

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

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

OP No 75/2022

In the matter of : Petition under Regulation 8 of the Kerala Electricity Supply Code, 2014 for enhancement of contract demand from 2900 kVA to 3600 kVA.

Petitioners : M/s Petronet LNG Limited

Respondent : 1) Kerala State Electricity Board Ltd (KSEB Ltd)
2) State Load Dispatch Centre (SLDC)
3) Cochin Port Authority (CoPA)

Petitioner represented by : Shri. Mithilesh Singh, GM(Maintenance)

KSEB Ltd represented by : Shri. M.P. Rajan, DY CE, TRAC, KSEB Ltd
Shri Rajesh AEE, TRAC, KSEB

M/s CoPA represented by : Shri. V.Thuraipandian, Chief Mechanical Manager

Date of hearing : 19.01.2023, 11:00 AM
Venue : e-hearing through video conferencing

Order dated 22.02.2023

1. M/s Petronet LNG Limited (hereinafter referred as PLL or Petitioner) on 08.11.2022 has filed a petition before the Commission with the following prayers:
 - “(a) The Hon'ble Commission may be pleased to direct the RESPONDENT NO. 1(KSEBL) to immediately enhance the contract demand of the Petitioner/Applicant to the extent of 3600 KVA subject to the Petitioner/applicant fulfilling the necessary procedures and formalities.*
 - “(b) That considering the national importance of the Petitioner/applicant's terminal, the Hon'ble Commission may kindly be pleased to waive-of the procedural requirements to facilitate the Respondent No. 1 to immediately process the application of Petitioner/Applicant for enhancement to 3600 KVA without any delay.”*
2. The Summary of the petition is given below;
 - (1) The petitioner, M/s Petronet LNG Limited is a company incorporated under the Companies Act 1956 and has one of its Liquefied Natural Gas

Terminal at Puthuvypin Kochi. The petitioner is also a co-developer of Puthuvypin SEZ along with M/s Cochin Port Trust Authority.

- (2) The petitioner, has been availing 2.9MVA power from KSEB Ltd at 11kV level, from its Njarakkal substation.
- (3) The petitioner submitted that, existing 11kV supply is insufficient due to the following;
 - (i) In order to achieve the National objective of “One Nation- One Gas Grid”, the existing cross country natural gas pipelines are being connected and strengthened, pursuant to this, the operations of the Kochi Terminal is expecting surge in demand in due course of time.
 - (ii) With the commissioning of Kochi-Mangalore cross country natural gas pipeline, the power demand of LNG terminal of the Petitioner has already increased, which shall further ramp-up with the connectivity of southern natural gas grid with the National natural gas grid. Based on the future demand, the petitioner requested the respondent KSEB Ltd for upgrading the existing 11kV supply from Njarakkal substation to 66kV from the nearest substation of KSEB Ltd.
 - (iii) For the future power requirement of Puthuvypin SEZ area, M/s CoPA propose to develop a 110 KV substation. However, it may take time to install the 110KV s/s, which will not align with the commissioning of Kochi- Bangalore cross-country natural gas pipeline.

As an interim measure, the petitioner approached KSEB Ltd to enhance the power from the existing contract demand of 2900 kVA to 3600 kVA vide its letter dated 17.08.2022. KSEB Ltd vide its letter dated 15.10.2022 confirmed the technical feasibility and availability of additional 700kVA power to the petitioner from KSEB Ltd's 66kV s/s at Njarakkal immediately upon receipt of approval from the Commission.

- (iv) The petitioner further submitted that, they are currently supplying natural gas to industrial consumers within and outside the State of Kerala as well as to the entire city gas distribution networks across the State. The enhancement in power demand will promote trade, commerce and industry in the State.

3. KSEB Ltd vide the submission dated 18.01.2023 submitted the following;

- (1) KSEB Ltd submitted that the petitioner M/s Petronet-LNG is a HT consumer of KSEB Ltd and comes under the Petro chemical industry. The tariff of the petitioner is under HT I(A) Industrial tariff for a contract demand of 2900kVA. The recorded maximum demand for the FY 2021-

22 is 2306 kVA. The power supply to the petitioner is fed through the 11kV feeder from 66kV Njarakkal substation of KSEB Ltd. The petitioner had requested to enhance the contract demand at 11kV from 2900 kVA to 3600 kVA.

- (2) The Regulation 8 of Kerala Electricity Supply code 2014 specifies the supply voltage levels for different connected loads or contract demands for new connections, or for gross connected load, or revision of contract demand consequent to revision of connected load or contract demand. The above regulation also states that the limit of contract demand may be exceeded with the approval of the commission.
- (3) M/s KSEB Ltd further submitted that the petitioner M/s Petronet has already submitted a request to KSEB Ltd to enhance the contract demand to 12.6MVA in 22.01.2021. M/s Petronet, also expressed their willingness to upgrade the existing single circuit 11kV KSEB Ltd supply to single circuit 66kV from nearest available KSEB Ltd substation.
- (4) KSEB Ltd further submitted that M/s CoPA had proposed to set up a 110kV substation at Vallarpadam/Puthuvypin to meet the increasing power requirements of the major stake holders. KSEB Ltd has accorded sanction for providing 110kV supply at Vallarpadam from 110kV Ernakulam North substation on deposit basis for an estimate amounting to Rs 64.71 Cr on 15.03.2022.
- (5) The petitioner is fed through a 11kV, 3x300 sqmm XLPE UG Cable having a current carrying capacity of 312A, from 66kV Njarakkal substation. The present maximum load recorded in the feeder is 189A. Further the voltage regulation calculated on the above feeder with the enhanced load of 3600KVA also was found to be within the limits.

Considering the above, KSEB Ltd vide its letter dated 15.10.2022 has intimated the feasibility to provide 700kVA additional power to M/s Petronet from 66kV substation Njarakkal, subject to the approval of the Commission.

- (6) KSEB Ltd further submitted that they are willing to provide supply to the consumer at 110kV supply for favour of catering the load requirement of 15.5MVA (2.9MVA existing +12.6MVA new requirement). The 110kV supply can be constructed from 110kV Ernakulam North substation or from the Njarakkal Substation (ongoing enhancement from 66kV to 110kV).
- (7) KSEB Ltd further submitted that the consumers availing voltages lower than the specified voltage levels in the Regulation 8 of the Supply code 2014 has to bear Low Voltage Supply Surcharge (LVSS) as per the Regulation 9 of the Supply Code 2014. But the Commission vide the tariff Order dated 25.06.2022 on petition OP No.11/2022 has specified the LVSS rates for LT Voltage level only.

4. The Commission admitted the petition as OP 75/2022. Shri. Mithilesh Singh, General Manager (Maintenance), Petronet, presented the matter on behalf of the Petitioner. Shri. Rajesh, Assistant Executive Engineer, presented the counter affidavit of the respondent KSEB Ltd. The summary of the deliberations during the hearing is given below.

- (1) M/s Petronet submitted that, the petitioner is a HT industrial consumer of KSEB Ltd and has been availing 2.9MVA at 11kV level, from its Njarakkal substation. The load of the consumer has marginally increased with the commissioning of Kochi-Mangalore cross country natural gas pipeline. For the future power requirement of Puthuvypin SEZ area, M/s CoPA propose to develop a 110 KV substation. However, it may take time to install the 110KV s/s, which will not align with the commissioning of the cross-country natural gas pipeline.

Hence, as an interim measure M/s Petronet requested for an additional 700kVA power from KSEB Ltd's 66kV substation at Njarakkal as per first proviso to Regulation 8 of the Supply Code, 2014. M/s Petronet further clarified that KSEB Ltd, providing them with this additional power will not in any manner unduly or improperly interfere with the efficient supply of electricity to any other consumer.

- (2) M/s CoPA submitted that they do not have any objection in KSEB Ltd supplying additional power to the account of 700kVA to Petronet.
- (3) KSEB Ltd submitted that as per Regulation 8 of Kerala Electricity Supply Code 2014, the maximum load that can be connected at 11kV is limited to 3 MVA. However, in exceptional cases, the maximum load limit can be increased up to 20% of the limit specified in Regulation 8 of the Supply Code, 2014 with the approval of this Commission.

KSEB Ltd further submitted that, as per Regulation 9 of the Kerala Electricity Supply Code 2014, the Low voltage supply surcharge is applicable to consumers availing supply at voltage lower than the one specified in Regulation 8 of the Supply Code. However, the Commission vide the tariff Order dated 25.06.2022, in petition OP No 11/2022, has approved low voltage supply surcharge to consumers who are required to avail supply at HT.

KSEB Ltd further submitted that, the power to M/s Petronet is fed through a 11kV, 3x300 sqmm XLPE UG Cable having a current carrying capacity of 312A, from 66kV Njarakkal substation. The present maximum load recorded is 189A on the said feeder. Further, the voltage regulation calculated on the above feeder with the enhanced load of 3600kVA also was found to be within the limits.

It was further submitted that, KSEBL vide letter dated 15.10.2022 has intimated the feasibility to provide 700kVA additional power to M/s

Petronet from 66kV substation Njarakkal, subject to the permission of the Commission.

M/s Petronet has already submitted a request to KSEB Ltd to enhance the contract demand to 12.6MVA and communicated their willingness to upgrade the existing single circuit 11kV KSEB Ltd supply to single circuit 66kV from nearest available KSEB Ltd substation.

Analysis and Decision of the Commission:

5. The Commission having examined in detail, the petition filed by M/s Petronet for enhancing the contract demand from 2900 kVA to 3600 kVA, the remarks of KSEB Ltd, the provisions of the Electricity Act,2003 and Kerala Electricity Supply Code, 2014, and other Rules and Regulations in force, decided on the subject matter as follows;
6. The only prayer of the petitioner is to permit them to enhance its contract demand at 11kV from 2900 kVA to 3600 kVA as per the first proviso to Regulation-8 of the Supply Code, 2014.
7. The Commission has examined the Regulation 8 of the Kerala Electricity Supply Code, 2014 (herein after referred as Supply Code, 2014). The relevant Regulation is extracted below for ready reference.

“8. Supply voltages for different connected loads or contract demands. - The supply voltage levels for different connected loads or contract demands for new connections or for gross connected load or contract demand consequent to revision of connected load or contract demand, shall be as follows: -

Supply voltage	Maximum connected load (for those without demand based metering)	Maximum contract demand (for those with demand based metering)
240 V(single phase)	5 kW	
415V(three phase)	100 kVA	100kVA
11 kV		3000 kVA
22kV		6000 kVA
33 kV		12000kVA
66 kV		20000kVA
110 kV		40000kVA
220 kV		>40000 kVA

Provided that the limit of connected load or contract demand specified for different supply voltage levels may be exceeded up to a maximum of twenty percent if supply at the appropriate higher voltage level is not feasible due to non-availability of distribution line at such higher voltage level in that area of supply:

Provided further that the limits of connected load or contract demand specified for different supply voltage levels as specified above may be exceeded in exceptional cases with the approval of the Commission, subject to the conditions stipulated in such approval. “

8. As extracted above, as per the Regulation-8, the maximum load that can be connected at 11 kV is limited to 3000 kVA only. However, as per the first proviso to Regulation 8 of the Supply Code, 2014, the **distribution licensee can exceed the load up to 20% of the limit specified under Regulation-8** if the licensee is convinced that the supply at the specified voltage level is not feasible due to the non-availability of distribution line at the specified voltage level in that area of supply.
9. In the instant case, the electricity requirement of the LNG Terminal of M/s Petronet at Puthuvypin, Kochi is being met by KSEB Ltd from its Njarakkal substation. M/s Petronet is availing 11 kV supply with a contract demand of 2900 kVA. The RMD during the year 2021-22 is 2306 kVA only as against the contract demand of 2900kVA.

The petitioner M/s Petronet submitted that, an additional power of 700kVA is required immediately for meeting the immediate increase in power requirement with the commissioning of the Kochi- Mangalore cross country natural pipe line and connectivity of 'natural gas grid with the National natural gas grid'.

The petitioner further submitted, as an interim measure, its immediate power requirement can be provided through the existing 11kV supply by enhancing the existing contract demand from 2900 kVA to 3600 kVA as per the 1st proviso to Regulation-8 of the Supply Code, 2014.

10. KSEB Ltd submitted that, the petitioner Petronet already applied for enhancing the contract demand from 2900 kVA to 3600 kVA.

KSEB Ltd further submitted that, the petitioner is fed through a 11kV, 3x300 sqmm XLPE UG Cable having a **current carrying capacity of 312A**, from 66kV Njarakkal substation. The present maximum load recorded **in the feeder is 189 A** against the maximum capacity of 312A. Further, the voltage regulation calculated on the above feeder with the enhanced load of 3600KVA also was found to be within the limits. Hence, KSEB Ltd vide its letter dated 15.10.2022 has intimated the feasibility to provide 700kVA additional power to M/s Petronet from 66kV substation Njarakkal, due to non-availability of distribution line of such higher voltage level in that area of supply, subject to the approval of the Commission.

11. The Commission has examined the request of the petitioner M/s Petronet and the comments of the respondent licensee KSEB Ltd. As per the first proviso to Regulation -8 of the Supply Code, 2014, KSEB Ltd can enhance the contract demand of the petitioner upto 20% of the limit of 3000kVA for supply at 11KV, provided the licensee KSEB Ltd is convinced that the supply at the specified

voltage level of 33KV is not feasible due to the non-availability of distribution line at such higher voltage level in that area of supply.

KSEB Ltd has intimated the feasibility to enhance the contract demand from 2900 kVA to 3600 kVA and also the non availability of distribution line to provide supply at the specified voltage level in that area of supply of the LNG Terminal of the petitioner at Puthuvypin, Kochi. **Hence the licensee KSEB Ltd can enhance the contract demand of the petitioner M/s Petronet LNG at Puthuvypin, Kochi from 2900 kVA up to 3600kVA as per first proviso to Regulation-8 of the Kerala Electricity Supply Code, 2014, without any reference or approval of the Commission.**

12. The Commission also examined the request of KSEB Ltd to approve low voltage supply surcharge at HT as per Regulation-9 of the Supply Code, 2014 to enhance the contract demand upto 20% above the limit of 3000kVA at 11kV HT supply.

The Commission noted that, as per the prevailing tariff Order dated 25.06.2022, the consumers are categorised as LT, HT, EHT-66kV, EHT 110 kV and EHT 220 kV based on the voltage level at which the supply is availed by the consumers.

But in the instant case, the petitioner Petronet is availing 11kV supply at HT category. As per the prevailing tariff Order dated 25.06.2022, the consumers availing supply at voltages 11000 volts, 22000 volts and 33000 volts are categorised under HT consumer. The tariff of HT consumers with the same purpose availing supply at HT with voltages 11000 volts, 22000 volts and 33000 volts are the same irrespective of their voltage level of supply. Hence, even if the petitioner avail supply at 33 kV also, its HT Industrial tariff remains the same irrespective of the change in voltage level and load limit. As per the methodology followed in the tariff Order, no low voltage supply surcharge is applicable in such cases. Also, KSEB Ltd has not filed any proposal to introduce low voltage supply surcharge at HT or EHT voltage levels as part of its tariff petition for the consideration of the Commission, following due procedure.

Considering the above, Commission rejects the request of KSEB Ltd to approve low voltage surcharge to the petitioner for enhancing the contract demand up to 3600 KVA.

Order of the Commission

13. The Commission after examining the petition filed by M/s Petronet for enhancing the contract demand from 2900 kVA to 3600 kVA, the comments of the KSEB Ltd, the provisions of the Electricity Act,2003, Kerala Electricity Supply Code, 2014 and other Rules and Regulations in force, hereby Orders the following;

- (1) KSEB Ltd can enhance the contract demand of the petitioner M/s Petronet at its LNG Terminal at Puthuvypin, Kochi from 2900kVA to 3600 KVA in compliance with the 1st proviso to Regulation-8 of the Kerala Electricity Supply Code, 2014. For complying the provisions of the Regulations in force by the licensees, separate approval of the Commission is not required.
- (2) The request of the KSEB Ltd to approve low voltage supply surcharge at HT voltage level for the petitioner M/s Petronet for allowing to enhance the contract demand up to 3600kVA is rejected due to the reasons given in paragraph-12 above.

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

List of participants

1. Shri. M.P.Rajan, DY CE, TRAC, KSEB Ltd
2. Shri Rajesh AEE, TRAC, KSEB
3. Shri. Mithilesh Singh, GM(Maintenance), Petronet
4. Dr. Vinay Narayan Paranjape, CGM & VP (Legal), Petronet
5. Shri. Yogananda Reddy, CGM & VP (Plant Head), Petronet
6. Shri. V.Thuraipandian, Chief Mechanical Manager
7. Shri. R.S. Ajayakumar, Executive Engineer
8. Shri. Ajithkumar, Executive Engineer
9. Smt. S. Jayalakshmi, Assistant Executive Engineer