

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

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

OP No 63/2022

In the matter of : Petition seeking approval for availing power through multiple 11kV feeders by Cochin Port Authority at Vallarpadam & Puthuvypin from M/s KSEBL

Petitioner : M/s Cochin Port Authority (CoPA)

Respondent : Kerala State Electricity Board Ltd (KSEB Ltd)

M/s CoPA represented by : Shri. V.Thuraipandian, Chief Mechanical Manager
Shri. R.S. Ajayakumar, Executive Engineer
Shri. Ajithkumar, Executive Engineer
Smt. S.Jayalakshmi, Assistant Executive Engineer

KSEB Ltd represented by : Shri. Jayaraj, Chief Engineer (Commercial & Tariff)
Shri. M.P.Rajan, Deputy Chief Engineer
Shri Rajesh AEE, TRAC, KSEB

Date of hearing : 12.01.2023 12.00 Noon

Venue : e-hearing through video conferencing

Order dated 22.02.2023

1. M/s Cochin Port Authority (herein referred as M/s CoPA or Petitioner) on 26.07.2022 has filed a petition before the Commission with the prayer to *'approve the proposal of Cochin Port Authority for availing 11 kV additional power through two nos of 11 kV feeders from M/s KSEBL for meeting the immediate power requirement of M/s IOCL's LPG Import Terminal at Puthuvypin till commissioning of the proposed 110 kV substation of Cochin Port Authority at Vallarpadam / Puthuvypin.*
2. The summary of the petition filed by M/s CoPA is given below;
 - (1) M/s CoPA is a small distribution licensee in the port area in Willingdon Island, Vallarpadam & Puthuvypin, supplying electricity within their area by purchasing power from the incumbent licensee KSEB Ltd at the Bulk Supply Tariff approved by the Commission.

At present, M/s CoPA is availing 3 MVA power at 11 kV, at Vallarpadam and Puthuvypin through 2 nos. dedicated 11 kV UG cables from the Marine Drive substation of M/s KSEB Ltd.

The monthly average recorded maximum demand (RMD) of M/s CoPA as on date is 2.2 MVA, out of the contract demand of 3 MVA capacity.

- (2) M/s Indian Oil Corporation Ltd (M/s IOCL) is setting up LPG Import facility at Kochi with a capacity of 1.2 Million Metric Ton per annum in the land leased by M/s CoPA in Puthuvypin Special Economic Zone.

The power requirement for M/s IOCL is 2 MVA. In the year 2020, M/s CoPA has allotted 1 MVA power to M/s IOCL LPG Import terminal. The balance requirement of 1 MVA to M/s IOCL can be sanctioned only after augmenting additional power requirement with M/s KSEB Ltd.

M/s CoPA further submitted that, the augmentation work for getting 1MVA power for meeting the requirement of IOCL was completed on deposit work basis. The CEA also granted approval for the same on 16.12.2021.

- (3) M/s CoPA, further submitted that, M/s D.P World and M/s Petronet-LNG had also requested for the additional power for their future expansions. In order to cater the future power requirements, M/s CoPA has decided to set up a 110 kV substation at Vallarpadam/ Puthuvypin for availing power from KSEB Ltd. The approximate cost for the construction of the 110kV substation is Rs 64.71 crore.

However, setting up of a new 110kV substation may take two to three years. Hence, as an interim arrangement, M/s CoPA proposed to avail power from KSEB Ltd through multiple 11kV feeders from 66kV substation of KSEB Ltd at Njarakkal, for meeting the immediate requirement of additional 1MVA power to M/s IOCL at Puthuvypin. The approximate cost for providing additional 11kV feeder is about Rs 1.13 crore. The work involves construction of dedicated feeder, laying 11kV UG cable/ ABC cable from KSEB's Njarakkal substation and for erecting RMU and associated equipment.

- (4) Regarding, availing power through multiple 11kV feeders, KSEB Ltd vide letter dated 27.12.2021 informed as follows;

'Being a distribution licensee M/s CoPT can avail power supply through different feeders if requested voltage level for transfer power to Licensee is not available. Hon'ble Commission is permitting multiple feeders at available voltage levels till the required infrastructure for receiving the total power at specified voltage level corresponding to the load is established by the Licensee.'

As M/s CoPT is planning to establish 110 kV substation in the interim period, M/s CoPT can avail power through multiple 11 kV feeders with the approval of the Commission.

M/s CoPT has to approach Hon'ble Commission to avail power through multiple 11 kV feeders as a special case till proposed substation is established by M/s CoPT. As a Licensee M/s KSEB Ltd can supply power to M.s CoPT, if technically feasible."

- (5) M/s CoPA further submitted that, the LPG Import terminal project of M/s IOCL is of great national importance. The scheduled date of commissioning of Phase-1 is September 2022 and final completion is scheduled for December 2022. CoPT has to provide the additional 1 MVA power to M/s IOCL by availing power from KSEB Ltd through 11 kV through multiple feeders.

3. KSEB Ltd vide the submission dated 11.01.2023 submitted the following;

- (1) Cochin Port Authority (CoPA) is a distribution licensee as per Electricity Act 2003. CoPA has been purchasing power from KSEB Ltd at BST approved by the Commission and supplying electricity within their license area. The power purchase from KSEB Ltd is governed by the power purchase agreement executed by Cochin Port Authority with KSEB Ltd.
- (2) CoPA is having two connections, one for the contract demand of 6500KVA at 110kV, for supplying power at W.Island (LCN no 21/1135) and second one with a contract demand of 3000kVA at 11kV for meeting power demand of Vallarpadam area(LCN No 05/5403).
- (3) KSEB Ltd further submitted that the petition filed by CoPA is for availing 11kV additional power through two nos of 11KV feeders from KSEB Ltd for meeting the immediate power requirement of M/s IOCL's LPG Import terminal at Puthuvypin till the commissioning of proposed 110kVsubstation of Cochin Port Authority at Vallarpadam/Puthuvypin.
- (4) At present CoPA is availing 11kV supply at Vallarpadam from 66kV Marine Drive substation. Further, the officials of the CoPA had confirmed that, they propose to set up 110kV substation at Vallarpadam/ Puthuvypin to meet the power requirements of the major stake holders.
- (5) KSEB Ltd further submitted that, they had accorded sanction for providing 110KV supply at Vallarpadam from 110kV Emakulam North substation on deposit basis for an estimate amounting to Rs 64.71 Cr on 15.03 2022. The amount is yet to be remitted by M/s Cochin Port Authority.
- (6) As it may take two to three years for setting up 110kV substation, and as major stake holders require additional power in FY 2022-23 and considering the urgency of the situation, KSEB Ltd expressed its

willingness to provide supply to M/s CoPA for 3MVA at 11KV, through additional 11kV feeder till commissioning of the proposed 110kV substation, subject to the permission of the Commission.

- (7) As the total load at Puthuvypin at the M/s Cochin Port Authority license area exceeds above 3MVA, providing supply at 11kV can't be allowed for an indefinite period.
 - (8) KSEB Ltd further submitted that the licence area at Puthuvypin and Vallarpadam requires electricity transmission/ distribution infrastructure upgradation to cater future load requirements in the area. The most techno-economically feasible and practically viable proposal for providing proper connectivity to the licensee is to set up a separate substation at Vallarpadam / Puthuvypin by the petitioner, subject to the permission of the Commission.
 - (9) KSEB Ltd further submitted that they are willing to provide supply to M/s IOCL on behalf of M/s CoPA at 11KV as an interim arrangement till the proposed substation is commissioned.
4. The Commission admitted the petition as OP 63/2022. Smt. S.Jayalakshmi, Assistant Executive Engineer, CoPA presented the matter on behalf of the Petitioner. Sri. Rajesh, AEE, presented the counter affidavit on behalf of the respondent KSEB Ltd. Sri. R. Rajandran, CGM (LPG) and Sri. T. Satheesh Kumar, Chief Manager submitted the comments on behalf of the consumer M/s Indian Oil Corporation Ltd. The summary of the deliberations during the hearing is given below.
- (1) Cochin Port Authority (CoPA) submitted that, it had entered into a PPA with KSEBL for 3MVA power at 11kV for meeting the power demand of the Vallarpadam and Puthuvypin area. It is fed through 2 nos.11 KV U.G cables from M/s KSEBL 66KV substation at Marine Drive. The Monthly average RMD of CoPA is 2200KVA and average consumption is 9 lakhs units at Vallarpadam & Puthuvypin.

M/s Indian Oil Corporation Ltd is setting up an LPG Import facility at Kochi with a capacity of 1.2 million Metric Ton per annum in the land leased by CoPA in Puthuvypin Special Economic Zone. The power requirement for LPG Import Terminal is 1MVA for Phase-I and total power requirement on completion of Phase-II is 2 MVA. CoPA has already provided 1 MVA of power to M/s IOCL and the additional power requirement of 1 MVA could be sanctioned only after augmenting power with M/s KSEBL. It was also submitted that M/s IOCL has one more HT installation at Puthuvypin at Multi User Liquid Terminal (MULT) jetty. About 1.950 MVA is required for their MULT Jetty. Hence, the total Power requirement of IOCL is about 4 MVA at Puthuvypin in the near future.

It was further submitted that M/s International Container Transhipment Terminal Operator and M/s Petronet-LNG, Kochi had also requested for additional power to the tune of 15.5MVA and 9.5 MVA respectively for their future expansions at Vallarpadam & Puthuvypin.

M/s CoPA has to upgrade the power supply arrangements from 11 kV to 110 kV for meeting future power demand. M/s KSEBL has given sanction for providing 110 kV supply from their Ernakulam North substation subject to approval of the Commission.

It was submitted that setting up of 110KV Substation may take 2-3 years. Hence, application was given for 3 MVA, 11KV supply at Puthuvypin through a 2nd 11 kV feeder for the immediate power requirement of M/s IOCL. KSEBL has given sanction for 3 MVA, 11 kV supply from their 66 kV substation at Njarakkal through 2nd 11 kV feeder till commissioning of 110 kV substation subject to the approval of the Commission. The estimated cost is Rs. 1.13 Crores and M/s IOCL shall bare the expenditure for taking up 11KV multiple feeders.

- (2) KSEB Ltd submitted that, the licence area at Puthuvypin and Vallarpadam requires electricity transmission/ distribution infrastructure upgradation to cater future load requirements in the area. Hence, KSEB Ltd requested before the Commission to direct the petitioners to set up a separate substation at Vallarpadam / Puthuvypin after conducting suitable techno economic feasibility studies as the total power requirement at the area is 31.5MVA.

KSEB Ltd further submitted that they are willing to provide supply to M/s IOCL on behalf of M/s Cochin Port Authority at 11kV as an interim arrangement till the proposed substation is commissioned.

- (3) The representative of M/s IOCL submitted that, they urgently require the additional power allocation of 1 MVA for its LPG import terminal project. The consumer agreed to bear the entire cost associated with the laying of 11 kV UG Cable/ ABC cable from KSEB's Njarakkal substation. IOCL also submitted that, in the event of commissioning of the 110 KV substation, they may utilise the 11kV feeder for availing stand by supply.
- (4) The Commission clarified during the hearing that, the approval of the Commission is not required for connectivity of the licensee with the STU, and this can be discussed and finalised between them as per the provisions of the prevailing Regulations in force. Further, since the consumer M/s IOCL clarified that they shall bear the cost associated with laying multiple 11 kV feeders from the KSEB Ltd Njarakkal substation, the cost may not be shared with other consumers of CoPA. However, DPR with detailed cost benefit analysis with supporting documents has to be submitted for getting the approval of the 110kV substation proposed by the CoPA.

Analysis and Decision of the Commission:

5. The Commission having examined in detail the petition filed by M/s CoPA for availing power through multiple 11kV feeders at Vallarpadam & Puthuvypin from M/s KSEBL as per the provisions of the Electricity Act,2003, Kerala Electricity Supply Code, 2014, KSERC(Terms and Conditions for Determination of Tariff) Regulations, 2021 , Kerala State Electricity Grid Code, 2005, decides as follows;
6. Present petition is filed by M/s CoPA with the prayer to grant approval for availing power through multiple 11 kV feeders at Vallarpadam and Puthuvypin from KSEB Ltd. The Commission has examined the prayer with the provisions of the EA-2003 and the relevant Regulations in force, and noted the following;
 - (1) M/s CoPA have the distribution license to supply electricity in their licensed areas at Wellington Island, Vallarpadam and Puthuvypin. The licensee has been purchasing the entire electricity requirement from the incumbent licensee KSEB Ltd at BST approved by the Commission.
 - (2) KSEB Ltd, which is the successor entity to the erstwhile KSEB is the incumbent distribution licensee, and also the State Transmission Utility in terms of the Section 39 of the Electricity Act, 2003.
 - (3) M/s CoPA, presently is availing 3 MVA power at 11kV through two numbers of dedicated 11kV UG cables from Marine drive substation of KSEB Ltd, for meeting the electricity demand at Vallarpadam and Puthuvypin area. Present RMD recorded at this area is 2.2 MVA out of the contract demand of 3 MVA.

M/s IOCL is an HT consumer of M/s CoPA at Puthuvypin area. M/s IOCL is establishing a LPG Import facility at Puthuvypin, Kochi. The total power requirement of the LPG Terminal will be 2 MVA.

M/s CoPA has allotted 1 MVA power to M/s IOCL in the year 2020. Now the IOCL is in the final stage of commissioning of the LPG Terminal and the consumer requested to M/s CoPA to allocate the balance 1 MVA power by December 2022.
 - (4) M/s CoPA further submitted that, they are proposing a new 110 KV substation at Vallarpadam/ Puthuvypin area to meet the emerging power requirements of various consumers including the demand of M/s DP World, M/s Petronet LNG and also the Multi User Liquid Terminal Jetty of M/s IOCL. M/s KSEB Ltd also gave sanction for providing 110kV supply from its Ernakulam North substation. The approximate cost of construction of the substation is about Rs 64.71 crore. However, setting up of 110kV substation may require 2 to 3 years from now.
 - (5) Considering the time required for establishing the proposed 110kV substation and also the immediate requirement of 1 MVA additional

power to M/s IOCL, M/s CoPA, as an interim arrangement proposed to avail power through another 11 kV multiple feeders from 66kV substation of KSEB Ltd at Njarakkal. The approximate cost of the interim arrangement is about Rs 1.13 crore. The works involves construction of dedicated feeder, laying 11kV UG cable/ ABC cable from KSEB's Njarakkal substation, erecting RMU and associated equipments etc.

- (6) KSEB Ltd has agreed to provide 11 kV supply to Puthuvypin area from its 66kV substation at Njarakkal, for meeting the additional power requirement of M/s IOCL, the consumer of M/s CoPA, subject to the approval of this Commission. KSEB Ltd raised the concern that, the total load of the Vallarpadam and Puthuvypin exceeds 3 MVA, providing supply at 11kV cannot be allowed for an indefinite period.
- (7) M/s IOCL, during the hearing held on 12.01.2023 submitted that, they require the additional 1 MVA power immediately and agreed to bear the entire cost of Rs 1.13 crore (approximate) required for drawing 11kV power from 66kV substation of KSEB Ltd at Njarakkal.

7. The Commission has examined the above aspects in detail.

Being a distribution licensee, M/s CoPA can avail supply **at different points of its licensed area at same voltage level of 11 kV**, as per the provisions of the 'Kerala State Electricity Grid Code, 2005 (herein after referred as Grid Code, 2005) and its amendments from time to time. The relevant portion of the Grid Code, 2005 is extracted below for ready reference.

“Regulation-10. Connection Points with Distribution Licensee.- The voltage at the point of connection to the transmission system may be as required by the Distribution Licensee. The connection point shall be the outgoing feeder gantry of the STU's/Transmission Licensee's substation. The metering point shall be at the outgoing feeder. All the terminal, communication, protection and metering equipment within the premises of the Transmission Licensee shall be owned and maintained by the STU/Transmission Licensee. The respective Distribution Licensee shall maintain all the equipment from the outgoing feeder gantry onwards.”

“ Regulation 12. Applications for Connections.-

(1) Any user seeking to establish new or modified arrangements for connection to and/or use of the transmission system shall submit the following report, data and undertaking along with an application, duly observing the procedural requirements, to the STU/Transmission Licensee:

- a) Report with drawings/schematic, stating the purpose of the proposed connection and/or modification, connecting site, technical description of apparatus to be connected or modification to the apparatus already connected.*
- b) Detailed project construction schedule and target completion date.*
- c) An undertaking to the effect that the user shall abide by the Grid Code and the provisions of IE Rules, for installation and operation of the apparatus.*

- d) *For special loads like Arc Furnaces, Rolling Mills, etc., Real and Reactive Power values of the load with time and harmonic Level.*
- e) *Any other pertinent technical details/schemes and drawings required by STU/Transmission Licensee.*

(2) The STU/Transmission Licensee shall make a formal offer, with cost and time estimation, to the user not later than one month from the date of receipt of application containing all the above information along with any such information as may be reasonably required. The break-up cost of the works to be undertaken shall be furnished duly classified under the sub-heads like materials, labour and supervision.

(3) A user whose development requires the STU/Transmission Licensee to obtain any of the consents, approvals, permissions, and right of ways or to comply with any other requirements mentioned in this Grid Code shall,

a) Provide necessary assistance, supporting information or evidence to the STU/Transmission Licensee; and

b) Ensure attendance by such witnesses as the STU/Transmission Licensee may reasonably request.

(4) In respect of offers for modifications to the existing connections, the terms shall also take into account, the existing Connection Agreement.

(5) If the nature of complexity of the proposed development is such that the prescribed time limit for making the offer is not considered adequate, the STU/Transmission Licensee shall make a preliminary offer within the prescribed time limit indicating the extent of additional time required for more detailed analysis of the issues.

(6) All final offers (other than the preliminary offers) including revised offers shall remain valid for a minimum period of 60 (sixty) days from the date of issue of the offer. The STU/Transmission Licensee shall make a revised offer, upon request by a user, if necessitated by changes in data furnished earlier by the user.

(7) The user shall furnish the relevant detailed planning data to the STU/Transmission Licensee within thirty days of acceptance of an offer or such longer period as the STU/Transmission Licensee may agree in a particular case.

(8) Wherever the State Power Grid is connected with the Inter State Transmission System, the provisions of connection conditions of IEGC will prevail."

8. As extracted above, the licensee M/s CoPA and STU (here SBU-T of KSEB Ltd) can mutually discuss and finalise the connection points with the State Transmission System as per the provisions of the Grid Code and other rules and Regulations in force. The Commission once again clarify that, in the case of distribution licensees, separate approval of the Commission is not required for availing power at different points of the STU even for availing supply at the same voltage level. At the same time KSEB Ltd shall put in place proper accounting procedures to assess the coincident RMD of the contiguous area of supply based on time block wise metering data at different drawal points, for proper billing.

9. However, for getting approval of the proposed 110 kV substation at Vallarpadam and Puthuvypin area, M/s CoPA may note the following aspects in detail.

- (1) As per the Section 39(2)(b) of the EA-2003, the STU (SBU-T of KSEB Ltd) is responsible for the planning and co-ordination relating to intra-state transmission in the State of Kerala.
- (2) Ministry of Power, Government of India, vide its letter dated 01.09.2021 had requested all State Governments to hand over the 33kV system and above to the STU in a phased manner for better planning, loss reduction and increased system reliability.

Hence Commission hereby direct to M/s CoPA that, it shall file separate petition with DPR and other supporting documents as per the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 along with the recommendation of the STU including with detailed load flow studies for the construction of dedicated 110 kV system, before the Commission for getting approval. The Commission may after detailed appraisal as per the provisions of the EA-2003 and other relevant Rules, Regulations and prudent practices, take appropriate decision on the proposal.

The Commission further direct the STU that, it shall, as per Section 39 of the EA-2003, consider the electricity demand of requirements of all the small licenses of the State also while proposing the capital investment plan for the construction/ augmenting/ upgrading the transmission system of the State.

Order of the Commission

10. The Commission, after detailed examination of the petition filed by M/s CoPA, the comments of the respondent KSEB Ltd, the provisions of the Electricity Act,2003 and Kerala Electricity Supply Code 2014, KSERC(Terms and Conditions for Determination of Tariff) Regulations, 2021, Kerala State Electricity Grid Code, 2005, and other Rules, Regulations and prudent practices, hereby orders the following;

- (1) All the distribution licensees in the State can avail power supply through different points at same voltage levels/ different voltage levels, with STU as per the provisions of the Grid Code, 2005 and its amendment from time to time. Separate approval of the Commission is not required in such cases.
- (2) M/s CoPA shall file separate petition before the Commission, with DPR and other supporting documents as per the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021 along with the recommendation of the STU including detailed load flow studies, for the

construction of dedicated 110 kV system, duly considering the observation given in paragraph-9 of this Order.

The petition is disposed of. Ordered accordingly.

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Sd/-
T K Jose
Chairman

Approved for issue

Sd/-
C R Satheeshchandran
Secretary

Annexure 1

List of participants during the hearing

1. Shri. Jayaraj, CE, TRAC, KSEB Ltd.
2. Shri. M.P.Rajan, DY CE, TRAC, KSEB Ltd
3. Shri Rajesh AEE, TRAC, KSEB
4. Shri. V.Thuraipandian, Chief Mechanical Manager
5. Shri. R.S. Ajayakumar, Executive Engineer
6. Shri. Ajithkumar, Executive Engineer
7. Smt. S.Jayalakshmi, Assistant Executive Engineer
8. Shri.R.Rajendran,CGM(LPG),IOCL
9. Shri. T.Satheesh Kumar, Chief Manager, IOCL