

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Present: Shri. T.M.Manoharan, Chairman
Shri. S. Venugopal, Member
Shri. K.Vikraman Nair, Member

Original Petition. No.13/2016

In the matter of petition filed by K S E B Ltd. for revision of cross subsidy surcharge and imposing additional surcharge for open access consumers

Petitioner : KSEB Ltd, Vydyuthi Bhavanam
Pattom, Thiruvananthapuram.
Represented by
: Sri. Bipin Sankar, Deputy CE, TRAC, KSEB Ltd
Sri. K G P Namboothiri, EE, TRAC, KSEB Ltd
Smt.Rajashree Sreedharan, AEE, TRAC, KSEB Ltd
Smt. Seema P Nair, AE, TRAC, KSEB Ltd
Sri Anoop M, SA, TRAC, KSEB Ltd

Order dated 14.3.2017

1. KSEB Ltd has, on 09-08-2016, filed a petition before the Commission for determination of cross subsidy for the year 2016-17 and additional surcharge for the year 2015-16 and 2016-17. The prayers of the petition are,

“

- (a) *Admit the petition for determination of cross subsidy surcharge and additional surcharge payable by open access consumers availing power through open access.*
- (b) *Allow the cross subsidy surcharge as specified in the table 2 above in compliance with National Tariff Policy 2016*
- (c) *Allow the additional surcharge as detailed under Annexure V and VI, consumer wise, for the year 2015-16 and for the period from April to July 2016.*
- (d) *May pass such further orders as this Honourable Commission may deem just and proper in the circumstances of the case.”*

2. KSEBL submitted that the National Tariff Policy 2016 (Clause 8.5.2) prescribe the formula for determining the cross subsidy surcharge and that under Section 42 of the Electricity Act -2003, the State Commission is empowered to determine the cross subsidy surcharge and additional surcharge for open access consumers. KSEB Ltd also submitted that Kerala State Electricity Regulatory Commission (KSERC) has, while approving the tariff for the years 2012-13, 2013-14 and 2014-15, adopted the formula prescribed in the Tariff Policy 2006, for determining the cross subsidy surcharge. Central Government has, vide resolution No 23/2/2005-R&R (Vol-IX) dated the 28th January, 2016, notified the tariff Policy, 2016. KSEB Ltd in its submission has adopted the formula prescribed in the National Tariff Policy 2016, for approval of the cross subsidy surcharge. Further, KSEB Ltd calculated the additional surcharge for each individual consumers of KSEB Ltd, who had availed open access using the transmission and distribution system of KSEB Ltd.
3. KSEBL submitted that at present there is no cross subsidy surcharge for the HT & EHT consumers. This has resulted in considerable financial loss to KSEBL, on account of:
 - i. *The absence of cross subsidy component that could have been recovered from these consumers when they avail power through open access.*
 - ii. *The under recovery of fixed charges, to be paid by KSEBL, for the stranded capacity due to open access by its consumers.*
4. The cross subsidy surcharges proposed by KSEB Ltd for various categories of consumers are given below.

Particulars	Proposed by KSEBL (Rs / kWh)
EHT 66 kV	1.16
EHT 110 kV	1.12
EHT 220 kV	1.59
EHT General	1.60
EHT commercial	Not proposed
Railways	Not proposed
HT-1(A) Industrial	1.27
HT-1(B) Industrial	1.50
HT II General(A)	1.34
HT II General(B)	1.67
HT III Agriculture (A)	1.26
HT III Agriculture (B)	0.70
HT-IV commercial	1.86
HT V Domestic	1.55

5. In the petition KSEBL submitted that;

- (1) The open access consumers draw power through open access whenever the price in the short-term market is favourable to them compared to their prevailing tariff. Hence KSEBL cannot forecast the exact quantum of energy wheeled by them.
- (2) The schedule on day-ahead basis by open access consumers has jeopardized the power purchase plan of the utility substantially. KSEBL is forced to surrender power contracted on long-term basis. This results in revenue loss, which ultimately burdens the other consumers.
- (3) During the year 2015-16, twelve embedded consumers of KSEBL had drawn power through open access where as in 2016-17 fourteen consumers had availed this facility. In 2015-16, the total open access drawal was 142.00 MU and the same during 2016-17 is 119.45 MU up to July 2016. Correspondingly, KSEBL had to surrender 123.76 MU and 99.81 MU already contracted with generators/ traders from outside the State. The additional liability incurred by KSEB Ltd by way of open access availed by the embedded consumers was Rs.16.13 crore and Rs.15.83 crore respectively in 2015-16 and 2016-17.
- (4) The loss sustained by KSEBL on account of Open Access benefit provided to the respective consumers has to be compensated by allowing additional surcharge.
- (5) The open access customers are high end consumers, the reduction in energy sale due to open access increases the cross subsidy burden of KSEBL and subsequent tariff increase to other consumers.
- (6) Under the universal supply obligation under section-43 of the Electricity Act, 2003, KSEBL have to make long term Power Purchase Agreements (PPAs) with the generators to ensure the supply of power keeping in view the annual increase in the load. For this, KSEBL have to bear fixed cost even when there is no off take of energy.
- (7) The demand estimated within the State is also inclusive of the consumption by open access customers. The power procurement plan of KSEBL is fixed on the basis of the requirement assessed for the year as a whole.
- (8) Considering the number of open access consumers and the fluctuation of their open access energy drawal, the computation of stranded cost incurred by KSEBL due to the universal supply obligation would be very difficult on case to case basis. Since the quantum of power surrendered everyday due to open access is not uniform, power surrendered everyday is not from a specific plant and therefore the fixed cost associated is

also different. KSEBL has made calculations for the year 2015-16 and 2016-17 based on actual open access and surrender and proportionate rates are arrived for each consumer.

- (9) Methodology adopted for the calculation is as below:
- Consumer wise surrender on monthly basis.
 - Source wise corresponding surrender of power from each station against open access.
 - For the year 2015-16 the effective fixed cost of each station was calculated based on the actual fixed charges of each station during the year 2015-16 and the energy received from the corresponding station. For the year 2016-17 the effective fixed cost of each station was arrived on the basis of annual fixed charges of each station for the year 2016-17 and the energy expected to be availed at the Kerala periphery at normative plant availability factor.
 - Proportionate total fixed cost commitment of each consumer is then calculated based on the quantum of power that had to be surrendered, from each source, due to open access by that consumer.
6. The petition was admitted as OP 13/16 and published in the web site of the Commission. As directed by the Commission, the licensee also published the petition at its website. A public hearing on the petition was conducted on 8.12.2016 at the office of the Commission.
7. During the public hearing, Sri Bipin Sankar, Deputy Chief Engineer, TRAC, KSEB Ltd presented the petition on behalf of KSEB Ltd. KSEB Ltd presented the details as per the petition filed on 9-8-2016. KSEB Ltd further submitted that, the additional surcharge as proposed in the petition may be approved for the year 2015-16 and 2016-17. It was further submitted that the additional surcharge proposed in the petition is not the exact amount of the fixed cost liability of the stranded capacity on account of open access availed by the embedded consumers due to the following;
- Time fluctuation of energy drawal by open access consumers.
 - The quantum of power surrendered everyday due to open access is not uniform.
 - Power surrendered everyday is not from a specific plant and hence the fixed cost of the stranded capacity on account of providing open access is different.

Considering these reasons, there is difficulty in arriving at the additional surcharge as per the Regulation 41 of the Open Access

Regulation 2013. KSEB Ltd therefore appealed before the Commission that,

- (i) The Regulation 41 of the KSERC (Connectivity and Inter State Open Access) Regulation, 2013 may be modified.
- (ii) Determine the 'additional surcharge' on per unit basis.

8. Sri. A R Satheesh, President, the Kerala HT and EHT Electricity Industrial Consumers' Association (hereinafter referred to as HT&EHT Association) presented the views on behalf of the association, as follows:

- (1) KSEB Ltd has made a factually incorrect statement in para 1.3 of its Petition in stating that "at present there is no CSS for the HT and EHT consumers". KSEB Ltd in its own Petition (Annexure I) has detailed the applicable CSS to different HT and EHT categories.
- (2) The revised formula for determining the CSS is yet to be notified by the Commission.
- (3) The cross subsidy surcharge or additional surcharge approved, if any, can be levied from prospective date only.
- (4) Paying open access charges with retrospective effect will be against natural justice.
- (5) All the open access consumers are embedded consumers and hence fixed charge is recovered through demand charges.
- (6) As per tariff policy 2016, discriminatory power has been conferred on State Electricity Regulatory Commissions for deciding the cross subsidy limit.
- (7) As per 8.5.1 of the NTP-2016,
"The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access"
- (8) Regulatory Commissions of Himachal Pradesh and Bihar have modified the formula given in tariff policy 2016.
- (9) KSEB Ltd has not provided any documentary evidence to prove that the quantum of power surrendered is on account of the open access availed by open access consumers.
- (10) KSEB Ltd also availed power from power exchanges during the period when it had surrendered contracted power on long term basis.
- (11) KSEB Ltd also is drawing power under UI mechanism, which is an indication of requirement of power over and above the scheduled quantum.
- (12) During the months of May'15, June'15, July'15, October'15, November'15, December'15, January'16 and February'16, the energy surrendered by KSEB Ltd is exactly equal to the quantum of Open Access Power availed by the Open Access consumers in Kerala
- (13) In Kerala, with substantial quantum of Hydel capacity, it is quite possible to reduce Hydel generation and manage the situation without surrendering a single unit.

9. The HT & EHT Electricity Industrial Consumers' Association, further requested the Commission to direct KSEB Ltd to submit the following information to verify the claim made by KSEB Ltd for additional surcharge.
- a. *Total contracted capacity in MW.*
 - b. *Hourly availability declared by the generator in MW.*
 - c. *Hourly schedules given by the Petitioner in MW.*
 - d. *Hourly schedules of Open Access transactions by the Open Access consumers in MW.*
 - e. *List of Power Purchases under Bilateral contracts, long term contracts, and Medium term contracts with all relevant details such as Price, Quantum and Period for the period considered for calculation of Additional Surcharge.*
 - f. *Details of all the Generators with their average PLF during the period under consideration.*
 - g. *Data regarding backing down due to distribution & transmission constraints.*
 - h. *Details of energy banked and return banked energy received for each 15 minute time block for whole year.*
 - i. *Details of stranded power for each 15 min time block for whole year.*
 - j. *Total fixed charges paid by the Petitioner for each station.*
 - k. *Total Transmission Charges paid by the Petitioner.*
 - l. *Total energy scheduled by the Petitioner in MU.*
 - m. *Total energy consumed by the Open Access consumers from KSEB Ltd. in MU.*
 - n. *Total demand charges paid by the HT/EHT consumers and total sale of energy to the HT/EHT consumers.*
 - o. *Total demand charges paid by the Open Access consumers having contracted demand with KSEB Ltd.*
10. Sri. P Suresh, Secretary, Kerala News Print Employees Union (CITU), Hindustan News Print Ltd had submitted in the hearing that CSS and additional surcharge as claimed by KSEB Ltd might not be approved. Availing power through open access helped them improving the financials of the company. Imposing CSS and additional surcharge will adversely affect the industries that avail cheaper power through open access.
11. Sri Ghana Shyam Nair, Chief Executive Officer, Sud-Chemie had, in the hearing, submitted that the State of Kerala is not an industrialized state. Many industries are on the verge of close down and increase in electricity charges may further deteriorate their financial position. The Commission may also consider the proposed industrial policy of the Government of Kerala before finalizing the CSS and additional surcharge.
12. The Chairman, Kerala State Electricity Regulatory Commission stated that the open access is a right conferred to the consumers by Electricity Act 2003. The

Commission is duty bound to act as per the provisions of the Electricity Act-2003, and its own regulations. The Chairman also explained the provisions in the Tariff Policy, 2016 regarding the determination of the cross subsidy surcharge and additional surcharge and directed KSEB Ltd to re-verify the data and calculation submitted by it, with special reference to the data provided in Annexure-IV in the petition. The Member (Finance) of the Commission has stated that, the calculation of the computation of additional surcharge was not logical and not backed by actual figures and KSEB Ltd failed to demonstrate the actual loss sustained by the licensee on account of open access availed by the embedded consumers. Member (Engineering) also stated that, the calculation of the additional surcharge is not based on the provisions in the Open Access Regulation, 2013. The Commission directed KSEB Ltd to provide detailed calculation on the additional surcharge claimed. In view of the above facts, the Commission had, in the daily order dated 13.12.2016 directed as follows, -

(i) KSEB Ltd may submit the revised calculation on additional surcharge, as per the provisions of the Electricity Act-2003, Tariff Policy 2016 and Open Access Regulation, 2013, latest by 22nd December-2016. A copy of the same may be provided to the HT&EHT Association.

(ii) The HT&EHT Association and other stakeholders may also submit their written comments if any on the subject petition, on or before 31st December 2016, with copy to KSEB Ltd.

13. In compliance of the daily order dated 13.12.2016, KSEB Ltd submitted revised calculation on cross subsidy surcharge and additional surcharge vide its letter dated 23.12.2016. KSEB Ltd submitted as follows:

(1) While submitting the original petition, KSEB Ltd had calculated cross subsidy surcharge only considering the weighted average cost of power purchase, which did not include the cost of generation and cost of intrastate transmission. Accordingly, the average cost of power purchase in the original petition was Rs 2.74/unit only. After accounting the cost of generation and intra-state transmission charges, the average cost of power purchase is worked out as Rs 4.01/unit. Based on the revised cost of power purchase, the cross subsidy surcharges proposed by KSEB Ltd for various categories of consumers are given below.

Category	Surcharge applicable (S)
	(Rs/ kWh)
EHT- Industrial 66 kV	1.15
EHT- Industrial 110 kV	0.97
EHT- Industrial 220 kV	1.59
EHT General	1.60
HT-1(A) Industrial	1.16
HT1(B) Industrial	1.50
HT II General(A)	1.34
HT II General(B)	1.67
HT III Agriculture (A)	1.11
HT III Agriculture (B)	-0.88
HT-IV commercial	1.86
HT V Domestic	1.55

- (2) The fixed charge under retail tariff is on account of cost incurred to maintain the distribution infrastructure created for distributing electricity to different categories of consumers. However, for calculation of stranded cost for the purpose of additional surcharge, it is considered that the utility has surrendered the power by way of availing open access by the embedded consumers. However, KSEB Ltd has to pay the fixed cost for the surrendered power to generator, from where KSEB Ltd contracted power. Open access consumers are under obligation to make payment to the DISCOMs in the form of Additional Surcharge as provided under Section 42 of the Electricity Act 2003. The fixed charges paid to KSEBL by Open Access consumers mainly cover the fixed cost of distribution infrastructure and not the fixed cost of power purchase.
- (3) The consolidation of the block wise drawal and surrender details in support of the claim on additional surcharge is under process and will be submitted within two weeks.
- (4) The determination of additional surcharge on case to case basis is difficult. Various State Electricity Regulatory Commissions have repealed their regulations for determining the additional surcharge on a case to case basis. Rajasthan Electricity Regulatory Commission has repealed the open access Regulations which provide the determination of additional surcharge on case to case basis, on 27.01.2016.
14. The KSEB Ltd did not submit any further details. No further submissions were received from HT & EHT association also.

Analysis and decision

15. The Commission has examined the claims of KSEB Ltd as submitted in the petition dated 09.08.2016, in the public hearing dated 08.12.2016 and the additional submissions as per letter dated 23.12.2016. The Commission has also examined the written statement of defence submitted by the HT&EHT Association and the submissions made during the hearing.
16. The major statutory provisions on levy of cross subsidy and additional surcharge are furnished below:
- (i) Provisions in the Electricity Act -2003: The following provisions of the Electricity Act-2003 deals with open access and related issues.
- (a) *2(47) “ open access” means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;*
 - (b) *Section 38 (2)(d) of the Electricity Act-2003 (on allowing open access through inter-state transmission system) ;*
 - (c) *Section 39(2)(d) (ii) of the Electricity Act-2003 (on allowing open access through intra-state transmission system).*

*Provided also that such surcharge may be levied till such time
39(2) The functions of the State Transmission Utility shall be -*

.....

(d) to provide non-discriminatory open access to its transmission system for use by-

.....

(ii) any consumer as and when such open access is provided by the State Commission under sub-section (2) of section 42, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission:

Provided that such surcharge shall be utilised for the purpose of meeting the requirement of current level cross-subsidy:

Provided further that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:

Provided also that the manner of payment and utilisation of the surcharge shall be specified by the State Commission.

Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use.

(d) *Section -40 (c) (on providing open access through the transmission system of a transmission system of a transmission licensee).*

(e) *Section -42 (2) of the Electricity Act-2003*

“The State Commission shall introduce open access in such phases and subject to such conditions, (including the cross subsidies, and other operational constraints) as may be specified within one year of the appointed date by it and in specifying the extent of open access in successive phases and in determining the charges for wheeling, it shall have due regard to all relevant factors including such cross subsidies, and other operational constraints:

Provided that such open access shall be allowed on payment of a surcharge in addition to the charges for wheeling as may be determined by the State Commission:

Provided further that such surcharge shall be utilised to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee:

Provided also that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:

Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use:

17. The Commission, has notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 vide the notification dated 14th November-2014. The Regulation-90 of Tariff Regulation, 2014 deals with Cross subsidy surcharge. The relevant portion of the Regulation is extracted below for ready reference.

“90. Cross subsidy surcharge.- (1) *The consumers who are permitted open access through the transmission network of the transmission business/licensee and/or the distribution network of the distribution business/licensee shall pay to the distribution business/licensee in whose area the consumer is located, a cross subsidy surcharge as per the formula specified in the Annexure-XI to these Regulations.*

(2) *The cross subsidy surcharge shall be levied in the manner specified with the Kerala State Electricity Regulatory Commission (Connectivity and Intra state Open Access) Regulations, 2013, as amended from time to time.”*

As per the Annexure-XI to the Regulations, the Commission has specified the formula for determining the cross subsidy surcharge as prescribed in the Tariff Policy-2006. The Commission is bound to adopt the provisions of the Tariff Regulations, 2014 for determining the tariff including cross subsidy surcharge since the year 2015-16, till the provisions of the Tariff Regulations, 2014 are amended by the Commission.

18. The Commission has been following the surcharge formula prescribed in the Tariff Policy 2006, for approving the cross subsidy surcharge in the previous tariff orders for the years 2012-13, 2013-14 and 2014-15. The surcharge formula as per the Tariff Policy-2006 is extracted 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

As detailed above, the tariff ‘T’, weighted average cost of power purchase ‘C’, wheeling charge ‘D’ and the system losses at the applicable voltages level are the basic input to determine the surcharge as per the above formula prescribed in the Tariff policy 2006. All these input parameters were being adopted by the Commission after verifying the data submitted by KSEB Ltd for the respective years. Since the KSEB Ltd has not filed any application for determination of

tariff for the years 2015-16, 2016-17 and 2017-18 and not submitted the necessary and sufficient data for determination of cross subsidy surcharge, the Commission is not able to determine the cross subsidy surcharge.

19. In compliance of the statutory provisions in the Electricity Act-2003 and the provisions in Tariff Policy, 2006, the Commission has been approving the cross subsidy surcharge along with the tariff order since the year 2012-13. The details are given below.

- (i) After a long gap of ten years since October-2002, the Commission vide the order dated 25th July 2002 in OP No. 23 of 2012 had revised the electricity tariff in the State w.e.f 1st July-2012. The paragraph 156 to 162 of the tariff order for the year deals with determination of cross surcharge for the open access consumers of the State. The abstract of the cross subsidy surcharge approved for the year 2012-13 is given below.

Category	Cross subsidy surcharge for the year 2012-13 (Rs/ kWh)
EHT- 66kV	0.11
EHT- 110kV	0.00
Railways	0.24
HT-1 Industry	0.00
HT-II General	0.49
HT-IV Commercial	2.55

- (ii) Subsequently, the Commission vide the order dated 30th April-2013 in petition OP No. 2 of 2013 had approved the tariff order for the year 2013-14 w.e.f 01-05-2013. The Commission vide the paragraphs 8.134 to 8.141 of the tariff order had approved the cross subsidy surcharge for the year 2013-14. The abstract of the cross subsidy surcharge approved for the year 2013-14 is given below.

Category	Cross subsidy surcharge for the year 2013-14 (Rs/ kWh)
EHT- 66kV	0.00
EHT- 110kV	0.00
EHT-220 kV	0.52
Railways	0.23
HT-1 Industry	0.00
HT-II Non Industrial	0.84
HT-IV Commercial	2.61

- (iii) For the financial year 2014-15, as part of the determining tariff, the Commission vide the order dated 30th September-2014 in OP 9/2014 had approved the cross subsidy surcharge for the year 2014-15. The abstract of the cross subsidy surcharge approved for the year 2014-15 is given below.

Category	Cross subsidy surcharge for the year 2014-15 (Rs/ kWh)
EHT- 66kV	0.00
EHT- 110kV	0.00
EHT-220 kV	0.52
EHT-General	1.80
EHT-Commercial	2.10
Railways	0.00
HT-1 Industry (A)	0.00
HT-1 Industry (B)	0.50
HT-II General (A)	0.10
HT-II General (B)	1.80
HT-III Agriculture (A)	0.00
HT-III Agriculture (B)	0.00
HT-IV Commercial	2.30
HT V Domestic	0.00

As detailed above, the Commission had been approving the cross subsidy surcharges as part of the tariff order of the financial years 2012-13, 2013-14 and 2014-15.

20. For the year 2015-16, KSEB Ltd had not filed the application for determination of tariff with relevant details as per the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. Further, KSEB Ltd had also not filed any application for determination of 2016-17 and 2017-18. However, the Commission through its various orders has been extending the validity of the tariff approved vide the orders dated 14-8-2014, 25-09-2014 and 30-09-2014 for the year 2014-15, till 31-03-2017. Accordingly, the cross subsidy surcharge approved by the Commission vide the order dated 30-09-2014 in OP No. 9 of 2014 is in force in the State till 31.03.2017.
21. In the meanwhile, the Central Government vide the notification dated 28th January-2016 has revised the Tariff policy and notified the revised Tariff Policy-2016. Para 8.5 dealing with cross-subsidy surcharge and additional

surcharge for open access and the surcharge formula as per the Tariff Policy 2016 are extracted below.

“8.5 Cross-subsidy surcharge and additional surcharge for open access

8.5.1 National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of

(a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation;

(b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC;

(c) transmission, distribution and wheeling charges up to the relevant voltage level; and

d) per unit cost of carrying regulatory assets, if applicable.”

Surcharge formula:

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

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.”

It is noticed that there are some modifications in the surcharge formula stipulated in the Tariff policy-2016 when compared to the surcharge formula in Tariff policy, 2006.

22. The Commission has already taken steps to amend the surcharge formula specified under Annexure-XI to Tariff Regulations, 2014 with the revised formula as stipulated in the Tariff Policy-2016. The draft amendment proposed in the Tariff Regulations, 2014 has already been published in the website of the Commission, and the public hearing on the same has been concluded. The Commission is in the process of notifying the amendment to the Annexure-XI in the Tariff Regulations, 2014 on surcharge formula. The Commission can adopt the surcharge formula as per the Tariff Policy, 2016 after the same is adopted under Annexure-XI to the Tariff Regulations 2014.
23. In the petition, KSEB Ltd has also submitted that,
‘At present there is no cross subsidy surcharge for the HT & EHT consumers. This has resulted in considerable financial loss to KSEBL, on account of:
 - (i) *The absence of cross subsidy component that could have been recovered from these consumers when they avail power through open access.*
 - (ii) *The under recovery of fixed charges, to be paid by KSEBL, for the stranded capacity due to open access by its consumers.’*
24. The Commission as part of the tariff orders for the years 2012-13, 2013-14 and 2014-15, had approved and notified the cross subsidy surcharge for the respective years along with tariff orders of the respective years as explained in paragraph 19 above. Since KSEB Ltd had not filed any application for determination of tariff for the financial years 2015-16, 2016-17 and 2017-18, the Commission has been extending the validity of the tariff orders dated

14.08.2014, 25-09-2014 and 30-09-2014 in OP No. 9/2014 and the said orders are in force till 31-03-2017. Thus, the cross subsidy surcharge determined by the Commission vide the order dated 30-09-2014 in petition OP No. 9/2014 is prevailing in the State as on date. KSEB Ltd has not filed any application for determination of tariff for the financial years 2015-16, 2016-17 and 2017-18 as mandated in the Tariff Regulations, 2014 read with the statutory provisions in Sections 62 and 64 of the Electricity Act, 2003. KSEB Ltd has also not submitted relevant data required for the above financial years to be applied in the cross subsidy surcharge formula.

25. Para 8.5 of the Tariff Policy, 2016, gives the following detailed guidelines for assessment of the cross subsidy surcharge and additional surcharge.
- i. The cross subsidy surcharge and additional surcharge levied from the open access consumers should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.
 - ii. The open access consumer shall pay cross subsidy surcharge in addition to the wheeling charges and transmission charges.
 - iii. Cross subsidy surcharge should be determined in such a manner that it compensates the loss of revenue sustained by distribution licensee and the competition through open access is not constrained. While protecting the interests of the distribution licensee, it should be ensured that open access is introduced in a time bound manner.
 - iv. A consumer will avail of open access only if the payment of all charges leads to a benefit to him.
 - v. The cross subsidy surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.
 - vi. SERCs should calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as an aggregate of, -
 - (a) Per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation.
 - (b) Transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC.
 - (c) Transmission, distribution and wheeling charges up to the relevant voltage level.
 - (d) Per unit cost of carrying regulatory asset if applicable.
26. KSEB Ltd has not submitted reliable data relating to the items mentioned in clauses (a) to (d) above. In the petition KSEB Ltd had assumed the average pooled power purchase cost 'C' is taken as Rs 2.74 /unit. Subsequently, based

on a clarification raised by the Commission during the public hearing held on 8.12.2016, KSEB Ltd vide its letter dated 23.12.2016 has submitted that the average cost of power purchase 'C' as Rs 4.01/per unit. Further, KSEB Ltd has also assumed other parameters 'T', 'L' 'D' and 'R' for the year 2016-17, in the surcharge formula as their own, without the approval of the Commission. KSEB Ltd has also not submitted any supporting documents for arriving at such parameters for the year 2016-17. The Commission cannot approve the cross subsidy surcharge based on the arbitrary data submitted by KSEB Ltd without substantiating documentary evidences.

27. The sub-section (4) of Section 42 of the Electricity Act-2003 provides for additional surcharge on open access consumers. The relevant section is extracted below.

“(4) Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply.”

28. The paragraph 8.5.4 of the Tariff Policy 2016 deals with additional surcharge to be claimed by the distribution licensees as per the section 42(4) of the Electricity Act-2003. The said para 8.5.4 is extracted below.

“8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.”

The same provision was existing in paragraph 8.5.4 of the Tariff Policy, 2006 also.

29. Regulation-41 of the KSERC (Connectivity and Intrastate Open Access) Regulations, 2013, (herein after referred as Open Access Regulation, 2013) deals with additional surcharge. The regulation 41 of the Open Access Regulation, 2013 is extracted below.

“41. Additional surcharge.- (1) *An open access customer, receiving supply of electricity from a person other than the distribution licensee of his area of supply, shall pay to the distribution licensee an additional surcharge on the charges of wheeling, in addition to wheeling charges and surcharge, to meet the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act.*

(2) The additional surcharge for obligation to supply shall become applicable only if it is conclusively demonstrated that the obligation of the licensee in terms of existing power purchase commitments has been and continues to be stranded or there is unavoidable obligation and incidence to bear fixed costs consequent to such a contract.

(3) The distribution licensee, whose consumer intends to avail open access, shall submit to the Commission within fifteen days of receipt of application, a detailed calculation statement of fixed cost which the licensee is incurring towards his obligation to supply.

(4) The Commission shall scrutinize the statement of calculation of such fixed cost submitted by the distribution licensee and obtain objections, if any, from the open access customer and determine the amount of additional surcharge.

(5) The additional surcharge shall be levied for such period as the Commission may determine.”

30. KSEB Ltd has submitted a computation of the additional surcharge for each individual embedded open access consumer separately for the year 2015-16 and 2016-17. The amount of additional surcharge proposed for each individual consumer ranges from Rs 1.39 lakh to Rs 331.7 lakh for the year 2015-16 and Rs 12.19 lakh to Rs 240.90 lakh for the year 2016-17. The licensee proposed to levy the additional surcharge retrospectively from the financial year 2015-16.
31. As per the details submitted by KSEB Ltd., the computation of additional surcharge is not logical and not substantiated by actual figures. KSEB Ltd has failed to demonstrate the actual loss, if any, sustained by it on account of payment of fixed charges for the stranded capacity consequent to the open access availed by the embedded consumers. The Commission vide the daily order dated 13-12-2016 had directed the licensee to submit the revised calculation of additional surcharge as per the provisions of the Electricity Act, 2003, Tariff Policy 2016 and Open Access Regulation, 2013, latest by 22nd December-2016. Though the licensee vide the letter dated 23-12-2016 has

submitted the explanation on the computation of additional surcharge, the revised calculation of additional surcharge has not been submitted before the Commission. Without sufficient details on actual loss, if any, sustained by KSEB Ltd by way of payment of capacity charges for the stranded capacity consequent to availing of open access by the embedded consumers, the Commission cannot approve the additional surcharge as per the section 42(4) of the Electricity Act-2003 and paragraph 8.5.4 of the Tariff policy.

32. With regard to the claim for the loss sustained by KSEB Ltd on account of payment of capacity charges for the stranded capacity consequent to availing of open access by the embedded consumers, it has to be noted that the embedded consumers pay the full demand charges as per their agreement with the licensee. Further as pointed out in para 8.5.4 of the Tariff Policy, 2016 the fixed costs related to network assets are recovered through transmission charges and wheeling charges. Therefore, additional surcharge cannot be approved by the Commission until and unless the licensee conclusively proves with substantiating documents that it has sustained loss on account of payment of capacity charges for the stranded capacity consequent to availing of open access by the embedded consumers.
33. Further, the parameter T in the cross subsidy surcharge formula is the tariff payable by relevant category of consumers including reflecting the renewable purchase obligation. The parameter C is the per unit weighted average cost of power purchase by the licensee including the meeting of the renewable purchase obligation. The parameter D is the aggregate of transmission, distribution, wheeling charges applicable to the relevant voltage level. The parameter L is the aggregate of transmission, distribution and commercial losses applicable to the relevant voltage level. The parameter R is per unit cost of carrying the regulatory asset. All these parameters can be determined only in the process for determination of tariff. In the absence of tariff and other parameters applicable to relevant financial years it would not be possible to compute the cross subsidy surcharge. As already explained KSEB Ltd has not submitted the application for determination of tariff for the financial years 2015-16, 2016-17 and 2017-18. KSEB Ltd cannot be allowed to assume the value of such parameters on account of its own lapses to submit application for determination of tariff and to claim cross subsidy surcharge and additional surcharge based on such assumed figures. Further, in the letter dated 27.7.2016 submitted in reply to the notice dated 22.06.2016 issued by the Commission initiating the suo motu proceedings for determination of tariff, KSEB Ltd has submitted that it does not propose any tariff revision and it

requires only continuance of tariff orders dated 14.08.2014, 25.9.2014 and 30.9.2014.

Order of the Commission

34. In view of the facts and circumstances explained above, it is found that KSEB Ltd has not submitted proper application with sufficient data to substantiate its claims for cross subsidy surcharge and additional surcharge as proposed by it in its application dated 9.8.2016 and revised submission dated 23.12.2016. Therefore the prayers of the petitioner cannot be granted and the petition is dismissed.

Sd/-
K.Vikraman Nair
Member

Sd/-
S Venugopal,
Member

Sd/-
T.M.Manoharan,
Chairman

Approved for Issue

Santhosh Kumar. K.B
Secretary