar power to KSEB Ltd's grid. Sanction was issued to M/s DP World on 03.12.2019 subject to certain conditions like limiting the solar generation to the extent of their maximum consumption level till evacuation facility is established with M/s KSEB Ltd.
- (4) Subsequently, M/s DP World reduced the capacity of the solar plant to 830 kWp from 1000 kWp. They obtained the energization approval of the solar plant dated 19.07.2021 from the Central Electricity Authority along with completion certificate on 27.09.2021. CoPT was unable to sanction grid connectivity to M/s D.P World as KSEB Ltd has turned down the request for grid connectivity, on the ground that there was no provision in KSERC (Renewable Energy & Net Metering) Regulations 2020 for accounting solar generation between distribution licensees.
- (5) CoPT as the distribution licensee has to provide grid connectivity and net metering facility to M/s D.P World as per the provisions of the KSERC (Renewable Energy & Net metering) Regulations, 2020.
- (6) CoPT further submitted that, they are also eligible for grid connectivity to the solar power system at Vallarpadam as per the provisions of the KSERC (Renewable Energy & net Metering Facility) 2020, since they are purchasing power from KSEB Ltd as a bulk consumer at the BST approved by the Commission.
- (7) M/s CoPT has decided to give grid connectivity for 830.28 kW solar power plant of M/s D.P World subject to the condition that grid connectivity and accounting and billing of the exported solar energy into the KSEB grid shall

be done / settled in accordance with the decision of KSERC. CoPT has also decided to obtain an undertaking in this regard from M/s D.P World for commissioning their plant.

- (8) The solar energy exported into the KSEB Ltd's grid could not be recorded in the existing TOD meter. Necessary modifications in the metering unit can be done only with the approval of KSEB Ltd. Till such time solar energy exported into KSEB Ltd's grid could not be accounted and will result in revenue loss to CoPT, if net meter facility is given to D.P World.
- (9) According to CoPT, the excess solar power exported to CoPT's grid by M/s D.P World has to be adjusted in the monthly electricity bills and the banked energy at the end of the settlement period has to be paid as per APPC. It is noted that APPC of KSEB Ltd is less than the average BST of CoPT, which is the APPC of CoPT. They further and submitted that excess power, if exported to KSEB Ltd's grid, will have to be paid to M/s DP World at the APPC of CoPT which is the average BST of CoPT.

3. The Commission vide letter dated 04.03.2022 directed CoPT to submit the details of the consumption of CoPT and also the generation from the solar plant installed by M/s DP world. CoPT submitted the details vide e mail dated 05.03.2022 as follows:

Year		DP WORLD consumption		Solar generation (expected)		Consumption at Vallarpadam		CoPT consumption	
		Monthly consumption (Units)	Billing demand (kW)	Monthly consumption (Units)	Demand (kW)	Monthly consumption (Units)	Demand (kW)	Monthly consumption (Units)	Billing demand (kW)
2020	MINIMUM	505410	1368			771750	2250	2485500	5587
	MAXIMUM	943980	1500			664450	2250	2299200	5419
	AVERAGE	664433	1624	0		840671	2250	2061971	5110
2021	MINIMUM	621400	1785			981600	2250	2186250	5368
	MAXIMUM	856470	1833			765000	2250	2036700	5622
	AVERAGE	714868	1760	0	0	892263	2258	2031968	5340
2022 (Jan Feb)	MINIMUM	604980	0			795850	2250	2484000	5941
	MAXIMUM	839370	0			1120250	2578	2200950	5604
	AVERAGE	722175	0	104150	625	958050	2414	2342475	5773

4. M/s KSEB Ltd, vide the submission dated 07.03.2022 submitted the following

- (1) Cochin Port Trust (CoPT) is a distribution licensee, purchasing power from KSEB Ltd for supplying power within their license area. The power purchase from KSEB Ltd is governed by the power purchase agreement executed by Cochin Port Trust with KSEB. CoPT is having two connections with contract

demand of 6500kVA at 110kV and 3000kVA at 11kV at Willington Island and Vallarpadam respectively.

- (2) Regarding connectivity to KSEB Ltd grid, it is submitted that KSERC (Renewable Energy and Net metering Regulations),2020, do not have provision for accounting solar generation between licensees, No APPC rate is prescribed to settle the accounts between licensees. Further, in this case the prosumer of one distribution licensee is injecting solar power and the excess energy is to be accounted by another distribution licensee. There is no provision for such transactions in the present Regulations.
- (3) As per Regulation 13(1), General Conditions, the distribution licensee shall provide the net metering arrangement to the prosumer. Hence, CoPT is having the obligation to provide grid connectivity to their consumer for solar power injection. However, if CoPT is having any technical or commercial constraints, CoPT is required to restrict the capacity to technical limits permissible.
- (4) KSEB Ltd added that, KSEB Ltd is the incumbent licensee in the State and any consumer can avail power from KSEB Ltd within Kerala. If the consumer opts to connect directly to KSEB Ltd network and avails power from KSEB Ltd as a consumer of KSEB Ltd, KSEB Ltd can give connectivity and absorb the excess solar power and settle the same as per the KSERC (Renewable Energy and Net metering Regulations), 2020.

Hearing on the petition:

5. The Commission admitted the petition as OP No. 13/2022. Hearing on the petition is held on 08.03.2022. Smt. Jayalakshmi, AEE made a presentation of the petition on behalf of the petitioner. Sri Manoj G, AEE, TRAC and Laiju M S, AEE, REES represented KSEB Ltd. The summary of deliberations during hearing is given below:

- (i) CoPT is a distribution licensee having their area of operation in the Cochin Port, Vallarpadam and Puthuvipin. They are availing power at Bulk supply Tariff from KSEB Ltd. CoPT is availing 11kV supply at Vallarpadam with 3 MVA contract Demand.

Two HT consumers at Vallarpadam and Puthuvipin has installed and commissioned solar power plants, viz, M/s GDKL having 80 kWp in October 2020 and M/s India Gateway Terminal Pvt Ltd (DP World) 830 kWp on 16.2.2022. CoPT submitted that, based on the in-principle approval given by CoPT, DP World has commissioned 830kW solar plant under net metering.

The minimum power demand recorded for DP world is below 500 kVA during no ship operation days. Hence, the excess solar power may be exported to KSEB Ltd's grid during minimum power demand. For this CoPT has to obtain

sanction for grid connectivity from KSEB Ltd. The main concern of CoPT is that if KSEB Ltd does not agree to provide accounting of excess energy, CoPT will not be in a position to account the same. CoPT has already instructed DP world to utilize their solar output to the maximum for their personal purpose and has obtained an undertaking stating that they have no claim on the excess power exported to KSEB Ltd grid, if any.

To a query by the Commission, DP World clarified that, the inverter capacity connected is of 690 kW (230 X 3).

There is no provision to record the export energy in the existing TOD meter with KSEB Ltd. If the excess power goes to the KSEB Ltd's grid, the same will have to be treated as commercial loss.

Average Power Purchase Cost of KSEB Ltd is less than the BST approved for CoPT which is the APPC of CoPT. Further, APPC cost between seller licensee KSEB Ltd and small distribution licensees is to be fixed, if the Commission allows grid connectivity to CoPT with KSEB Ltd.

- (ii) KSEB Ltd submitted that all the renewable energy transactions in the State are based on KSERC (Renewable Energy and Net metering) Regulations, 2020. There is no provision in the RE Regulations, 2020 to settle the energy account of the prosumer of one licensee with another licensee. While giving connectivity, it is duty of the distribution licensee to ensure the technical and commercial feasibility and also whether it conforms to the Regulations in force. If DP World directly connects to KSEB Ltd system, KSEB Ltd can settle the energy as a prosumer of KSEB Ltd.
- (iii) DP World submitted that the process was initiated as part of their green energy initiative, as per the directions of the Ministry for Ports and they have invested Rs 3.84 Cr on the assumption that net metering facility will be available. Presently the generation is 16 % of their consumption and it is proposed to increase it upto 30 %, if net metering is available.

M/s DP world further clarified that prior permission from KSEB Ltd has not been obtained by DP World or CoPT. It is further clarified that the new project/ expansion proposed at Vallarpadam, once materialized, will address the issue.

Analysis and Decision of the Commission

6. 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 Ministry of New & Renewable

Energy (MNRE), Regulations issued by this Commission, deliberations during the hearing held on 08.03.2022, and hereby decided as follows.

7. The prayers of the petitioner M/s CoPT are the following:
 - (1) Allow grid connectivity and net metering facility to CoPT for 1000 kWp solar power system at Vallarpadam & PuthuVypin with 11kV grid of M/s KSEBL.
 - (2) To fix tariff for accounting solar export between CoPT and KSEBL and the APPC to be paid to the consumers by CoPT and the Seller Licensee, M/s KSEBL.”

The Commission has examined the prayers of CoPT in detail and the decision of the Commission is detailed in the subsequent paragraphs.

Prayer-1. Allow grid connectivity and net metering facility to CoPT for 1000 kWp solar power system at Vallarpadam & PuthuVypin with 11kV grid of M/s KSEBL.

8. Cochin Port Trust (CoPT) is a license holder of this Commission for distributing electricity at Port Trust and also at Vallarpadam & Puthu Vypin area. CoPT is availing power from the incumbent licensee KSEB Ltd at the Bulk Supply Tariff (BST) as approved by the Commission. At present CoPT has a contract demand of 6.5MVA with KSEB Ltd for meeting the electricity requirement at Port Trust area. Further, CoPT has a contract demand for 3 MVA power with KSEB Ltd for meeting the power requirement at Vallarpadam.

As per the prevailing Rules and Regulations, uniform retail tariff is prevailing in the State for similar categories of consumers, irrespective of the licensee supplying power to them. Accordingly, open access charges and other levies payable by the similar categories are also uniform.

9. The Commission vide the Notification 1204/D(T)/2019/KSERC dated 7th February 2020 has notified the KSERC (Renewable Energy & Net Metering) Regulations 2020 (here in after referred as RE Regulation 2020).
10. As per the provisions of the RE Regulation 2020, the distribution licensee has to provide Net metering facility to a prosumer for the installation of RE capacity up to 1 MW under Net metering facility, subject to conditions specified therein. Further a prosumer, before installing the RE power to the grid of the licensee, is required to obtain the feasibility certificate from the licensee regarding the feasibility of connecting the RE system with the distribution system of the licensee. All the distribution licensees in the State have to follow these procedures specified in the

RE Regulation 2020, before allowing a prosumer to install RE system under Net metering.

11. In the present case, M/s D.P World is a consumer of the licensee M/s CoPT with a contract demand of 3 MVA. The licensee M/s CoPT has granted feasibility certificate and permission to the consumer to install 830 kWp solar power under Net metering facility and prosumer had commissioned the same.
12. The basic issue here is that during “NO SHIP OPERATION PERIOD” the power requirement of the consumer M/s D.P World is less than 500 kVA. So, the consumer wants to bank the excess power generated during day time with the licensee M/s CoPT. However, the CoPT submitted that they cannot bank the same and hence they want to export the excess power from the solar plant of M/s D.P World to KSEB Ltd.
13. KSEB Ltd however, turned down their request citing that there is no provision in the RE Regulation 2020 to bank the excess energy of a prosumer of one licensee with another distribution licensee. KSEB Ltd further suggested that the KSEB Ltd is the incumbent licensee, the consumer M/s D.P World can opt for power from KSEB Ltd instead of CoPT and in such case KSEB Ltd can absorb the excess solar power and settle the same as per the provisions of the RE Regulation 2020.
14. The Commission has examined the issue in detail. Here M/s D.P World is the prosumer and CoPT is the licensee to facilitate Net metering facility as per the RE Regulation 2020. Further the D.P World as the prosumer has to obtain feasibility certificate from the licensee CoPT to install and connect the solar plant with the distribution system of the Licensee. M/s CoPT as the distribution licensee is duty bound to examine all the issues including the constraints, if any, in connecting the solar plant with their system. In the present case CoPT as the licensee was aware of the consumption pattern of the prosumer M/s D.P World, at Vallarpadam license area. The licensee was also aware of the demand of the consumer during no ship operation period. The licensee was required to consider all these aspects while granting feasibility certificate to the prosumer. If the licensee could not provide banking facility for the excess power, if any, generated from the 830 kWp solar power of the prosumer, the licensee should have instructed the prosumer to reduce the capacity of their solar plant to their consumption levels. Had the licensee done this at the time of granting feasibility certificate, the present issue can be avoided. But, in the present case, the licensee failed to appraise the constraints faced by them for providing the banking facility to the prosumer at the time of granting feasibility certificate and is now requesting the Commission to allow connectivity and Net metering facility with 11 KV grid of M/s KSEB Ltd.
15. **The Commission has also examined the provisions of RE Regulation 2020 in this regard. There is no provision in the RE Regulation 2020 to bank the**

excess power of a prosumer with the incumbent licensee KSEB Ltd. Hence, the Commission cannot direct KSEB Ltd to provide connectivity and Net metering facility for the 830 kWp installed by M/s D.P World, the consumer of CoPT. Hence, this prayer is rejected.

Prayer-2. To fix tariff for accounting solar export between CoPT and KSEBL and the APPC to be paid to the consumers by CoPT and the Seller Licensee, M/s KSEB Ltd.

16. As already mentioned, the licensee M/s CoPT has been purchasing power from M/s KSEB Ltd at Bulk Supply Tariff (BST) as approved by the Commission from time to time. Further till now, KSEB Ltd, as a incumbent licensee has been generating and purchasing power from various sources for meeting the electricity demand of all the consumers of the State including Bulk licensee M/s CoPT. Further, as per the prevailing Rules and Regulation, uniform retail tariff is prevailing in the State for similar categories of consumers, irrespective of the licensee from which the consumer avail supply. The Open Access charges and other levies payable by the similar categories of consumers in the State are also uniform, irrespective of license area where the consumer is situated. The Commission also noted that the Bulk Supply Tariff approved by the Commission for Bulk Licensees purchasing power from KSEB Ltd cannot be considered as Average Pooled Power Purchase Cost (APPC) of such licensee purchasing power from KSEB Ltd.

Considering these aspects in detail the Commission hereby orders that CoPT and other licensee who purchase power from KSEB Ltd shall settle the energy account of their prosumer under Net metering facility at the APPC approved by the Commission for the incumbent licensee KSEB Ltd from time to time, till further orders.

Order of the Commission

17. The Commission, after examining the Petition filed by CoPT dated 18.02.2022, the deliberations during the hearing held on 09.03.2022, the provisions of the Electricity Act 2003, KSERC (Renewable Energy and Net Metering) Regulations, 2020 other relevant Guidelines, Rules and Regulations, hereby orders as follows:
- (i) The first prayer of the petitioner to allow grid connectivity and Net metering facility to the solar plant of D.P World installed at Vallarpadam to KSEB Ltd is rejected, due to the reason cited under paragraph 8 to 16 above.
 - (ii) M/s CoPT and other licensees who purchase power from KSEB Ltd, shall settle the energy account of their prosumer under Net metering facility at the

APPC of KSEB Ltd as approved by the Commission from time to time, till further orders.

Petition disposed of. Ordered accordingly.

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

Sd/-
Preman Dinaraj
Chairman

Approved for issue

C R Satheeshchandran
Secretary