

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

**Present: Shri.K.Vikraman Nair, Member
Shri.S.Venugopal, Member**

RP No.4/2017

In the matter of Review Petition filed by M/s Kochi Metro Rail Ltd on the order on the suo motu determination of tariff dated 17-04-2017

Petitioner : The Chairman and Managing Director
 Kochi Metro Rail Limited, 8th Floor , Revenue Tower,
 Park Avenue, Kochi 682011
 (represented by Sri. Rajendran.A.R, General Manager (KMRL)
 Sri.Paul Jasy Anter, Deputy General Manager)

Respondent : Kerala State Electricity Board Limited, Vydhyuthi Bhavan,
 Thiruvananthapuram
 (represented by Sri.Joseph V.K, Chief Engineer, Sri. Bipin
 Shankar, Deputy Chief Engineer (TRAC) and Sri. K.G.P
 Nampoothiri, Executive Engineer, TRAC)

Order dated 12.07.2017

1. M/s Kochi Metro Rail Corporation Limited (*hereinafter referred to as KMRL or petitioner*) on 23-5-2017 filed a petition for review of the Order of the Commission on the *suo-motu* determination of tariff dated 17-4-2017. The Commission considered the petition and admitted the same on 2-6-2017 as RP No.4/2017. The main prayers of the petitioner are (i) to classify all connected loads of traction, metro stations, maintenance depot etc. of the Kochi Metro Rail Ltd under Extra High Tension – KMRL (110kV) tariff (ii) allow HT II General A or LT VI (B) tariff instead of LT - VI General (C) tariff for the corporate and administrative offices located separately and (iii) commercial loads which are likely to come up in metro stations like ATM, kiosks, stalls, hotels etc, are to be separately metered and charged under a tariff category to be decided by the Commission and the said consumption is to be deducted from the main energy consumption metered at KMRL point of supply.

2. In the petition, M/s KMRL stated that the metro system is unique and is different from Indian railway system. Unlike the Indian railway system, metro system is integrated with various subsystems such as signalling, stations, controls etc., which cannot be separated. Hence there cannot be a separate tariff for KMRL stations like that of stations of Indian railways. Kochi Metro receives power at KMRL Muttom 110kV Receiving substation (RSS) from Kalamassery 220kV Substation of KSEB Ltd. which is step down to 33kV and distributed through 33 kV cable ring main network along the Metro route to provide power supply at Auxiliary Substation (ASS), Traction substations (TSS) and also to the maintenance depot and Operation Control Centre (OCC) at Muttom. At the metro stations, power is further step down to 750 V DC for traction power and 415 V AC three phase for train control, signalling, telecommunication, passenger information display, public address system, air-conditioning for technical equipment rooms, passenger amenities and Safety services namely, Fire detection and Suppression System, elevator, Escalator, Automatic fare Collection, lighting and Electrical Control and Protection systems etc. The above electrical loads in the metro stations are necessary for ensuring safe and reliable transport to the commuters.
3. The nerve centre Metro rail network is the Operation Control Centre (OCC), located inside the Muttom depot which controls the train operation through a computer server. Technical monitoring and control equipment are located in every station, which requires controlled atmospheric conditions through air conditioning system. In Kochi Metro, presently has 12 Traction sub-stations for the corridor length of 25.6 KM with 22 stations. These traction sub-stations, draws power from the 33kV cable network laid by KMRL. Each metro station is provided with an auxiliary sub-station. The auxiliary system consists of fire detection and suppression system, elevator, air conditioning arrangements, escalator, signalling equipment, automatic fare collection and electrical control and protection systems which are integral parts of Metro Rail Systems, and in-separable by design. Hence, segregation of the traction and station loads are operationally and logistically unfeasible.
4. Due to the unique design of electrical system, no electrical supply from KSEB Ltd or other Licensee can be availed in the Metro Stations separately, as all the LT supply for metro operations are fed through the auxiliary transformers in the Auxiliary Substations. Hence no provisions are made to avail individual LT/HT Supply from KSEB Ltd for Metro Stations. Separate service connection is also not feasible from

safety point of view. Hence, separate tariff for metro stations is not reasonable and hence KMRL requested to review the decision to allow separate tariff for metro stations.

5. Regarding commercial loads in the Stations, KMRL submitted that at present, metro stations are not been provided with any of the commercial loads like ATM, kiosks, stalls, hotels etc. It is reasonable that the loads under these category be metered separately and charged under separate category and above consumption shall be deducted from the main energy consumption metered at KMRL point of supply
6. Regarding the tariff of the offices of KMRL, it is stated in the petition that vide Order No.AEE1/HT Con code-25/5890/KSHB/15-16/2630 dated 02/11/2015, KSEB Ltd had allowed HT II General (A) tariff as the KMRL is a special purpose vehicle with equal participation of Kerala Govt. and Central Govt. However, in the Tariff order dated 17-4-2017, it was classified under LT VI(C) and HT II(B). KMRL requested that KMRL offices may please be allowed to be continue with the HT II General (A) tariff.
7. It was also argued that KMRL system and Railway system are totally different and same treatment cannot be applied. Indian railway network is powered by 25kV AC system whereas Kochi Metro Trains are provided with traction power at a voltage of 750V DC traction system, since the traction current is relatively high which requires Traction sub-stations at frequent intervals. The Receiving Substations and ASS-TSS Substations of KMRL are designed for un-manned operation. Metro Rail services are dedicated for urban public transport only whereas Indian railways cater to cargo transportation also. Stations of Indian Railway are approximately 10 or more Kilometre apart whereas the Kochi Metro Stations are very close with a distance of upto 650 Mts and thus the electrical supply is distributed to Metro station through 33KV ring main cables. The electrical network of Indian Railway and Metros are of totally different and the tariff fixed for Indian railway stations cannot be extended to KMRL Metro stations.
8. On receiving the petition, the Commission issued notice to KSEB Limited and a press release was issued for the information of the public. Public hearing on the petition was held on 27-6-2017 at the office of the Commission.

Public hearing on the Petition

9. In the public hearing the Shri. Rajendran, A.R, General Manager, KMRL made a detailed presentation on the KRML system. He stated that KMRL is following energy efficient, measures such as LED lighting, V3F technology, utilisation of braking energy, VRF controlled air conditioners etc., The total connected load of Aluva-Palarivattom stretch is 23.5MW and the traction load is about 63.79% ie., 15000kW in 6 stations. The auxiliary loads in 11 stations, depot and receiving stations consists of 32.94% (7745.38 kW). The balance is the commercial connected loads about 70kW in each station ie., 770kW in 11 stations (3.27% of the connected load). An estimate of energy consumption so far shows that 64% is for traction and 36% is for auxiliary loads.

10. Shri. Rajendran also presented the examples of Delhi Metro rail Corporation (DMRC), Bangalore Metro Rail Corporation Limited (BMRCL) and Chennai Metro Rail Limited. In the case of DMRC, the existing commercial loads are extended through power supply arrangements of DMRC constructed at the cost of DMRC. Electricity for commercial purposes (kiosk, shops, ATM etc., at metro stations) is metered and billed by DMRC prevailing existing commercial tariff and the difference between commercial tariff and metro tariff is calculated and paid to DISCOM after retaining 7.5% and 9% respectively in the case of 66kV and 110 kV connections. In the case of BMRCL, there is single tariff for traction and non traction loads (BMRCL tariff). The commercial loads are fed from auxiliary transformer at the Stations and are metered by the distribution licensee. The bill is an integrated bill containing the demand charges for the recorded demand and the energy charges having two components ie., traction and commercial. The distribution of monthly bill to the commercial loads is carried out by BMRCL. In the case of Chennai Metro, TNERC has allowed HT1B tariff to CMRL for the mixed load of auxiliary and traction. The consumption of commercial loads in Kiosks, ATM ec, are separately metered and charged under miscellaneous category and the consumption is deducted from the main energy consumption metered at CMRL point of supply.

11. Based on the above, KMRL requested to allow EHT 110kV KMRL tariff for traction and auxiliary loads and also the backup supply provided at 33kV. The corporate and administrative offices located separately are to be categorised under HT II general and LT VI(B) tariff applicable to offices of State/Central Govt considering the fact that KMRL is a SPV formed with equal

participation by Government of India and Government of Kerala. The Commercial loads may be separately metered and billed under the prevailing tariff ordered by Commission and the consumption thereof may be deducted from the main energy consumption at the point of supply of KMRL.

12. KSEBL had furnished a written reply on the petition of M/s KMRL. Shri. Bipin Shankar, Deputy Chief Engineer representing KSEB Ltd stated that after the enactment of the Electricity Act 2003, Commission is empowered to determine the tariff for electricity in the State and accordingly, the Commission has issued tariff order and tariff schedule effective from 18-4-2017 for retail supply after following the due procedure. In the said tariff schedule, traction load of KMRL is given separate tariff under 110kV and offices of KMRL including stations were assigned LTVI (C) and HT II(B) tariff. Further as per Section 62(4), the tariff determined shall not be modified more than once in a financial year except for fuel surcharge recovery. Any change in tariff will affect the recovery of revenue envisaged in the ARR. Hence KSEB Ltd requested to reject the request of KMRL. In the case of commercial load, KSEB Ltd stated that the commercial loads at the Stations of KMRL may be separately metered at a point and the consumption recorded is charged at applicable LT commercial tariff and the same being deducted from the main energy consumption metered at Muttom at 110kV level. Similarly, the station loads shall also be separately metered and billed at LT VI C tariff in the similar manner. KSEB Ltd also raised the issues relating to grievance redressal mechanism for the commercial consumers of KMRL at the Stations in case of disputes. In reply KMRL stated that such disputes can be settled by KMRL themselves.

13. KSEB Ltd was sought one week time for furnishing the reply to the additional submissions made by KMRL during the hearing, which was allowed. However, no further reply was furnished by KSEB Ltd.

Analysis an decision of the Commission

14. In the Review petition, KMRL had sought to review the decision of the Commission in assigning separate tariff for traction and Station loads of KMRL and also requested to change the tariff for offices of KMRL from LT VI (C)/HT II(B) to LT VI (B)/HTII (A), on the reason that KMRL is established by State and Central

Government and hence eligible for tariff of offices of Government. Another prayer was in relation to the metering and billing of commercial loads at the Stations.

15. The Commission has considered the submissions of KMRL and KSEB Ltd carefully. As per the provisions of Section 94(1)(f), the Commission has been vested with the powers for reviewing its decisions, directions and orders as in the Code of Civil Procedure 1908. Accordingly, clause 67(1) of KSERC (Conduct of Business) Regulations, 2003 provides that:

67. Powers of Review-(1) Any person or party affected by a decision, direction or order of the Commission may within forty five days from the date of making such decision, direction or order apply for the review of the same.

(2) An application for such review shall be filed in the same manner as a petition under chapter III of these regulations.

(3) The Commission may after scrutiny of the application, review such decisions, directions or orders and pass such appropriate orders as the Commission deems fit within forty five days from the date of filing of such application.

Provided that the Commission may at its discretion, afford the person or party who filed the application for review, an opportunity of being heard and in such cases the Commission may pass appropriate orders as the Commission deems fit within thirty days from the date of final hearing.

Provided further that where the application for review cannot be disposed of within the periods as stipulated, the Commission shall record the reasons for the additional time taken for disposal of the same.

16. The application and the scope of the review of an Order are circumscribed under Order 47, Rule 1, of Code of Civil Procedure, 1908. The review power, under the aforesaid provision is reproduced as below: -

“Application for review of judgment – (1) Any person considering himself aggrieved –

(a) by a decree or order from which an appeal is allowed, but from which no appeal has been preferred; or

(b) by a decree or order from which no appeal is allowed; or

(c) by a decision on a reference from a Court of Small Causes, and who, from the discovery of new and important matter of evidence which, after the exercise of due diligence, was not within his knowledge or could not be produced by him at the time when the decree was passed or order made, or on account of some mistake or error apparent on the face of the record, or for any other sufficient reason, desires to obtain a review of the decree passed or order made against him, may apply for a review of judgment of the Court which passed the decree or made the order”.

17. The review jurisdiction is a limited power to be exercised when new facts which could not be produced at the time of the order or any apparent error on the face of record are brought to the notice of the Commission. In this context, KSEB Ltd in their reply stated that the review sought by KMRL is to be rejected on account of the provision of Section 62(4) that tariff shall not be revised more than once in a financial year. However, the Commission is of the view that the said provision is not applicable in the present context.

18. In the tariff order dated 17-4-2017, the Commission has allowed the separate tariff for the traction load of KMRL at 110kV, after considering the request of KMRL during the hearing and the objections and comments of stakeholders thereof. The offices and metro stations of KMRL was assigned the tariff of LT VI (C) similar to that of Indian Railways. However, in the present review petition, KMRL has requested to review the decision of the Commission assigning traction tariff and station tariff separately citing technical and other limitations, which was not brought before the Commission in the original proceedings. Accordingly, it is within the scheme of the provisions of law to review the tariff determined for KMRL. KMRL has furnished that the auxiliary loads at the stations such as train control, signalling, telecommunication, passenger information display, public address system, air-conditioning for technical equipment rooms, passenger amenities and Safety services namely, Fire detection and Suppression System, elevator, Escalator, Automatic fare Collection, lighting and Electrical Control and Protection systems etc., which are fed at 415 V three phase from the auxiliary subsystem connected to the ring main of 33kV network of KMRL which are integral part of metro system and is inseparable by design. KMRL has also cited examples of BMRCL, DMRC and CMRL where mixed loads of traction and stations are treated together. In this context, KSEB Ltd had suggested to separate the station load and traction load for tariff purposed. The Commission notes that as per the details furnished by KMRL

and the practices being followed in the metro systems elsewhere, there is no requirement to separate station/auxiliary loads. Hence, traction tariff of KMRL at 110 kV is made applicable to both traction load and the auxiliary loads including station load. Further, the traction tariff is also applicable to the backup supply provided by KSEB Ltd to KMRL at 33kV level.

19. Regarding the commercial loads that may come up in the metro stations in future, as suggested by KMRL and concurred by KSEB Ltd, the same is to be supplied from the auxiliary transformer at the Stations of KMRL and is to be separately metered at one point by KSEB Ltd at each station. The energy consumption of the commercial loads at all stations is to be deducted from the total energy recorded at the KMRL point of supply at Muttam. KSEB Ltd shall issue a single bill consisting of two energy charges – one at LT VII A tariff for the total commercial consumption and the other for net traction energy at the energy charges of KMRL traction tariff. The demand charges shall be for the billing demand i.e., the recorded maximum demand or 75% of the contract demand whichever is higher at the KMRL traction point of supply. KMRL may in turn charge the individual commercial consumers at the stations at the applicable LT VII A tariff for both fixed and energy charges. Any disputes of such consumers shall be addressed by KMRL promptly and such consumers also have the right to approach the grievance redressal mechanism available at present.
20. KMRL has requested to allow LT VI (B)/ HT II(B) tariff for the offices of KMRL located separately. As per the Tariff order effective from 18-4-2017, LT VI (B) tariff is applicable to offices and institutions under State or Central Government or Local Self Government institutions. Since KMRL is formed as a special purpose vehicle with equal participation of the State Government and Central Government, it is just and reasonable to allow the LT VI (B)/ HTII(A) tariff for the offices of KMRL.
21. Accordingly, in the schedule of Tariff and Terms and Conditions for Retail Supply of Electricity by KSEBL and other licensees with effect from 18-4-2017 to 31-3-2018, the words '*offices of KMRL including railway stations*' under item (vi) of LT VI General (C) tariff is hereby deleted.

Orders of the Commission

22. Having considered the review petition filed by KMRL and the reply furnished by KSEB Ltd the Commission has decided as follows:

- a. Having considered the details furnished by KMRL, the traction supply is allowed to be extended to feed the auxiliary loads such as stations, train control, signalling, telecommunication, passenger information display, public address system, ticketing, air-conditioning for technical equipment rooms, passenger amenities and Safety services etc. at the stations. Accordingly there is no separate tariff for the metro stations of KMRL. The said traction tariff is also applicable to backup supply provided by KSEB Ltd.
- b. The Offices of the KMRL shall be charged under LT VI (B) /HT II (A) tariff.
- c. The commercial loads at the Stations of KMRL are to be metered at one point at each station by KSEB Ltd and the total energy consumption of such commercial loads shall be billed at the applicable energy charges of LT VII A tariff. The consumption of commercial loads is to be deducted from the total consumption recorded at KMRL point of supply at Muttom for billing the traction load. A single bill for the traction load is to be issued along with charges for commercial consumption as above.
- d. KMRL shall charge the commercial loads in the stations separately at the applicable LT VII A tariff for both fixed and energy charges.
- e. The schedule of Tariff and Terms and Conditions for Retail Supply of Electricity by KSEBL and other licensees with effect from 18-4-2017 to 31-3-2018, is amended as stated in para 21.

23. The petition is disposed of. Ordered accordingly.

Sd/-
K.Vikraman Nair
Member

Sd/-
S.Venugopal
Member

Approved for issue

Sd/-
Santhosh Kumar.K.B
Secretary