

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

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

**OP No 53/2021**

In the matter of : Petition seeking approval for incentive applicable for lagging power factor to Cochin Port Trust.

Petitioner : Cochin Port Trust. Willingdon Island, Cochin  
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 : 08.03.2022.

**Order dated 24.03.2022**

1. M/s Cochin Port Trust (hereinafter referred to as CoPT of the petitioner) filed a petition before the Commission on 29.09.2021 with the following prayers:  
  
*“Hon'ble Commission may kindly allow the power factor incentive to Cochin Port Trust in respect of Consumer no. 21/1135 (EHT supply to Cochin Port Trust at W. Island) and Consumer no. 5/5403 (11 kV to Cochin Port Trust at Vallarpadam) in accordance with power factor incentive / disincentive order of the Hon'ble Dtd — 08/07/2019 in OP no. 15/2018”.*
2. Summary of the petition filed by M/s Cochin Port Trust is given below:
  - a) Cochin Port Trust (CoPT) is having license for distributing electricity within the Port area in Willingdon Island (Consumer No. 21/1135) and Vallarpadam & Puthu Vypeen (Consumer No. 5/5403). CoPT has been purchasing electricity from KSEB Ltd for meeting its electricity demand.

At present, two PPAs are entered with KSEB Ltd, one for a Contract Demand of 6500 kVA at 110 kV for supplying power at W.Island (Consumer No. 21/1135) and second one with the contract demand of 3000 kVA at 11 kV for meeting the power demand of Vallarpadam area (Consumer No. 5/5403).

M/s KSEB Ltd is issuing monthly electricity bills to Consumer No. 21/1135 and 5/5403 as per Bulk supply tariff applicable to small licensees and bulk consumers as per the tariff order dated 08.07.2019.

- b) CoPT is maintaining power factor at almost 0.99 lag for Consumer No. 21/1135 and 0.97 lag for Consumer No. 5/5403 in accordance with the CEA (Technical Standard for Connectivity to the Grid) Regulations, 2007. As per the tariff Order dated 08.07.2019, the minimum power factor to be maintained by all consumers is 0.95 (lag).
  - c) As per the prevailing tariff Order dated 08.07.2019, CoPT is eligible to get power factor incentive of about Rs 2.50 lakh per month for consumer No. 21/1135 and Rs 0.50 lakh per month for consumer No. 5/5403. However, KSEB Ltd declined the request of CoPT stating that there is no provision in the prevailing Tariff Regulations, 2018 and Tariff Order dated 08.07.2019 for providing power factor incentive for licensees purchasing power from KSEB Ltd.
3. The Respondent, M/s KSEB Ltd, vide submission dated 23.12.2022 submitted the following
- (1) Cochin Port Trust is a distribution licensee purchasing power from KSEB Ltd and supplying in their Licensee area. The power purchase from KSEB Ltd is governed by the PPA signed by KSEB Ltd and Cochin Port Trust on 17.11.2008.
  - (2) The upper limit specified by the Commission vide Tariff Order dated 08.07.2019 for power factor is 0.95 lag for imposing penalty. There is no mention of incentive applicable to the licensees in the tariff Order. Moreover, the agreement executed by the Cochin Port Trust and KSEB Ltd mention only about the power factor penalty and not incentive. KSEB Ltd is imposing penalty as a part of grid discipline and the same is also included in the PPAs. KSEB Ltd imposed penalty to various licensees following CEA (Technical Standards for Connectivity to Grid) Regulations, 2007, Kerala State Electricity Grid Code, 2005 (KSEGC 2005), relevant regulations of KSERC and the agreement between KSEB Ltd and Licensees.
4. The Commission admitted the petition as OP 53/2021 and hearing conducted on 09.03.2022. Smt. Jayalakshmi presented the petition on behalf of the petitioner and Sri Manoj G, KSEB Ltd presented the matter on behalf of the Respondent KSEB Ltd. The summary of discussions is given below:
- (1) CoPT submitted that, CoPT is an Electricity distribution licensee in port area in Willington Island (consumer No. 21/1135), Vallarpadam and Puthu Vypeen (Consumer No.5/5403). CoPT has been purchasing electricity from KSEB Ltd at Bulk Supply Tariff. CoPT had a contract demand of 6500 kVA at 110 kV at Willington Island and 3000 kVA at 11 kV at Vallarpadam.

CoPT further submitted that, as per the tariff Order dated 08.07.2019, the minimum power factor to be maintained by all consumers including Bulk Consumers ranges from 0.90 lag to 0.95 lag. CoPT, at its expense, had installed capacitor bank to maintain the power factor. Though the PF maintained by the CoPT is above 0.95, KSEB Ltd is not allowing any incentive to the petitioner.

CoPT, as a licensee is providing power factor incentive to eligible consumers in their license area.

- (2) M/s KSEB Ltd submitted that, the Commission as per the tariff Order dated 08.07.2019 approved the power factor incentive for the HT, EHT consumers only and not mentioned any incentive for the Distribution Licensees. Moreover, the PPA executed between KSEB Ltd and CoPT, provides only for the Power factor penalty and not any incentive. However, the Commission, vide the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021, in which Power factor incentive is made applicable to the Distribution Licensees also. The Tariff Regulation 2021 is prospective and M/s CoPT will be eligible for the Power Factor incentive once the Commission issues the Tariff Order in the control period based on the said Regulation.

### Analysis and Decision

5. The Commission has examined in detail the petition filed by CoPT, counter affidavit of the respondent KSEB Ltd, deliberations of the subject matter during the hearing held on 08.03.2022, as per the provisions of the Electricity Act, 2003, KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018, other regulations and orders issued by the Commission and the Tariff Order dated 08.07.2019, and the Commission hereby decides as follows: -
6. The Commission vide the Tariff Order dated 08.07.2019 in Petition OP No. 15/2018 approved the power factor incentive and disincentive as follows.

***“Power factor incentive / disincentive***

*The following incentive and disincentive shall be applicable to LT industrial consumers with a connected load of and above 20 kW, HT&EHT Consumers for power factor improvement.*

<b><u>PF range (lag)</u></b>	<b><u>Incentive/ Penalty</u></b>
	<b><u>Incentive</u></b>
Above 0.95 and upto 1.00	0.50% of the Energy Charge for each 0.01unit increase in power factor from 0.95
	<b><u>Penalty</u></b>
0.90 and upto 0.95	0.50% of the energy charges for every 0.01fall in PF below 0.95 and upto 0.90
below 0.90	1% of the energy charge for every 0.01 fall inPF from 0.90

*Note: No penalty and incentive for consumers with leading power factor. “*

7. The Commission vide Order dated 23.04.2020 in Petition No. OP 02/2020, clarified that the Licensees purchasing power from KSEB Ltd at the Bulk Supply Tariff approved by the Commission also shall maintain the power factor @ 0.95, and if they failed to maintain the power factor @0.95, such licensees not maintaining the power factor @0.95 is bound to pay penalty at the rates specified in the Tariff Order dated 08.07.2019. The relevant portion of the Order of the Commission is extracted below:

*18. Based on the above considerations, the Commission directs that all distribution licensees of the State shall maintain a minimum power factor of 0.95 as prescribed in Commissions Order dated 08.07.2019 in OA No. 15/2018. The Commission further directs that as long as M/s TCED do not maintain the minimum pf of 0.95, M/s KSEB Ltd. has every right to levy the power factor penalty as applicable to all other distribution licensees of the State, who procure power from M/s KSEB Ltd. at bulk supply tariff.*

However, there is no clarity regarding the power factor incentive payable by the licensees purchasing power from KSEB Ltd through PPA.

8. Subsequently, the Commission vide the Regulation 85(11) of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021, provided as follows.

***“(11) The Commission shall prescribe in the Tariff Order, appropriate incentive/disincentive for maintaining the power factor of the distribution system, at a level between 0.95 lag and 0.95 lead as specified in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations 2007, as amended from time to time, to certain category of consumers including Bulk consumers/ distribution licensees in the State.”***

These Regulations are applicable from 01.4.2022.

9. KSEB Ltd has already filed the ARR, ERC and Tariff Petitions for the MYT period from 2022-23 to 2026-27 which is under process. The Commission, while issuing the Tariff Order for the forth coming Control Period will be specifying the appropriate incentive/ disincentive for maintaining the power factor by consumers including Bulk consumers and distribution licensees availing power from KSEB Ltd. Hence, the Commission is of the view that the petition filed by CoPT can be considered during the next Control Period Tariff determination time and appropriate orders can be issued based on the Tariff Regulations, 2021.

### **Order of the Commission**

10. The Commission, after examining the Petition filed by CoPT dated 29.09.2021, the deliberations during the hearing held on 08.03.2022, the provisions of the Electricity Act, 2003 and Tariff Regulations, 2021, hereby orders that,

- (1) The power factor incentive and power penalty payable by the licensees purchasing power from KSEB Ltd shall be determined as per the provisions of the Regulation 85(11) of the Tariff Regulations, 2021, in the next tariff Order approved for the next MYT period from 2022-23 to 2026-27.
- (2) The Commission hereby closes the present petition filed by the licensee CoPT.

The petition disposed off. Ordered accordingly.

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

**Sd/-**  
**Preman Dinaraj**  
**Chairman**

Approved for issue

S/d  
C R Satheeshchandran  
Secretary