

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

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

RP. No.01/2017

In the matter of : Review Petition filed by HT&EHT Association in the order dated 17.04.2017 on determination of open access charges for embedded open access consumers.

Petitioner : The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association,
Productivity House, Jawarharlal Nehru Road,
Kalamassery-683102, Ernakulam District, Kerala

Represented by : Sri. A.R.Satheesh, President, HT & EHT Association & others

Respondent : Kerala State Electricity Board Ltd,
Vydyuthi Bhavanam,
Pattom, Thiruvananthapuram-695 004.

Represented by : Sri. Bipin Sankar P, Deputy CE, TRAC, KSEBL
Sri. K G P Nampoothiri, EE, TRAC, KSEBL

Order dated 26.07.2017

1. The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association (hereinafter referred as HT & EHT association), on 21.04.2017, has filed a review on the order dated 17.04.2017 in the suo-motu proceedings on determination of tariff, regarding determination of open access charges for embedded open access consumers.
2. The main issues raised by the HT&EHT association are summarised below.

' Power Purchase Cost

As per NTP 2016, in the formula for CSS (Cross Subsidy Surcharge), 'C' is defined as

“C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable”
Since C is the weighted average cost of power purchase, the cost of own generation may be exclude while computing ‘C’.

Cross Subsidy Surcharge

The Commission has determined the CSS in two stages. Initially, CSS for the consumers who opt out of the system of SBU-D of KSEBL has been determined by the Commission vide para.14.87 and the average tariff for each tariff was considered as “T” for computing the CSS. The CSS has been determined by calculating the surcharge as per formula, calculating surcharge considering 20% of average tariff and then fixing CSS as lower of the two.

The CSS for embedded consumers has been determined separately vide para.14.88 considering the fact that embedded Open Access consumers are paying full demand charges for the whole month including the power sourced through open access. Energy charge for each category has been considered as “T”. The CSS has been determined by calculating the surcharge as per formula, surcharge limit considering 20% of energy charge and then fixing CSS as lower of the two. As per this methodology, the embedded consumers are getting a relief of only 20% of the demand charges paid, whereas embedded consumers are eligible for exemption of 100% demand charges part.

The surcharge as per formula for embedded consumers has got reduced by 48 paise per unit (161-113) for EHT-1 Category and 70 paise per unit (173-103) for EHT-2 category. The differences are exactly equal to the demand charges part paid by embedded Open Access consumers. Hence the petitioner request the Hon’ble Commission to revise the CSS by reducing the demand charge component from the CSS determined for opted out consumers.

If CSS for embedded consumers is reworked as proposed above, CSS for EHT-3, EHT-G, HT-IIA, HT-IV and HT-V will get revised to zero. The petitioner pointed out that the above category of consumers are not availing Open Access facility in Kerala. Hence there would not be any loss of revenue for KSEBL on this account.

Validity

The petitioner requested to revise the Open access charges effective from 20.04.2017 only, on the reason that, the tariff order 2017-18 was published at the website of the Commission on 18.04.2017 after 11.30am.

3. The petitioner filed an amendment to the original petition through email on 23.05.2017. Subsequently, the petitioner filed the amended petition on 25.05.2017. The additional issues raised in the amended petition is summarised below.

“ The transmission loss is equally applicable to power drawn from the licensee and power drawn under Open Access. Hence, the incentive and penalty should be applicable to both power drawn from licensee as well as power drawn under Open Access. But KSEBL has been allowing the incentive to power drawn from licensee only. There is no logical reason for denying the incentive for the power drawn under Open Access.

As per Clause 31(5-XII) of Kerala Electricity supply code 2014 cross subsidy surcharge payable by Open access consumers is a part of “Charges payable for supply of Electricity”. Accordingly, power factor incentive is applicable to the CSS levied to the consumers.

Hon’ APTEL vide the judgment dated 14th November 2013 in Appeal No. 231 of 2012 has decided that,

‘ The very purpose to provide higher power factor rebate is to encourage the consumer to maintain high power factor and to minimize the system losses. Any loss before the meter installed at consumer’s premises is on account of the distribution licensee. In order to reduce these losses, the State Commission has incentivized high power factor based on pure technical and engineering principle. It has nothing to do with the source of power. Accordingly, power factor rebate is payable to the consumer who also avails open access.’

The additional prayers of the petition are:

- (1) Extend power factor incentive to the power sourced through open access also.
- (2) Allow the power factor incentives on charges collected from consumers towards cross subsidy surcharge.

4. KSEB Ltd filed its counter affidavit against the original petition on 24.05.2017. The issues raised in the counter affidavit are summarised below.

- (i) The petition filed by HT&EHT association is for reviewing the open access charges determined by Commission in the suo-motu tariff order dated 17-4-2017. The review under Civil Procedure Code is permissible only on the following grounds. (a) Discovery of new and important matter or evidence which after exercise of due diligence was not in the knowledge of the applicant and could not be produced by him at the time when decree or order was passed. (b) Some mistake or error apparent on the face of the record. There has been no discovery of new and important matter and the argument raised by the petitioner cannot be treated as an error in the order of Commission dated 17.04.2017. Hence KSEB Ltd submitted that, the instant petition filed by HT&EHT association is not maintainable.
- (ii) The Commission vide the notification dated 20th March 2017 amended the KSERC(Terms and Conditions for Determination of Tariff) Regulations, 2014 to incorporate the modifications in the formula for cross subsidy surcharge as stipulated in the Tariff Policy, 2016 after conducting detailed deliberations and inviting suggestions

from all stakeholders including the petitioner. Hon'ble Commission in the suo-motu tariff order dated 17-4-2017 has adopted the formula stipulated in the Tariff Policy, 2016 and KSERC (Terms and Conditions for determination of Tariff) Amendment Regulations, 2017 for determining cross subsidy surcharge applicable for open access consumers .

KSEB Ltd is the State Transmission Utility (STU) and the distribution licensee, which also owns generation assets, in the state of Kerala. As per the Second Transfer Scheme notified by the Government under Section 131 of the Electricity Act, 2003, the activities of the company are being carried out through Strategic Business Units (SBUs) for each of the functions of generation, transmission and distribution. The total energy requirements of the State are being met by KSEB Ltd from the hydel stations owned and operated by it, power purchase from Central Generating Stations (CGS), power purchases from the IPPs in the State, the traders and from the energy exchanges. Therefore the cost of power purchase for SBU-D includes the cost of power procurement from SBU-G and from CGS, IPPs, trades, short term market etc. Accordingly, the per unit weighted average cost of power purchase by the Licensee shall include the cost of generation also.

The inclusion of cost of generation in the definition of 'Power Purchase cost' is affirmed by Hon'ble CERC in the explanation given for 'Average Pooled Power Purchase cost' of a distribution licensee in the CERC(Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as extracted below:

"5.1 (c) Explanation: for the purpose of these regulations 'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be."

Hence, KSEB Ltd requested that, the prayer of the petitioner to exclude own generation in the computation of 'C' may be rejected.

(iii) KSEB Ltd further submitted that, the approach adopted by the Commission for fixing separate cross subsidy surcharge for embedded open access consumers is inconsistent with the provisions of EA, 2003 and Tariff Policy, 2016 considering the following:

- There is no provision under the EA, 2003 and Tariff Policy, 2016 to fix separate cross subsidy surcharge for embedded open access consumers.

- Further, no State Electricity Regulatory Commission has so far allowed separate cross subsidy surcharge for embedded open access consumers.
 - As per the formula for cross subsidy surcharge stipulated in Tariff Policy, the tariff 'T' adopted in Hon'ble Commission is tariff inclusive of both 'demand charge' and 'energy charge'. There is no provision in the Tariff Policy to calculate cross subsidy surcharge based on only 'energy charge'.
 - As per the Tariff Policy, the tariff 'T' has to be differentiated based on the consumer category and not on the basis of whether the consumer is 'embedded' or not.
 - There is no stipulation in the Tariff Policy that demand charge of a consumer will compensate a DISCOM for loss of cross subsidy as claimed by the petitioner.
 - Determination of Cross subsidy surcharge for an embedded open access consumer by considering only energy charge in Tariff is against the very concept of 'cross subsidy surcharge' for open access.
 - Hon'ble Commission has to be guided by the provisions in the Tariff Policy and has to comply its own Regulations in the matter of fixation of the Cross Subsidy Surcharge applicable for the open access consumers.
- (iv) KSEB Ltd further raised the issue that, in the table 14.87 of the order dated 17.04.2017, while computing CSS the Commission has accounted twice the intra-state transmission charges, and that, the argument of the petitioner that, the revision of open access charges as per the suo-motu tariff order dated 17.04.2017 will adversely affect the open access is not correct. The open access availed for the month of April-2017 was 28.31MU as against 10.79 MU during April-2016. KSEB Ltd also raised the issue that the embedded open access consumers are creating more financial burden and operational constraints than the open access consumers left out of the system. As an embedded consumer, the consumers draw power from short-term market as and when the short-term market rate is less than their prevailing tariff and availing power from KSEB Ltd when the market rates are not favourable. KSEB Ltd cannot forecast the exact quantum of energy wheeled by them and KSEB Ltd has to always keep the capacity ready duly considering the contracted capacity of such consumers, which ultimately results in surrender of contracted capacity and revenue loss which will ultimately burden the other consumers.
- (v) KSEB Ltd therefore requested before the Commission that,
- (a) reject the prayers of the petitioner and dismiss the petition.
 - (b) revise the cross subsidy surcharge determined in the order dated 17-4-2017 by removing the error on double counting of 'intra state transmission charges'.
 - (c) the cross subsidy surcharge applicable to the consumers who opt out of the system of SBU-D of KSEB Ltd may be made applicable for 'embedded open access consumers' also.

Hearing on the Petition

5. The Commission scheduled the hearing on the petition at the office of the Commission on 25.04.2016. Sri. A. R. Satheesh, president of the HT&EHT industrial Electricity Consumers Association presented the matter on behalf of the petitioner. Further, many members of the petitioner, Association also supported the issues raised by the petitioner.

Sri. Bipin Sankar, Deputy Chief Engineer, KSEB Ltd presented the counter remarks on behalf of the respondent.

The Commission vide the daily order dated 25.06.2017 has issued the following directions to the petitioner HT&EHT Association and the respondent KSEB Ltd.

- (i) *The HT & EHT Association shall file the amended petition as per the provisions of the KSEB (Conduct of Business) Regulations, 2003.*
 - (ii) *The HT & EHT Association shall provide copies of the petition and other documents filed before the Commission to KSEB Ltd for their remarks.*
 - (iii) *KSEB Ltd is allowed time upto 12.6.2017 to file their written submissions on the petition filed by the HT & EHT Association.*
6. The petitioner, in compliance of the above, has filed the petition in accordance with the Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003.
7. KSEB Ltd vide its letter dated 19.06.2017 submitted the counter affidavit on the amended review petition filed by HT&EHT association. The reply of KSEB Ltd on additional issues raised are summarised below.
- (i) The suo-motu tariff order dated 17.04.2017 was issued by the Commission pursuant to the public notices issued on 22-6-2016 and 1-12-2016 and after hearing the views, suggestions and objections of the stakeholders in the public hearings and also after considering the written objections and remarks as well as the documents and materials received from all stakeholders. The Commission had also consulted the State Advisory Committee before issuing the order. The petitioner had attended the public hearing and had also been part of the proceedings right from the beginning. Further, the petitioner is also a member of the State Advisory Committee. The petitioner had never raised the claims now raised and the judgment of Hon'ble APTEL dated 14-1-2013 in the public hearing or in the written submissions, even though the suo-motu process took place subsequent to the judgment of Hon'ble APTEL. Hon'ble Supreme Court in Union of India v Paul Manickam, AIR 2003 SC 4622 (4629) has held that the court would not entertain a review petition with an entirely new substratum of issues. The issues raised in the amended petition are entirely new and not covered in the order dated 17-4-2017 of Hon'ble Commission.

- (ii) There are no provisions in the prevailing Regulations or in the orders of Hon'ble Commission stipulating a DISCOM to pay power factor incentive to a consumer for the quantum of power drawn through open access. The power factor incentive/disincentive applicable for the consumers of KSEBL are being approved by Hon'ble Commission through the tariff orders issued from time to time. In the tariff orders, the power factor incentive/disincentive is calculated as percentage of 'energy charges'. Since the open access consumers do not pay any 'energy charges' to the distribution licensee for the quantum of energy availed through open access, power factor incentive/disincentive cannot be made applicable for the quantum of energy drawn through open access.
- (iii) In the State of Kerala, the power factor incentive is provided for power factor above 0.9, whereas the power factor benchmark for claiming power factor incentive as approved in CEA (Technical Standards for Connectivity to the Grid) Regulations,2007 is 0.95. In other State Electricity Regulatory Commissions also provide incentive when the consumer maintain power factor above 0.95. By fixing the power factor benchmark norms at a lower value of 0.90 the consumers in the State are already benefitted unduly. The claim for power factor incentive on the quantum availed through open access also is unfair and unjustifiable.
- (iv) The power factor incentive/disincentive approved by the Commission is calculated as a percentage of 'energy charges'. As per the Kerala Electricity Supply Code, 2014 "energy charge" is defined as the **charge levied on the consumer based on the quantity of energy supplied**, which is expressed in kWh or kVAh. 'Cross subsidy surcharge' payable by open access consumers is a charge for compensating the DISCOM for loss of "cross subsidy", and it cannot be equated to energy charges.
- (v) KSEB Ltd further submitted that,
 - (a) The minimum power factor to be maintained by the consumers may be fixed at 0.95 as stipulated in CEA(Technical Standards for connectivity to Grid)Regulations,2007.
 - (b) The typographical error in the tariff order dated 17-4-2017 increasing the power factor incentive (from 0.25% of energy charges to 0.50% of energy charges) may be corrected.
 - (c) Power factor incentive may be withdrawn for power factor in the range of 0.90 to 0.95.
 - (d) Power factor penalty may be increased so as to have a sufficient deterrent effect.
 - (e) Hon'ble Commission may also issue a detailed speaking order in this respect.

8. The HT&EHT Association vide its letter dated 27.06.2017 has submitted the reply to the counter affidavit submitted by KSEB Ltd, are summarized below.

- (i) KSEB Ltd is silent on the APTEL judgment in Appeal No. 231 of 2012 allowing Power Factor incentive to the open access consumers and extending the same for Cross Subsidy Surcharge amount also.
- (ii) Certain points raised by KSEB Ltd regarding the quantum of PF incentive are not at all relevant in this context.
- (iii) KSEB Ltd submitted misleading numbers as the pay out from them on account of PF incentive for cross subsidy surcharge.
- (iv) In FY 2016-17, the total open access energy was only 401.45 MU, which is 1.69% of energy requirement and in 2017-18 for April and May, the OA purchase was 48.13 MU which is 1.10% of the energy requirement of Kerala.

Analysis and Decision

8. The Commission has examined the review petition filed by the HT&EHT association and the counter affidavit submitted by the respondent KSEB Ltd. The petition filed by the HT&EHT association is for reviewing the suo-motu tariff order dated 17.04.2017. The relevant provisions in the Electricity Act-2003 for reviewing the decisions, directions and orders of the Commission is extracted below.

- “
- (i) Section 94 of the Electricity Act-2003, provide as follows.
 “ (1) *The Appropriate Commission shall, for the purposes of any inquiry or proceedings under this Act, have the **same powers as are vested in a civil court under the Code of Civil Procedure, 1908** in respect of the following matters, namely: -*
 - (a) *summoning and enforcing the attendance of any person and examining him on oath;*
 - (b) *discovery and production of any document or other material object producible as evidence;*
 - (c) *receiving evidence on affidavits;*
 - (d) *requisitioning of any public record;*
 - (e) *issuing commission for the examination of witnesses;*
 - (f) reviewing its decisions, directions and orders;***
 - (g) *any other matter which may be prescribed.:*
 - (ii) “Order 47 rule 1 of the Code of Civil Procedure dealing with review of the orders and decisions of a Civil court is quoted 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,*
- (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 or 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 to the Court which passed the decree or made the order.

(2) A party who is not appealing from a decree or order may apply for a review of judgment notwithstanding the pendency of an appeal by some other party except where the ground of such appeal is common to the applicant and the appellant, or when, being respondent, he can present to the Appellate Court the case on which he applies for the review.

Explanation : The fact that the decision on a question of law on which the judgment of the court is based has been reversed or modified by the subsequent decision of a superior court in any other case, shall not be a ground for the review of such judgment."

As extracted above, as per the provisions of the Electricity Act-2003 and Order 47 rule 1 of the Code of Civil Procedure, the review jurisdiction of the Commission is very limited. For reviewing its decisions, the discovery of new and important matter or evidence, which was not within the knowledge of the petitioner 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 face of record, or for any other sufficient reason.

The Commission has examined, the issues raised by the HT&EHT association in the review petition and found that no new facts have been brought before the Commission. However the Commission is making its stand clear on the issues raised by the HT&EHT Association, in the following sections.

9. The Commission, vide the order dated 17.04.2017, has determined the cross subsidy surcharge for the open access consumers. The relevant portion of the order of the Commission dated 17.04.2017 is extracted below.

“

14.81 *The Commission vide the KSERC (Terms and Conditions for determination of Tariff) Amendment Regulations, 2017, notified on 21st March-2017, had adopted the surcharge formula as per the Tariff Regulations, 2016 for determining the cross subsidy surcharge for open access consumers. Accordingly, the surcharge formula specified in the Tariff Regulations, 2014 is detailed below.*

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.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of consumers seeking open access.

Provided further that the Commission in consultation with the Government shall exempt levy of cross subsidy surcharge on railways, as defined in Indian Railways Act 1989 being a deemed licensee on electricity purchase for its own consumption.

14.82 *The HT&EHT association during the public hearings has requested that, since the embedded consumers availing open access are bearing the demand charges for the power contracted with the licensee, the demand charge may be excluded while computing the average tariff for determining the cross subsidy surcharge.*

14.83 *The Commission had examined the issue raised by the HT&EHT Association. As detailed in paragraph 14.81 above, the cross subsidy surcharge formula as prescribed in the Tariff Policy-2016, is being adopted for determining the cross subsidy surcharge, for the consumers who opt out of the system of SBU-D of KSEB Ltd or of other licensees. In such cases, the tariff of a consumer includes both demand charge and energy charge. Hence, the Commission had adopted the average of the demand and energy charge for determining the cross subsidy surcharge for the consumers who opt out of the system of SBU-D of KSEB Ltd or of other licensees. As per the revised tariff approved by the Commission for the year 2017-18, the average tariff of the HT&EHT consumers is given in the table below.*

Table 14.55
Average tariff for different categories of consumers for the year 2017-18

Tariff Category	Contract demand (MVA)	Annual Energy consumption (MU)	Demand charge (Rs. Cr)	Energy charge (RS. Cr)	Total (Rs. Cr)	Average tariff (Rs/kWh)
HT-I(A) Industry	549.0	1999.4	197.64	1080.55	1278.19	6.39
HT-I(B) Industry	2.1	10.2	0.76	6.03	6.79	6.64
HT-II(A)	73.0	215.0	30.66	117.65	148.31	6.90
HT-II (B)	137.0	551.6	65.88	391.78	457.66	8.30
HT-III(A)	6.0	6.2	1.22	1.74	2.96	4.75
HT-III(B)	0.5	0.8	0.09	0.27	0.36	4.38
HT-IV	231.0	653.1	110.86	476.94	587.80	9.00
HT-V	5.6	11.7	2.34	6.62	8.96	7.63
EHT-I	55.0	325.2	19.8	165.00	184.80	5.68
EHT-II	140.0	643.3	48.72	323.99	372.71	5.79
EHT-III	18.0	30.6	6.05	14.50	20.55	6.71
EHT-G	21.0	60.5	9.32	39.77	49.09	8.12

14.84 *The weighted average cost of power purchase per unit, of KSEB Ltd for the year 2017-18, as per the cost of generation power purchase approved for the year 2017-18 is given in the table below.*

Table 14.56
Weighted average cost per unit of power purchase for the year 2017-18

SI No	Particulars	Quantity	Amount
		(MU)	(Rs. Cr)
1	Own Generating stations of SBU-G	6473.62	677.48
2	CGS	11000.05	3755.97
3	IPP- wind and SHPs	142.00	45.87
4	Traders	5729.80	2195.02
5	Short-term market	1946.98	778.79
6	PGCIL transmission charges		563.70
7	Intra state transmission charges		905.20
	Total	25292.45	8922.03
Weighted average cost of power purchase (Rs/unit)			3.53

14.85 The loss in the transmission system is approved at 4.5% and that in the HT system at 5.50%. The weighted average loss in the system for providing supply at HT level is assessed at 9.75%.

14.86 'D', the aggregate transmission charges and wheeling for providing supply at EHT level is Rs 0.37 per unit and the same at providing supply at HT level is Rs 0.31 per unit. The Commission had not approved any carrying cost for the year 2017-18. Hence the parameter 'R' in the surcharge formula is adopted as '0'.

14.87 Based on the above, the cross subsidy surcharge applicable to the consumers who opt out of the system of SBU-D of KSEB Ltd or of other licensees, for the year 2017-18 is approved as given in the table below.

Table 14.57
Cross subsidy surcharge payable by the consumers who opt out of the system of SBU-D of KSEB Ltd and of other licensees for the year 2017-18

Category	T =Avg tariff (Rs/unit)	C= Avg. cost of PP (RS/unit)	L =Aggregate transmission & distribution loss (in %)	D= transmission and wheeling charges (Rs/unit)	R= Per unit carrying cost	Surcharge as per formula (Rs/unit)	Surcharge limit (20% avg. tariff) (Rs/unit)	Cross subsidy surcharge approved (Rs/unit)
EHT-I	5.68	3.53	4.5%	0.37	0.00	1.61	1.14	1.14
EHT-II	5.79	3.53	4.5%	0.37	0.00	1.73	1.16	1.16
EHT-III	6.71	3.53	4.5%	0.37	0.00	2.64	1.34	1.34
EHT-G	8.12	3.53	4.5%	0.37	0.00	4.05	1.62	1.62
HT-I(A)	6.39	3.53	9.75%	0.68	0.00	1.80	1.28	1.28
HT-I(B)	6.64	3.53	9.75%	0.68	0.00	2.05	1.33	1.33
HT-II(A)	6.90	3.53	9.75%	0.68	0.00	2.31	1.38	1.38
HT-II (B)	8.30	3.53	9.75%	0.68	0.00	3.71	1.66	1.66
HT-III(A)	4.75	3.53	9.75%	0.68	0.00	0.16	0.95	0.16
HT-III(B)	4.38	3.53	9.75%	0.68	0.00	0.00	0.88	0.00
HT-IV	9.00	3.53	9.75%	0.68	0.00	4.41	1.80	1.80
HT-V	7.63	3.53	9.75%	0.68	0.00	3.04	1.53	1.53

14.88 The embedded consumers avail the facility of open access, while continuing in the system of SBU-D of KSEB Ltd and of other licensees. Therefore the embedded consumers have to pay the demand charges in accordance with the agreement executed between the consumers and licensee. When the embedded consumer avails power through open access, the licensee loses only the energy charge. Therefore, the cross subsidy surcharge payable by the embedded consumers has been worked out based on the energy charges applicable to the category to which the consumer belongs. Thus, for computation of cross subsidy surcharge payable by embedded consumers the energy charge is taken as 'T'.

Table 14.58
Cross subsidy surcharge payable by the embedded HT&EHT consumers

Category	T = Energy charge (Rs/unit)	C= Avg. cost of PP (Rs/unit)	L =Aggregate transmission & distribution loss (in %)	D= transmission and wheeling charges (Rs/unit)	R= Per unit carrying cost	Surcharge as per formula (Rs/unit)	Surcharge limit (20% energy charge) (Rs/unit)	Cross subsidy surcharge approved (Rs/unit)
EHT-1	5.20	3.53	4.5%	0.37	0.00	1.13	1.04	1.04
EHT-II	5.10	3.53	4.5%	0.37	0.00	1.03	1.02	1.02
EHT-III	4.70	3.53	4.5%	0.37	0.00	0.63	0.94	0.63
EHT-G	6.30	3.53	4.5%	0.37	0.00	2.23	1.26	1.26
HT-1(A)	5.50	3.53	9.75%	0.68	0.00	0.91	1.10	0.91
HT-I(B)	5.80	3.53	9.75%	0.68	0.00	1.21	1.16	1.16
HT-II(A)	5.40	3.53	9.75%	0.68	0.00	0.81	1.08	0.81
HT-II (B)	6.70	3.53	9.75%	0.68	0.00	2.11	1.34	1.34
HT-III(A)	2.80	3.53	9.75%	0.68	0.00	0.00	0.56	0.00
HT-III(B)	3.30	3.53	9.75%	0.68	0.00	0.00	0.66	0.00
HT-IV	6.80	3.53	9.75%	0.68	0.00	2.21	1.36	1.36
HT-V	5.50	3.53	9.75%	0.68	0.00	0.91	1.10	0.91

10. As detailed above, in the tariff order dated 17.04.2017, the Commission has determined the cross subsidy surcharge as per the formula specified in the KSERC (Terms and Conditions of Tariff) Amendment Regulation, 2017 (herein after referred to as Tariff (amendment) Regulation, 2017). The Tariff (Amendment) Regulation, 2017 was notified on 21th March-2017, and the surcharge formula specified therein is same as that in the Tariff Policy, 2016. The Commission has adopted the surcharge formula given in the Tariff Policy 2016, after detailed deliberations including publishing the draft, inviting suggestions and objections from the public, conduct public hearing etc.
11. The main issues raised by the petitioner in this review petition are the following.

- (i) The cost of own generation may be excluded while computing 'C' in the surcharge formula.
- (ii) Reduce the demand charge component from Cross Subsidy Surcharge for Embedded open access consumers.
- (iii) Allow power factor incentive to the power sources through open access route and allow power factor incentive on cross subsidy surcharge collected from open access consumers.
- (iv) Implement the new open access charges from 20.04.2017 only.

- 12.** The first issue raised by the petitioner is that, the cost of own generation may be excluded while computing the 'C' in the surcharge formula, wherein 'C' is the per unit weighted average power purchase by the licensee. The Commission has examined the issue in detail and noted the following.

Government of Kerala has, under Section 131 of the Electricity Act, 2003, issued the Second Transfer Scheme, as per G.O(P) No. 46/2013/PD dated 31st October 2013, which has been notified as SRO No. 871/2013 in Kerala Gazette Extra Ordinary No.3103 dated 31.10.2013 (hereinafter referred to as the Second Transfer Scheme). Thereafter KSEB Ltd has been performing the duties and functions of generating company, transmission licensee and distribution licensee through the Strategic Business Units namely SBU-Generation, SBU-Transmission and SBU- Distribution. All the generation assets owned and operated by the erstwhile KSEB is now vested with the SBU-G of KSEB Ltd. As per the Regulation-11 of the KSEB (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred as Tariff Regulations, 2014), KSEB Ltd has to file the application for approval for aggregate revenue requirements (ARR) separately, for each Strategic Business Units before the Commission. Accordingly, as per the tariff order dated 17.04.2017, the Commission has determined the ARR of the SBU-G of KSEB Ltd separately. The cost of power purchase of SBU-D of KSEB Ltd includes the cost of power generation of SBU-G of KSEB Ltd. Thus, while computing the 'C' the per unit cost of power purchase of SBU-D of KSEB Ltd, the cost of generation of SBU-G of KSEB Ltd, too has to be considered. Hence the first issue is decided accordingly.

- 13.** The second issue raised by the petitioner is regarding the cross subsidy surcharge determined for embedded open access consumers vide the tariff order dated 17.04.2017. The analysis and decision of the Commission on this issue is given below.

- (i) As discussed under paragraph-9 above, in the tariff order dated 17.4.2017, the Commission has, as per the Tariff (amendment) Regulation, 2017 determined the cross subsidy surcharge for the consumers who opted out of the system of KSEB Ltd and the

embedded consumers separately. Considering the fact that, the embedded consumers has been bearing the demand charge based on the contract demand, the Commission, as part of its endeavor to promote open access by the embedded consumers, has taken the considered decision to exclude the demand charge from the tariff 'T' of the relevant category of consumer, to be adopted for determining the cross subsidy surcharge. Accordingly, as detailed in the Table 14.57 and 14.58 of the tariff order dated 17.04.2017, the cross subsidy surcharge determined as per the formula specified in the Tariff (Amendment) Regulation, 2017 is extracted below.

Cross subsidy surcharge as per the surcharge formula specified in the Tariff (Amendment) Regulation, 2017

Category	Consumers who left out of the distribution system of SBU-D	Embedded open access consumers	Reduction of CSS for embedded consumers compared to those who left out of the System
	(Rs/unit)	(Rs/unit)	(Rs/unit)
EHT-1	1.61	1.13	0.48
EHT-II	1.73	1.03	0.70
EHT-III	2.64	0.63	2.01
EHT-G	4.05	2.23	1.82
HT-1(A) Industry	1.80	0.91	0.89
HT-I(B) Industry	2.05	1.21	0.84
HT-II(A)	2.31	0.81	1.50
HT-II (B)	3.71	2.11	1.60
HT-III(A)	0.16	0.00	0.16
HT-III(B)	0.00	0.00	0.00
HT-IV	4.41	2.21	2.20
HT-V	3.04	0.91	2.13

- (ii) However, the Surcharge formula specified in the Tariff (Amendment) Regulations, 2017 further stipulated that, the surcharge shall not exceed 20% of the tariff applicable to the category of consumers seeking open access. Accordingly, the surcharge payable by the open access shall be, the surcharge as determined above or 20% of the tariff applicable, which ever is less. The restriction on cross subsidy surcharge payable by the open access consumers is for facilitating the open access, and thus, this shall definitely benefit the open access consumers.
- (iii) As stated earlier, as part of its endeavour to promote the open access, the Commission has taken the considered decision to exclude the demand charges in the tariff component 'T' in the surcharge formula specified in the Tariff (Amendment) Regulations, 2017. Accordingly, the cross subsidy surcharge determined for embedded open access consumers is considerably less than the open access consumers, who

have left out of the system of SBU-D of KSEB Ltd. This is an additional benefit to the embedded open access consumers.

- (iv) The very purpose of the cross subsidy surcharge is clearly prescribed in subsection (2) of Section-42 of the Electricity Act-2003, which is extracted below for ready reference.

Section 42 (2) of the EA-2003

(2) 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 may 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 :

.....”

As extracted above, the very purpose of the cross subsidy surcharge is to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee.

- (v) However, if the methodology suggested by the petitioner is being adopted, the cross subsidy surcharge payable by the highly subsidising commercial consumers including EHT3, EHT-G, HT-II A, HT-IV and HT-V will get revised to zero. This is against the spirit of the provisions of the Electricity Act-2003. Hence the Commission is not in a position to accept the proposal of the petitioner. The second issue raised by the petitioner is decided accordingly.

14. The third issue raised by the petitioner is to extend the power factor incentive to the power sourced through open access route and to allow power factor incentive on charges collected from open access consumers towards cross subsidy surcharge, in view of the judgment of the Hon'ble Appellate Tribunal for Electricity (APTEL) dated 14th November 2013 in Appeal No. 231 of 2012. The Commission has examined the matter in detail. The analysis and decision of the Commission on this issue is given below.

- (i) The Appeal No. 231 of 2012, was filed by M/s Jindal Stainless Limited, before the Hon'ble APTEL against the order of the Haryana Electricity

Regulatory Commission dated 14.08.2012, on dismissing the petition seeking recovery of the power factor rebate allowed earlier on cross subsidy surcharge levied on open access customers. Relevant portion of the judgment is extracted below.

“41. The State Commission in its order on Distribution and Retail Supply ARR and Tariff-2000 dated 22.12.2000 provided the scheme for incentive/penalty for high/low power factor. The relevant portion of the order is quoted as below:-

“Annexure 3 –Schedule of Tariff for Supply of energy 4. HT Industrial and Steel Furnace Power Supply:

(viii) Power Factor The monthly average power factor of the plant and apparatus installed by the consumer shall not be less than 90% lagging. The monthly average power factor shall mean the ratio expressed, as percentage of total kWh to total KVAH supplied during the month, The ratio shall be rounded up to two figures. In case the monthly average power factor falls below 90% lagging, the consumer shall have to pay a surcharge of 1% of **SOP charges** for every 1% decrease in the power factor upto 80% and 2% of SOP charges for every 1% decrease in Power Factor below 80%. **Rebate of 0.5% on SOP will be allowed for every 1% increase in Power Factor above 90%.**

42. The State Commission also notified Haryana Supply Code Regulations on 10.8.2004. Regulation 3 of the said Supply Code specified the charges to be recovered from the consumers. The said Regulation is extracted as below:-

“3. Recovery of Electricity Charges from consumers

(a) The distribution Licensee shall recover the electricity charges for the electricity supplied to the consumer as per the tariff determined by the Commission from time to time in accordance with the provisions of the Act.

(c) The consumer shall pay following charges, in addition to the charges for the electrical energy supplied, as approved by the Commission from time to time:-

1. All surcharges, Additional Surcharges
2. Additional charge for delayed payment
3. Wheeling charges
4. FSA (Fuel surcharge adjustment) Charge
5. Rental, if any, towards meters & other electric plant and equipment of the Licensee
6. Miscellaneous charges such as penal charges for exceeding sanctioned demand,
7. Any other charges applicable”

43. The perusal of the above Regulation would reveal that the sale of power charges would include surcharge and additional surcharge. According to the Respondent, the term “Surcharge” as mentioned in the Regulation 3 is not

the Cross Subsidy Surcharge. This submission is not correct. The term "Surcharge:" is defined in Regulation 2(19) of the same Supply Code. This is quoted below:-

"2(19) "Surcharge" means surcharge determined by the Commission under Section 39(2)(d)(ii), 40(c)(ii) and 42(2)."

44. This would indicate that the surcharge is referred to in Regulation 3 is the Cross Subsidy Surcharge payable by Open Access consumer and the incentive on power factor would also be applicable on this amount.

45. According to the Appellant, the Appellant is availing Open Access since 2009 and at no time in the past, Power Factor Rebate was disallowed to the Appellant and in fact in its order dated 25.3.2010 the State Commission observed the fact that the Appellant has been availing power through Open Access after paying wheeling charges.

46. The learned Counsel for the Appellant also drew our attention towards the dual policy being followed by the Licensee by considering the definition of SOP charges while levying Power Factor Penalty and MDI Penalty. While in both these cases, the penalty/rebate is to be worked out on SOP charges, the Respondent DISCOM is including cross subsidy surcharge in the Sale of Purchase charges while levying penalty but refusing to include the cross subsidy surcharge element for giving rebate.

47. The power factor rebate has been disallowed on the Cross Subsidy Surcharge element for the Open Access consumer. The said action is contrary to the Regulations as well as the order dated 25.3.2010 passed by the State Commission.

48. According to the Appellant, when the Cross Subsidy Surcharge is by all means a part of Sale of Power charges and accordingly "Penalty for exceeding MDI" and Penalty/Rebate on the power Factor is to be levied on the Sale of Power charges including Cross Subsidy Surcharge

49. As pointed out by the Appellant, the Respondent till date has been recovering penalty on the low power factor and penalty for exceeding contract demand on the sale of power, which includes Cross Subsidy Surcharge. Therefore, the State Commission now cannot permit the utility, the Respondent to use different yardstick to the consumer while giving rebate and recovering MDI penalty, when both are to be charged on sale of power. Therefore, this treatment is contrary to the commercial principles. This point is decided accordingly.

.....

56. Summary of the findings:-

III. As per clause 2(19) of the Supply Code, the surcharge referred to in Regulation 3 is the Cross Subsidy Surcharge payable by Open Access consumer is a part of SoP charges and, therefore, the incentive on power factor would also be applicable on this amount. The Respondent till date has been recovering penalty on the low power factor and penalty for exceeding contract demand on the sale of power including Cross Subsidy Surcharge form embedded open access consumers. The licensee cannot probate and approbate at the same time. Therefore, the State Commission now can not permit the utility, the Respondent to use different yardstick to the consumer while giving rebate and recovering MDI penalty, when both are to be charged on sale of power. Therefore, this treatment is contrary to the commercial principles."

- (ii) A close perusal of the above judgment of the Hon'ble APTEL dated 14.11.2013 in appeal No. 231 of 2012 reveals the following.
- (a) As per the Haryana Supply Code Regulations notified by the HERC, the 'sale of power charges' include fixed charge/demand charge, energy charge, all surcharges and additional surcharges, additional charge for belated payments, wheeling charges, fuel surcharge adjustments, rental towards meters etc, miscellaneous charge and any other charges applicable. Further, as per the definition given in the Haryana Supply Code, the surcharge means the cross subsidy surcharge. Accordingly, as per the scheme of incentive/ penalty for power factor in the State of Haryana, the open access consumers are eligible to incentive on factor for the amount collected towards cross subsidy surcharge.
 - (b) During the past, the open access consumers in the State of Haryana were getting power factor incentive for the amount collected towards cross subsidy surcharge also.
 - (c) Haryana DISCOMS were including the cross subsidy surcharges in the 'sale of power charges' while levying power factor penalty and maximum demand indicator (MDI) penalty.
 - (d) Dis-allowing the power factor rebate on the Cross Subsidy Surcharge element for open access consumers in the State of Haryana is contrary to the Regulations as well as the order dated 25.3.2010 passed by the HERC.
 - (e) The distribution licensees in the State of Haryana has been recovering the penalty on the low power factor and penalty for exceeding contract on the 'sale of power charges (SOP)' which includes cross subsidy surcharge. Therefore, different yardstick cannot be applied to the consumer while giving rebate and recovering penalty, when both are to be charged on sale of power.
- (iii) However, in the State of Kerala, power factor incentive and penalty are being provided on energy charge only. The Commission had notified the Kerala Electricity Supply Code in the year 2005 and subsequently notified the revision on the Kerala Electricity Supply Code in the year 2014. The Regulation 31 of the Kerala Electricity Supply Code 2014 provides for the 'recovery of charges for supply of Electricity. Further, the sub regulation (5) of Regulation 31 provides the various items included under 'charges'. The Regulation-31 is extracted below for ready reference.

31. Recovery of charges for supply of electricity.- (1) *Subject to the provisions of this Code, the charges to be levied on the consumer by the distribution licensee for the supply of electricity in pursuance of the provisions of the Act, shall be in accordance with the tariff fixed by the Commission from time to time and the conditions of the licence.*

(2) *The charges of electricity supplied by the licensee shall be:-*

- (a) *fixed in accordance with the methods and principles as may be specified by the Commission; and*

(b) published in such manner so as to give adequate publicity for such charges and prices.

(3) The licensee shall publish the tariff schedule in English and Malayalam on its website immediately after the Commission has approved it.

(4) The licensee shall also make available copies of the tariff schedule in English and in Malayalam to its consumers at a reasonable price.

(5) The charges may include:-

- (i) energy charge;*
- (ii) fixed charge or demand charge, as the case may be;*
- (iii) meter rent, if any;*
- (iv) capacitor surcharge, if any;*
- (v) fuel cost adjustment charge, if any;*
- (vi) power factor adjustment charge, if any;*
- (vii) reactive energy charge, if any;*
- (viii) time of use charge, if any;*
- (ix) penal charge for delay in payment and for exceeding contract demand, if any;*
- (x) interest on instalments due, if any;*
- (xi) wheeling charge, if any;*
- (xii) cross-subsidy surcharge, if any;*
- (xiii) rent for electric plant and equipment of the licensee, if any;*
- (xiv) charge for protected load, if any;*
- (xv) penal charge for harmonic dumping, if any;*
- (xvi) any other charge applicable as approved by the Commission from time to time:*

Provided that electricity duty, taxes or any other statutory levy payable by the consumer shall also be shown in the bill.

- (iv) As detailed above, as per the Regulation 31 of the Kerala Electricity Supply Code, 2014, the energy charge is one of the components of electricity charges. Further, as per the prevailing orders of the Commission, the power factor incentive/ penalty are imposed only on energy charges, and it cannot be provided on other component of 'charges' as per the prevailing orders and regulations issued by this Commission. Hence, the decision of the Hon'ble APTEL in judgment dated 14.11.2013 in appeal No. 231 of 2012, cannot be applied here. The third issue raised by the petitioner is decided accordingly.

15. The fourth issue raised by the petitioner to revise the open access charges with effect from 20.04.2017 only. The Commission has approved the tariff order for the year 2017-18 on 17.04.2017, and ordered that the revised tariff is applicable, prospectively from 18.04.2017. KSEB Ltd and other licensees has been levying electricity tariff and other charges as per the tariff order dated 17.04.2017 with effect from 18.04.2017. The Commission cannot change the applicability of the revised tariff approved vide the order dated 17.04.2017.

16. KSEB Ltd has raised many issues for the consideration of the Commission, in the counter affidavit filed against the review petition filed by the HT&EHT Association. Subsequently, KSEB Ltd has filed review petition against the Tariff Order dated 17.04.2017, which is admitted for further processing. The Commission may examine the issues raised by KSEB Ltd during the proceedings of the review petition filed by them.

Orders of the Commission

17. The review petition filed by the HT&EHT association against the tariff order dated 17.04.2017 is disposed of as above.

Sd/-

K.Vikraman Nair
Member

Sd/-

S.Venugopal
Member

Approved for issue

Sd/-
K B Santhosh Kumar
Secretary