

**BEFORE THE HONOURABLE KERALA STATE ELECTRICITY
REGULATORY COMMISSION**

IN THE MATTER OF: KSEB petition No. OP No. 2 of 2013 on ARR, ERC and Tariff petition for the year 2013-14. Additional submission on Tariff Recategorisation, proposals for Transmission Charges, Wheeling Charges, Cross subsidy surcharge of Open Access Consumers-reg

And

IN THE MATTER OF: Kerala State Electricity Board
Vydyuthi Bhavanam, Pattom,
Thiruvananthapuram - 695 004

The petitioner named above respectfully submits as under:

1. KSEB vide the petition dated 02-01-2013 had filed the ARR, ERC and Tariff petition for the year 2013-14 before the Hon'ble Commission for approval. Hon'ble Commission vide the letter No. 59/CT/2013/KSERC/59 dated 11-01-2013 has directed KSEB to file the following additional proposals.
 - (1) Proposals for re-categorization of different categories of consumers.
 - (2) Proposals for Transmission Charges, Wheeling Charges, Cross subsidy surcharges for Open access consumers.

As directed by the Hon'ble Commission, KSEB may submit the following proposals for the kind consideration of the Hon'ble Commission.

- I. **Proposals for re-categorisation of consumers.**
2. KSEB submits the following proposals for re-categorization before the Hon'ble Commission for approval.
 - (i) **Cost Accountants, Management consultancy:**

At present, the tariff for similar activities including offices of Advocates, Chartered Accounts, Tax consultants, Architects, Company Secretary/ Consulting Engineers etc. are categorized under LT-VI (B) tariff. Considering the similar nature of activities of the Cost Accountants, Management Consultants etc, KSEB may request to include the offices of the 'Cost Accountants and Management Consultants' under LT-VI (B) category.

(ii) **Village offices**

At present, the offices and institutions under State/Central Government, Corporations, Boards under State/Central Government/Local bodies etc. are categorized under LT VI (B) Tariff. The tariff for the offices of tax collecting departments under State/Central Government (other than local bodies) is categorized under LT VI (C) Tariff. Generally, village offices are categorized under LT-VI(B) category. However, there are doubts from the field offices on the tariff applicable to village offices. Hence, KSEB may request before the Hon'ble Commission to include the village offices also specifically under LT-VI(B).

(iv) **Treasuries**

At present, the tariff category for offices of tax collecting departments under State/Central Government (other than local bodies) is categorized under LT VI (C) Tariff. Field offices are raising doubts on the tariff applicable to treasuries. Hence KSEB request before the Honorable Commission to include Treasuries under LT VI(C) category.

(v) **E-toilets / Public Comfort Stations**

At present E-toilets are not included in the existing tariff categorization. Considering the nature of activities, 'e-toilets' may be categorized under LT-VI (B) category.

(vi) **Gymnasium :**

At present Gymnasium upto 2 KW are included in LT I(b) category and above 2 KW are included under LT VII(C) category. Considering the nature of activities, KSEB requests to include the Gymnasium under LT-VII(C) irrespective of the connected load.

(vii) **Software training centers and other related commercial activities under HT category**

The software training centers and other related activities under LT categories now categorized under LT-VI(B), however no such re-categorization is now available for consumers having HT Supply and hence all the 'activities related to software development, software training centers etc' under HT are now categorized under HT-I Industrial tariff.

Hence KSEB may request that, the software development units approved by a Government agency shall be billed under HT-I industrial category. However, 'software training units and other related activities under HT may be categorized under HT-IV Commercial tariff.

- (viii) **Cinema dubbing and animation studios, Centre for Hall marking of gold under HT category**
KSEB requests before the Honourable Commission to include Cinema dubbing and animation studios, Centre for Hall marking of gold etc under HT supply as HT-IV Commercial category .
- (ix) **Cinema dubbing and animation studios, Centre for Hall marking of gold under LT category**
KSEB requests before the Honourable Commission to include Cinema dubbing and animation studios under LT supply as LT-VII(C) category. The Centre for Hall marking of gold under LT may be categorized under LT-VII(A) commercial category.
- (x) **Show rooms, display outlets of automobiles**
KSEB requests before the Honourable Commission to include show rooms, display outlets and service stations of automobiles under HT-IV Commercial category .
- (xi) **Ornamental fish breeding and bird breeding**
Honourable Commission vide tariff order dated 25.07.2012 has ordered to include ornamental fish breeding under LT Commercial category. KSEB requests before the Honourable Commission to extend the same to HT category also.
- (xii) **Private Hospitals, Private clinical testing laboratories, Private consultancy Clinics.**
KSEB requests before the Honourable Commission to include private clinical testing laboratories private hospitals and private consultancy clinics under LT categories from LT-VI(B) category to LT-VII (A) category.
- (xiii) **Kerala State Beverages Corporations (KSBC) sale outlets**
KSEB requests before the Honourable Commission to include KSBC sale outlets under LT-VII A Commercial category.
- (xiv) **High Mast lamps**
KSEB request that, metered supply shall be mandatory for High Mast Lamps.
- (xv) **Premises of Kudumbasree units and self help groups**
KSEB requests before the Honourable Commission to include premises of Kudumbasree units and self help groups recognized by the Government under LT-1(a) domestic category.
- (xvi) **IT/ITES Units, Government IT Parks, certified private IT Parks and Akshaya -e-Centres**
State Government has informed that, as per the paragraph 11.2.1 of IT policy 2012, "IT/ITES Units, Government IT Parks,

Certified private IT Parks and Akshaya e-Centres are entitled to power tariff under HT I or LT IV tariff as applicable'. Government vide letter dated 06.12.2012 has requested that, the IT/ITES Units, Government IT Parks, certified private IT Parks and Akshaya e-centers shall be categorized under HT-I or LT-IV tariffs according of the voltage level of supply.

(xvii) Ksheera Co-operative societies- may be included under LT-IV Industrial category.

(xviii) Minimum contract demand for LT-IV Industrial consumers

Hon'ble Commission vide the order dated 25th July-2012 on petition OP No. 23 of 2012 has ordered that, ToD tariff shall be made mandatory for all LT industrial consumers with connected load 20 kW and above, with effect from 01-01-2013. Accordingly, KSEB has been taking steps to introduce ToD tariff for all LT-IV consumers with connected load above 20 KW and requested all such industrial consumers to disclose their contract demand. However, in order to avoid revenue loss on account of shifting the consumers to ToD tariff and also to avoid mis-use of the connected load/contract demand, KSEB request that the minimum contract demand for LT-IV industrial consumers under ToD tariff may be fixed as 16kVA.

(xix) Tariff applicable to Advertising Boards and Hoarding etc.

It is noticed that, many consumers has being utilising electricity for lighting external advertisements, external hoardings and displays at department stores, malls, multiplexes, theatres, clubs, hotels etc and prevailing tariff applicable is LT-VII(A) commercial categories. Though the Hon'ble Commission vide the interim order dated 9th October-2012 on OP No. 38/2012 has ordered that, power from the grid shall not be used for Display Lighting, hoarding, external illumination of buildings and other publicity and sales - promotion purposes, such consumers has been using electricity for such purposes. Legally, KSEB could not avoid power connection to such consumers also. Hence, KSEB may propose higher tariff compared to LT-VII(A) for the electricity used for 'Display Lighting, hoarding, external illumination of buildings and other publicity and sales - promotion purposes etc'. The proposed rate is given below.

Fixed charges (Rs./connection/Month)	500
Energy Charge (Rs./unit)	12.50

Note: The electricity used for the purpose of indicating/displaying the name and other details of the shops or Commercial premises, for which electric supply is rendered, shall be covered under the prevailing Tariff of such shops or commercial premises.

II. Proposals for Transmission Charges, Wheeling Charges, Cross subsidy surcharge for Open Access consumers.

3. As directed by the Hon'ble Commission, the proposal for transmission charges, wheeling charges and cross subsidy surcharge of open access consumers is detailed below.
4. As per the methodology prescribed in the Model Terms and Conditions of Intra-State Open Access Regulations September 2010, the transmission charges / wheeling charges is to be approved at Rs/MW/day basis, based on the contracted capacity, scheduled drawal or actual drawal, which ever is higher. However, Hon'ble Commission has been approving the transmission and wheeling charges on per unit basis, based on the ARR estimated for transmission and distribution functions. KSEB has estimated the transmission charges and wheeling charges for the year 2013-14 based on the methodology adopted by the Hon'ble Commission for the year 2012-13.
- (i) Transmission Charges**
5. The transmission charges payable for the year 2013-14 by the open access consumers is arrived based on the following.

- (a) The total ARR of the transmission function for the year 2013-14 as per the Table-8.55 of the ARR&ERC petition for the year 2013-14 is Rs 806.78 crore.
- (b) The transmission losses in the KSEB system upto 66 kV level is estimated as 5.0%.
- (c) The net energy input into the KSEB system for the year 2013-14 is taken as 21656.72 MU (Table 7-23 of the ARR).

The transmission charges arrived for the year 2013-14 based on the same methodology adopted by the Hon'ble Commission for the year 2012-13 is given in the Table below.

Table-1.

Transmission charges payable by open access consumers for the year 2013-14

(1)	ARR for Transmission (Table-8-55 of the ARR & ERC petition)	806.78	Rs. Cr
(2)	Energy input into the System (Table 7-23 of the ARR)	21656.72	MU
(3)	Transmission loss (5%)	1082.836	MU
(4)	Net energy available for sale to Distribution = (2)-(3)	20573.88	MU
(5)	Transmission charges payable for the year 2013-14= (1)/(4)	<u>0.39</u>	<u>Rs/unit</u>

(ii) Wheeling charges

6. The total ARR of the distribution functional area estimated for the year 2013-14 is Rs 2756.04 crore (excluding cost of power purchase). As per the methodology recommended by the FOIR vide the Model Terms and Conditions of Intra-State Open Access Regulations September 2010, the entire distribution ARR excluding 'the cost of power purchase and transmission charges payable to the STU' is to be considered for computing the wheeling charges. However, vide the order dated 25-07-2012 on Petition No. OP No. 23 of 2012, Hon'ble Commission split the total ARR of the distribution into HT and LT based on the value of the net work as 25% : 75%.
7. However, the actual value of the distribution assets upto 11kV system and between 11 kV and up to Low voltage system is yet to be segregated. Any under estimation of the value of the distribution assets above 11 KV may ultimately burden the LT consumers. Considering the above, KSEB proposes to adopt the 50% of the total distribution ARR as the ARR for the distribution system above 11 kV. Further distribution losses upto 11 KV is assumed as 10%. Based on the above, wheeling charges for the year 2013-14 is estimated as Rs 0.82 per unit. The details are given below.

Table-2

Calculation of Wheeling charges payable by the open access consumers for the year 2013-14

(1)	ARR for Distribution (Table 8-55 of the ARR)	2756.04	Rs. Cr
(2)	ARR for 11/ 33 kV (50% of the total distribution expense)	1378.02	Rs. Cr
(3)	Energy input into the System (Table 7-23 of the ARR)	21656.72	MU
(4)	Consumption by EHT consumers (including bulk licensees and railway traction)	1992.55	MU
(5)	Transmission loss	1082.836	MU
(6)	Energy carried by 33/ 11kV = (3)-(4)-(5)	18581.33	MU
(7)	Loss in the 11 kV/ 22 kV / 33 kV system (10%)	1858.133	MU
(8)	Net energy carried by 33/22/11 kV = (6)-(7)	16723.2	MU
(9)	Wheeling charges payable = (2)/(8)	0.82	Rs/unit

(iii) Surcharge payable by the open access consumers

8. The surcharge payable by the open access consumers has computed based on the methodology prescribed under paragraph-8.5 of the Tariff Policy., which is reproduced below.

Surcharge formula:

$$S = T - [C (1 + L / 100) + D]$$

Where

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power ;
D is the Wheeling charge ;
L is the system Losses for the applicable voltage level, expressed as a percentage

9. The weighted average power purchase costs of top 5% power, excluding the liquid fuel based generation and renewable power is detailed below.

Table-3.
Computation of Weighted average cost of top 5% power purchase for the year 2013-14

Source	Energy Produced /Purchased	Fixed Cost	Incentive, Tax, etc.	Total Variable cost	Total Cost	Avg. Tariff
	MU	Rs. Cr	Rs. Cr	Rs. Cr	Rs. Cr	(Rs/ kWh)
MAPS	128.55	26.19	0.49	0.00	26.68	2.08
RSPTS Stage I & II	2359.28	150.05	14.39	368.05	532.49	2.26
TALCHER - Stage II	3113.74	238.11	11.38	467.06	716.55	2.30
NLC-II- Stage-1	388.54	24.12	7.56	76.15	107.83	2.78
NLC-II- Stage-2	553.31	35.07	13.43	108.45	156.95	2.84
KAIGA Stg II	225.05	67.64		0.00	67.64	3.01
KAIGA Stg I	242.74	72.95	1.49	0.00	74.44	3.07
NLC - II Exp	293.93	35.27		58.79	94.06	3.20
Kudamkulam	1376.79	447.46		0.00	447.46	3.25
Kahalgon	59.18	5.03		14.38	19.41	3.28
Talcher-I	65.58	5.57		15.93	21.51	3.28
Farakka STP	113.48	9.65		27.58	37.22	3.28
Vallur JV with	187.58	28.14		37.52	65.65	3.50
Tuticurin JV	82.08	12.31		16.42	28.73	3.50
Simhadri Exp	609.87	104.09		113.44	217.53	3.57
NLC- Exp- Stage-1	436.32	59.07	28.05	78.10	165.22	3.79
Traders- Firm arrangements made						
PTC (June-2013 to May-2014)	584.00					4.17
PTC (June-2013 to May-2014)	584.00					4.27
Sub total (CGS)	11404.03	1320.72	76.79	1381.86	2779.37	
5% pf the power purchase	570.20					
Weighted average cost for the top 5% power purchase (Rs/kWh)	4.27					

Note: All the sources of power purchase including traders having firm contracts to supply power to KSEB has been considered for arriving the cost of power purchase for top 5% margin (excluding liquid fuel stations and renewable power).

10. As detailed above, the cost of power purchase for the top 5.00% of the power purchase for the year 2013-14 is Rs 4.27 per unit, i.e., the

cost of power purchase arrangements made through M/s PTC for the period from June-2013 to May-2014. Based on the above, the cross subsidy surcharge for EHT-1 66 kV, EHT-II 110 Kv, HT-1 Industry, Railways and HT-IV commercial is arrived and details are given below.

Table-4
Cross subsidy surcharge payable by the open access consumers

Category	Average tariff	Weighted average cost of power purchase (C)	System Losses 'L'	Transmission charges/ Wheeling charges (D)	C (1+L/100)+D	Surcharge applicable
	(Rs/ kWh)	(Rs/ kWh)	(%)	(Rs/kWh)	(Rs/kWh)	(Rs/ kWh)
EHT-66 kV	5.88	4.27	5.00	0.39	4.87	1.01
EHT-110 kV	5.77	4.27	5.00	0.39	4.87	0.90
Railways	6.06	4.27	5.00	0.39	4.87	1.19
HT-1 Industrial	6.15	4.27	10.0	0.82	5.52	0.63
HT-II Non commercial	6.77	4.27	10.0	0.82	5.52	1.25
HT-IV commercial	9.09	4.27	10.0	0.82	5.52	3.57

11. As detailed above, based on the ARR&ERC petition for the year 2013-14 and tariff proposals, the transmission charges, wheeling charges and cross subsidy surcharge payable by the open access consumers for the year 2013-14 is summarized below.

- (1) Transmission charges - Rs 0.39 per unit
- (2) Wheeling charges - Rs 0.82 per unit
- (3) Cross subsidy surcharge
 - (i) EHT- 66 kV - Rs 1.01 per unit
 - (ii) EHT- 110 kV - Rs 0.90 per unit
 - (iii) Railways - Rs 1.19 per unit
 - (iv) HT-1 Industrial - Rs 0.63 per unit
 - (v) HT-II Non industrial - Rs 1.25 per unit
 - (vi) HT-IV commercial - Rs 3.57 per unit

Prayer

In continuation of the KSEB petition dated 02-01-2013 on ARR, ERC and tariff petition, KSEB may prays before the Hon'ble Commission to approve:

- (1) The tariff re-categorization proposals as detailed above.
- (2) The Transmission charges, wheeling charges and cross subsidy surcharge applicable to the open access consumers for the year 2013-14.

Chief Engineer (Commercial & Tariff)