



KERALA STATE ELECTRICITY REGULATORY COMMISSION

**ORDERS IN THE
SUO MOTU PROCEEDINGS FOR DETERMINATION OF TARIFF FOR
ELECTRICITY FOR THE FINANCIAL YEAR 2017-18
APPLICABLE TO
THE STRATEGIC BUSINESS UNITS (GENERATION, TRANSMISSION AND
DISTRIBUTION) OF KSEB LTD AND FOR OTHER LICENSEES**

Order No. 1007/F&T/2016/KSERC

17TH April, 2017

KERALA STATE ELECTRICITY REGULATORY COMMISSION
Thiruvananthapuram

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

In the matter of suo motu proceedings for determination of tariff for electricity, applicable to the Strategic Business Unit (Generation), the Strategic Business Unit (Transmission) and the Strategic Business Unit (Distribution) of Kerala State Electricity Board Limited for the financial year 2017-18.

Order No. 1007/F&T/2016/KSERC dated 17th April, 2017

The Kerala State Electricity Regulatory Commission, in exercise of the powers vested in it under the provisions of the Electricity Act, 2003 (Central Act 36 of 2003) and of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 and other regulations enabling it in this behalf, issues the following orders.

The Commission has, based on the facts and circumstances explained in the public notices dated 22.06.2016 and 01.12.2016 issued by the Commission, heard the views, suggestions and objections of the stakeholders in the public hearings held at Thiruvananthapuram on 27.07.2016 and 17.01.2017, at Kannur on 27.12.2016, at Kozhikode on 28.12.2016, at Ernakulam on 03.01.2017, at Thrissur on 04.01.2017, at Pathanamthitta on 12.01.2017 and at Kattappana on 13.01.2017. The Commission has also considered the written objections and remarks as well as the documents and materials received by it in this regard. The Commission has also consulted the State Advisory Committee on 18.01.2017. After having considered all the relevant statutory provisions, facts and documents, the Commission hereby passes the following orders.

Dated this the seventeenth day of April, 2017.

Sd/-
K.Vikraman Nair
Member

Sd/-
S.Venugopal
Member

Sd/-
T.M.Manoharan
Chairman

Approved for issue,

Sd/-
Santhosh Kumar.K.B
Secretary

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CHAPTER - 1 INTRODUCTION

- 1.1 Kerala State Electricity Regulatory Commission (hereinafter referred to as KSERC or as the Commission) has, in exercise of its powers conferred under sub-regulation (5) of regulation 11 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as the Tariff Regulations, 2014) read with Section 61, Section 62 and Section 64 of the Electricity Act, 2003 (hereinafter referred to as the Act) and in compliance of the provisions in the Tariff Policy, 2016 and of the order dated 11.11.2011 of the Hon'ble Appellate Tribunal for Electricity (APTEL) in OP No. 1/2011, initiated this *suo motu* proceedings to determine the tariffs applicable to the Strategic Business Unit –Generation (SBU-G), Strategic Business Unit –Transmission (SBU-T) and Strategic Business Unit –Distribution (SBU-D) of KSEB Ltd. The facts and circumstances leading to initiation of this *suo motu* proceedings are briefly stated below.
- 1.2 Section 61 of the Act confers power on the Electricity Regulatory Commissions to specify by regulations, the terms and conditions for the determination of tariff in accordance with the principles stipulated therein. Section 62 of the Act empowers the Commission to determine tariff for generation of electricity, transmission of electricity, wheeling of electricity and for retail sale of electricity. Section 64 of the Act prescribes the procedure for determination of tariff and issuance of tariff order. The Commission has, in exercise of its powers under Section 61 of the Act, issued vide notification No.787/SEA/2011/KSERC dated 14.11.2014, the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, which specify the detailed principles and procedures for determination of tariff. Sub-regulation (5) of regulation 11 of the Tariff Regulations, 2014 specifies that the Commission may, on its own, initiate proceedings for determination of tariff if the licensee or the SLDC does not file application for determination of tariff within one month from the date stipulated for submitting the application. Sub-regulation (5) of regulation 11 of the Tariff Regulations, 2014 is quoted hereunder,-
- “11. Filing under multi-year tariff (MYT) framework. –***
- (5) In case the generation business/company or transmission business/licensee or distribution business/licensee or state load dispatch centre does not file the application under these Regulations within one month of stipulated date, the Commission may, on its own initiate proceedings for tariff determination.*
- 1.3 Tariff Policy, 2016 issued by Government of India has, in para 8.1 (7), stipulated that appropriate Commissions should introduce and implement multi-year tariff (MYT) system and initiate regulatory scrutiny and tariff determination on a *suo motu* basis, in case the licensee does not file the tariff application in time. It has also been stipulated that the requisite tariff changes should come into effect

from the date of commencement of each financial year and any gap on account of delay in filing should be on the account of licensee. Para 8.1 (7) of the Tariff Policy, 2016 is quoted hereunder,-

“8.1 Implementation of Multi-Year Tariff (MYT) framework

(7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.”

1.4 The Hon'ble APTEL has, in its judgment dated 11.11.2011 in OP No. 1/2011 (*suo motu* proceedings on the basis of the letter received from Ministry of Power, Government of India), directed the State Commissions to ensure that the review of annual performance, the truing up of past expenses and the determination of annual revenue requirements and tariff are conducted year to year basis as per the time schedule specified in the Tariff Regulations and that in the event of delay, in filing the application for the approval of ARR, for the truing up of accounts and for the review of annual performance, of one month beyond the scheduled date of submission of the application, the State Commission must initiate *suo motu* proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy. The directions given by the Hon'ble APTEL in the judgment dated 11.11.2011 in OP No. 1/2011, are quoted hereunder,-

“65. In view of the analysis and discussion made above, we deem it fit to issue the following directions to the State Commissions:

(i) Every State Commission has to ensure that Annual Performance Review, true-up of past expenses and Annual Revenue Requirement and tariff determination is conducted year to year basis as per the time schedule specified in the Regulations.

(ii) It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year. For example, the ARR & tariff for the financial year 2011-12 should be decided before 1st April, 2011. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff.

(iii) In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.

(iv) In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course

except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset should be allowed to the utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the distribution licensee.

(v) Truing up should be carried out regularly and preferably every year. For example, truing up for the financial year 2009-10 should be carried out along with the ARR and tariff determination for the financial year 2011-12.

(vi) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/ mechanism.

66. We direct all the State Commissions to follow these directions scrupulously, and send the periodical reports by 1st June of the relevant financial year about the compliance of these directions to the Secretary, Forum of Regulators, who in turn will send the status report to this Tribunal and also place it on its website.”

- 1.5 The Commission had, on 14.08.2014, issued order in OP No. 9/2014 filed by KSEB Ltd, determining the retail sale tariff (RST) of electricity. The Commission had also issued order dated 25.09.2014 revising the bulk supply tariff applicable to the sale of electricity to other distribution licensees. Further, the Commission had issued order dated 30.09.2014 approving the open access charges, pooled cost of power purchase, meter rent, etc.
- 1.6 KSEB Ltd has challenged the validity of the Tariff Regulations, 2014, by filing Writ Petition No.465/2015(G) before the Hon'ble High Court of Kerala, mainly stating the reason that the norms for expenditure specified in the Tariff Regulations, 2014 are inadequate resulting in under recovery of its expenses. The prayers in the Writ Petition are the following,-

“

- (i) Issue a writ of certiorari or any other appropriate writ, order or direction calling for the records leading to Exhibits P5 and quash the same as illegal and violative of Article 14 of the Constitution of India.*
- (ii) Issue writ of mandamus or any other appropriate writ, order or direction to the respondent to revise Exhibit P5 regulations strictly*

as per the legal mandate provided in the Electricity Act, 2003, National Electricity Policy and on the basis of past performance of KSEB including its audited accounts; and

- (iii) *Issue such other writs, orders or direction which this Hon'ble Court may deem fit and proper to issue in the facts and circumstances of the case".*

While admitting the above Writ Petition the Hon'ble High Court was pleased to issue an interim order on 07.01.2015 to the effect that tariff proposal, if any, submitted by the petitioner shall not be rejected on the basis of the Tariff Regulations, 2014. The Commission had, on receipt of the interim order of the Hon'ble High Court dated 07.01.2015, filed a petition before the Hon'ble High Court seeking clarifications with regard to the implementation of the said order. The Hon'ble High Court has not declared that any of the provision in the Tariff Regulations, 2014, is invalid. The earlier regulations which governed determination of tariff were repealed as per the provisions in the Tariff Regulations, 2014. Therefore the application for determination of tariff filed by any licensee including KSEB Ltd can be processed only in accordance with the provisions of the Tariff Regulations, 2014. It was under these circumstances the Commission moved the Hon'ble High Court for a clarification to the effect that the Commission might be permitted to process the application submitted by KSEB Ltd in accordance with the provisions of the Tariff Regulations, 2014. The Hon'ble High Court is yet to issue orders clarifying the points raised by the Commission therein.

- 1.7 KSEB Ltd had, on 30.03.2015, filed an application for approval of a composite ARR & ERC without separate accounts of the SBU-G, SBU-T and SBU-D for the financial year 2015-16. In the said application KSEB Ltd had projected a composite aggregate revenue requirement of Rs.12338.06 crore and an expected revenue from charges of Rs.10765.89 crore, leaving a revenue gap of Rs.1572.17 crore for all the SBUs together. The said application did not contain any proposal for bridging the said revenue gap by appropriate revision of tariff applicable to various categories of consumers. The said application did also not contain strategic business unit wise accounts of expenditure or balance sheet in accordance with the directions given by Government of Kerala in the Second Transfer Scheme notified as per GO (P) No. 46/2013/PD dated 31.10.2013 and published as SRO No 871/2013 in Kerala Gazette Extra Ordinary No.3103 dated 31.10.2013 under Section 131 of the Act. Further the said application was not filed in accordance with the multi-year tariff (MYT tariff) principles as specified in the Tariff Regulations, 2014. KSEB Ltd had, in the said application, promised to submit subsequently, a separate application for determination of tariff. However, KSEB Ltd has not so far submitted any such application.

1.8 The Commission had extended the period of validity of the tariff orders issued by it on 14.08.2014, 25.09.2014 and 30.09.2014 in view of the pendency of the WP No. 465/2015 (G) filed by KSEB Ltd challenging certain provisions of the KSERC (Terms and Conditions for the Determination of Tariff) Regulations, 2014, and in view of the interim order of the Hon'ble High Court dated 07.01.2015 to the effect that the application filed by KSEB Ltd for the determination of tariff should not be rejected in view of the Tariff Regulations, 2014. The Commission had filed a petition before the Hon'ble High Court requesting for clarification so that the application filed by KSEB Ltd could be processed in accordance with the Tariff Regulations, 2014. Under the above circumstances, the Commission had, by various orders, revalidated till 31.03.2016, the tariff orders dated 14.08.2014, 25.09.2014 and 30.09.2014 in OP No. 9/2014 the details of which are given hereunder, -

Table-1.1

Revalidation of the Tariff orders dated 14.08.2014, 25.09.2014,30.09.2014 in OP No.9/2014

Particulars	Date of order	Period of validity
Tariff order in OP No.9/2014	14.08.2014	16.08.2014 to 31.03.2015
	25.03.2015	01.04.2015 to 30.09.2015
	25.09.2015	01.10.2015 to 31.12.2015
	14.12.2015	01.01.2016 to 31.03.2016
BST order in OP No. 9/2014	25.09.2014	16.08.2014 to 31.03.2015
	25.03.2015	01.04.2015 to 30.09.2015
	25.09.2015	01.10.2015 to 31.12.2015
	14.12.2015	01.01.2016 to 31.03.2016
Transmission charges, wheeling charges, open access charges	30.09.2014	16.08.2014 to 31.03.2015
	25.03.2015	01.04.2015 to 30.09.2015
	25.09.2015	01.10.2015 to 31.12.2015
	14.12.2015	01.01.2016 to 31.03.2016

1.9 In the letter No. KSEB/TRAC/ARR & ERC 2016-17/2353 dated 30.11.2015, KSEB Ltd had requested the Commission to grant time extension for one month, i.e. till 31.12.2015 for filing the ARR & ERC petition for 2016-17. The reasons cited for such enlargement of time were the time taken for the following new initiatives taken by KSEB Ltd.

- (i) Ensuring accuracy and integrity of data.
- (ii) Completing the implementation of LT billing software in the balance 256 sections.
- (iii) Implementation of central processing of data.
- (iv) Submission of data relating to voltage wise distribution loss.
- (v) Preparation of safety budget plan for improving safe operations of the installations and network.
- (vi) Assessment of the impact of renewable energy purchase and the solar photo voltaic (PV) penetration.

Even after expiry of the period of extension of one month, as requested for in the letter dated 30.11.2015, KSEB Ltd did not file the application for determination of tariff as per the provisions of Tariff Regulations, 2014.

1.10 The Commission thereupon, vide its letter dated 11.01.2016, informed KSEB Ltd as follows,-

- (a) *As per the regulation-11 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as the Tariff Regulations, 2014), the application for the ARR&ERC should be filed, along with the truing up of accounts for the previous financial year, on or before 30th of November of the current financial year, as per the details specified therein. The relevant provisions of the regulation is extracted below for ready reference.*
- (b) *The Tariff Regulations, 2014 has been in force from the FY 2015-16 onwards. Prior to issuance of the said Regulations, the applications for determination of tariff filed by the distribution licensees were processed in accordance with the provisions of the following regulations,-*
 - (i) *Kerala State Electricity Regulatory Commission (Tariff) Regulations, 2003;*
 - (ii) *Kerala State Electricity Regulatory Commission (Terms and Conditions of Tariff for Retail Sale of Electricity) Regulations, 2006;*
 - (iii) *Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity under MYT Frame Work) Regulations, 2006; and*
 - (iv) *Kerala State Electricity Regulatory Commission (Fuel Surcharge Formula) Regulations, 2009.*
- (c) *As per regulation 99 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations 2014, the above regulations, stand repealed.*
- (d) *All the distribution licensees in the State, other than KSEB Ltd are following the provisions in the Tariff Regulations, 2014 for filing the ARR& ERC since the year 2015-16.*
- (e) *However, KSEB Ltd has not followed the provisions of the Tariff Regulations, 2014 while filing the ARR&ERC for the year 2015-16 vide the application dated 30-03-2015.*
- (f) *Though KSEB Ltd has challenged the KSERC (Terms and Conditions for Determination of Tariff) Regulations 2014, before the Hon'ble High Court vide the WP(C) No. 465/2015 (G), the Hon'ble High Court has not stayed the implementation of the said Regulations. The Hon'ble High Court, vide its interim order dated 7th January-2015, has issued only the following direction:*

'The tariff proposals if any submitted by the petitioner shall not be rejected on the basis of Ext. P5 regulations'.

- (g) Commission is statutorily responsible for regulating the various activities of the 'Distribution licensees' including the expenses of the utility. The Commission has to regulate the licensees based on the provisions of the Electricity Act, 2003 and the regulations notified by the Commission in conformity with the provisions of the said Act from time to time. KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 is the prevailing regulations applicable to the licensees and generating companies in Kerala.*
- (h) Commission further informs that, the expenses incurred by the licensees without the approval of the Commission and the expenses which are not prudent will not be allowed to be passed on to the consumers by way of tariff.*
- (i) In accordance with the First Transfer Scheme issued by the Government as per G.O (MS) 37/2008/PD dated 25th September 2008 and published as SRO No.990/2008, under Section 131 of the Electricity Act, 2003, the properties, liabilities, interests, rights and obligations of the erstwhile Kerala State Electricity Board were transferred to and vested in the Government. The Government has, under the Companies Act, 1956, incorporated a fully Government owned company namely KSEB Ltd for re-vesting the functions, properties, interest, rights, liabilities, proceedings and personnel in accordance with sub-section (2) and Section 133 of the Act, 2003. There are three independent Strategic Business Units under the corporate office of KSEB Ltd namely Strategic Business Unit (Transmission), Strategic Business Unit (Distribution) and Strategic Business Unit (Generation) for managing the activities relating to transmission, distribution and generation. Accordingly the Government has, vide G.O (P) No.46/2013/PD dated 31.10.2013, published as SRO No.871/2013, issued the Second Transfer Scheme in exercise of the powers conferred under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act, 2003. As per the Second Transfer Scheme, the Government has re-vested in KSEB Ltd., the functions, properties, interest, rights, liabilities, proceedings and personnel of the erstwhile KSEB. As per the provisions of Section 12 and Section 14 of the Electricity Act, 2003, KSEB Ltd is the State Transmission Utility and a distribution licensee which has to perform the duties and functions of the transmission licensee and distribution licensee. In view of the provisions in the Electricity Act, 2003, to the effect that the transmission licensee and the State Transmission Utility shall not engage in trading of electricity, the functions of transmission licensee and the functions of distribution licensee are vested in the Strategic Business Unit (Transmission) and the Strategic Business Unit*

(Distribution) respectively. The provisions of the Tariff Regulations, 2014 applied to the above Strategic Business Units and to the State Load Despatch Centre which should be ring fenced to ensure independent functioning.

- (j) Considering the above facts and legal provisions, KSEB Ltd as well as the Strategic Business Units and State Load Dispatch Centre are statutorily bound to submit application for determination of tariff strictly as per the provisions of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 including the time lines specified therein. Petitions if any submitted for condoning the delay if any will be considered on merits as and when such petitions are filed along with the applications for determination of tariff.*

1.11 KSEB Ltd did not comply with the statutory provisions contained in the Act or in the Tariff Regulations, 2014 made there under. It did also not comply with the directions of the Hon'ble APTEL in its judgment dated 11.11.2011 in OP No. 1/2011 or with the directions issued by this Commission. Consequently, in letter No. 2329/F&T/2015/ KSERC/332 dated 31.03.2016, the Commission further informed KSEB Ltd as follows,-

“

- (i) All the licensees in the State except KSEB Ltd has filed the ARR&ERC under MYT for the control period from 2015-16 to 2017-18 as per the provisions of the KSERC (Terms and Conditions of Tariff) Regulations, 2014. Though KSEB Ltd had filed the ARR&ERC for the 2015-16 for a single year basis, without adhering to the provisions in the KSERC (Terms and Conditions of Tariff) Regulations, 2014 on 31st March-2015, the Commission could not process the petition, due to the interim order of the Hon'ble High Court in WP (C) No. 465/2015(G), filed by KSEB Ltd challenging certain regulations in KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014.*
- (ii) The Commission vide the letter cited under reference has directed that, KSEB Ltd as well as the Strategic Business Units and State Load Dispatch Centre are statutorily bound to submit application for determination of Tariff, strictly as per the provisions of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 including the time lines specified therein. However, KSEB Ltd is yet to comply with the directions of the Commission. KSEB Ltd as the STU with State Load Dispatch Centre and the distribution licensee owning generation assets, is statutorily bound to comply with the provisions of the Electricity Act-2003, KSERC (Conditions of License for Existing Distribution Licensees) Regulations, 2006, KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 and other relevant*

regulations, orders and directions issued by the Commission from time to time.

- (iii) The Commission vide its suo motu orders dated 25-03-2015, 25-09-2015 and 14-12-2015 has extended the validity of the tariff order dated 14-8-2014 and the tariff order dated 30-09-2014 in OP No. 9/2014 up to 31-03-2016. The Commission has extended the validity of the said orders dated 14-08-2014 and 30-09-2014 in OP No. 9/2014 for a further period upto 30-09-2016 for all licensees, who have filed the application for approval of ARR&ERC under MYT as per the provisions of the KSERC (Terms and Conditions for Determination of Tariff) regulations, 2014.*
- (iv) It is noted that, KSEB Ltd has not filed any application for the approval of ARR&ERC for the year 2016-17 as per the provisions of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. Neither has it filed any application for extending the validity of the tariff order dated 14-08-2014 in OP No. 9/2014 and 30-09-2014 in OP No. 9/2014 beyond 31-03-2016, with valid reasons. It is informed that, the extension of the validity of the tariff order dated 14-8-2014 and the tariff order dated 30-09-2014 in OP No. 9/2014 as applicable to KSEB Ltd will expire on 31-3-2016. Appropriate action may be taken.”.*

1.12 Kerala State Electricity Board Ltd has, consequent to the said letter No. 2329/F&T/2015/KSERC dated 31.03.2016 issued by the Commission, filed a petition on 04.04.2016, requesting to extend, till 30.09.2016 or till the present rates are revised by the Commission, the validity of the tariffs determined by the Commission as per its orders dated 14.08.2014, 25.09.2014 and 30.09.2014 in OP No.9/2014. KSEB Ltd has claimed that the said petition was filed under Section 62 (4) and Section 64 (6) of the Electricity Act, 2003, read with regulations 22 (b), 44 and 69 of Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003. The Commission has carefully examined the request of KSEB Ltd in view of the relevant facts and legal provisions. Sub-section (4) of Sections 62 and sub-section (6) of Section 64 of the Electricity Act, 2003, are quoted hereunder.

“62.Determination of Tariff. –

(4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.

64. Procedure for tariff order.-

(6) A tariff order shall, unless amended or revoked, continue to be in force for such period as may be specified in the tariff order.”.

From sub-section (4) of Section 62, it can be seen that tariff order shall normally be issued once in each financial year with a validity period of one financial year and the tariff cannot be changed during that financial year. Sub-section (6) of Section 64 of the Act stipulates that a tariff order shall, unless amended or revoked, continue to be in force for such period as may be specified in the tariff order. The said statutory provisions do not confer on KSEB Ltd any right or privilege to request, without submitting proper application and supporting documents as specified in the Tariff Regulations, 2014, for enlargement of the validity period of the tariff orders dated 14.08.2014, 25.09.2014 and 30.09.2014 which were issued for the financial year ending on 31.03.2015. Regulation 11 of the Tariff Regulations, 2014 provides that every transmission licensee or distribution licensee or State Load Dispatch Centre shall file on or before 30th day of November of the current financial year, an application for approval of ARR and for determination of tariff for the ensuing financial year along with application for truing up of the accounts for the previous financial year. It is further stipulated therein that the tariff determined for a particular financial year shall be in force till the end of such financial year unless the Commission approves the continuation of such tariff for subsequent periods.

1.13 Being the State Transmission Utility and the distribution licensee owning most of the generation assets in the State, KSEB Ltd has a bounden duty and responsibility to submit in time, in compliance of the relevant statutory provisions and regulations, the application for determination of the aggregate revenue requirements (ARR), the expected revenue from charges (ERC) and the tariff, along with all the supporting documents as specified in the Tariff Regulations, 2014. KSEB Ltd has to, in compliance of the provisions in the Section 64 of the Act, submit application for determination of tariff for various categories of consumers depending upon the revenue gap or revenue surplus anticipated during the relevant financial year. ARR is the estimate of expenditure for a financial year and ERC is the estimate of revenue for that particular financial year at the prevalent tariff and the difference between them would indicate the revenue surplus or revenue gap to be considered while determining the tariff. The Commission has to conduct public hearing on such applications as an integral part of the procedure for determination of tariff. After duly considering all the relevant facts presented by the licensee and by the stakeholders and after prudence check, the Commission has to issue appropriate orders determining the tariff. Under the circumstances as explained in earlier paragraphs the validity of the tariff orders dated 14.08.2014, 25.09.2014 and 30.09.2014 was extended by the Commission till 31.03.2016.

1.14 It is the prime and foremost duty of KSEB Ltd to submit applications for truing up of its accounts with actual figures of revenue and expenditure and audited accounts, so that the Commission can, after due consideration of all the

relevant facts and figures and after public hearing and prudence check issue appropriate orders thereon. As a Government company incorporated under the provisions of the Companies Act, 1956 and functioning under the provisions of the Companies Act, 2013, KSEB Ltd must have completed preparation of its annual accounts for 2014-15 and 2015-16. The Comptroller and Auditor General (C&AG) must also have completed the audit of the accounts of KSEB Ltd for the financial year 2014-15. But for reasons unknown to the Commission, KSEB Ltd has not submitted in time the application for truing up of accounts to the Commission for its scrutiny, prudence check and approval. It should be specially noted that the Commission has the duty to examine such accounts and to conduct prudence check with a view to safeguarding the interests of the consumers. The consumers who contribute to the revenue of KSEB Ltd have a right to know such accounts. The action of KSEB Ltd in having delayed the application for truing up of accounts for the scrutiny by the Commission and by the consumers cannot be justified on any grounds. Further, in the case of delay in submitting the application for truing up of accounts, KSEB Ltd would face the risk of losing the chance to recover the amount of revenue gap, if any, as determined by the Commission.

1.15 In the petition dated 04.04.2016, KSEB Ltd has submitted that the petitioner 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. In the petition dated 04.04.2016, KSEB Ltd has further submitted that the Hon'ble APTEL vide its order dated 10.11.2014 in appeal Nos. 1/2013 and 19/2013, has remanded the matter of truing up of accounts of KSEB Ltd with certain findings which are expected to alter various trued up figures applicable to KSEB Ltd for the year 2010-11. KSEB Ltd has not explained how and why the said order of the Hon'ble APTEL dated 10.11.2014 would prevent it from filing the application for truing up of accounts and for determination of tariff, along with the details of the actual expenditure and revenue and the audited accounts for the relevant financial year.

1.16 In para 15 and 16 of the petition dated 04.04.2016 KSEB Ltd has submitted that as per regulation 9 (2) of the Tariff Regulations, 2014, an application for approval of the ARR & ERC in MYT frame work for the second year of the control period shall be based on elements like,-

- (i) Approval of ARR by the Commission for the control period along with the determination of tariff for the first year of the control period.
- (ii) Revised forecast of the ARR for the ensuing year.
- (iii) Truing up of expenses and revenue of previous financial year.

KSEB Ltd has stated in para 16 of the petition dated 04.04.2016 that it is facing difficulty in complying with the direction of the Commission in view of the fact that the application for approval of ARR & ERC for the first year of the control period (2015-16) is pending before the Commission. ARR is the estimate of expenditure for a financial year and ERC is the anticipated revenue for the said financial year at the prevalent tariff. Therefore the above contention of KSEB Ltd does not appear to be reasonable or well founded, since the estimate of expenditure and revenue at the prevalent tariff do not depend on the order of the Commission approving the ARR & ERC of the previous financial year.

- 1.17 In para 18 of the petition dated 04.04.2016 KSEB Ltd has submitted that non-availability of approved tariff will severely affect its effective functioning including financials and that the absence of approved tariff could cripple the entire revenue generation activity, which in turn could lead to default in payment to generators, central transmission utility, banks and financing agencies etc., which could have serious consequences in maintaining power supply within the State. It has been further submitted that without an approved tariff applicable for retail supply, KSEB Ltd will not be able to effectively perform its various duties and responsibilities mandated under the Electricity Act, 2003 as a distribution licensee. Therefore KSEB Ltd has requested the Commission to extend the validity of the existing tariff orders dated 14.08.2014, 25.09.2014 and 30.09.2014 in OP No.9/2014 till 30.09.2016 or the date of effect of new tariff order pertaining to the financial year 2016-17 whichever is earlier.
- 1.18 In nutshell KSEB Ltd has requested the Commission to extend the validity of the existing tariff orders without submitting any application and substantiating documents for the approval of ARR & ERC and for the determination of tariff and without submitting any data, documents or accounts relating to its performance during 2015-16 and relating to the anticipated expenditure and revenue during 2016-17. KSEB Ltd has also taken a stand to the effect that in the absence of orders on truing up of accounts relating to the financial years 2010-11, 2011-12 and 2012-13, it is not in a position to project its revenue requirements properly. At the same time, KSEB Ltd has not submitted all the necessary details for truing up of accounts relating to the financial years 2010-11, 2011-12 and 2012-13, in accordance with the directions of the Hon'ble APTEL in its judgment dated 10.11.2014 in Appeal Nos. 1/2013 and 19/2013, to enable the Commission to issue appropriate orders. It may not be appropriate for the Commission to allow KSEB Ltd to take advantage of its own lapses, which can either be willful or inadvertent. KSEB Ltd does also appear to be unconcerned about the directives given by the Hon'ble Supreme Court and by the Hon'ble APTEL to the effect that, the consumers should not be burdened with the carrying cost on regulatory assets, if any, caused by the delay on the part of the licensee, in filing application for truing up of accounts and for recovery of fuel surcharge.

1.19 The Commission had, as per its letter No. 2227/F&T/2014/KSERC dated 29.01.2016, directed KSEB Ltd to submit on or before 29.02.2016, the additional details / clarifications required for passing orders on the application for truing up of accounts relating to 2011-12 and 2012-13. KSEB Ltd has not so far submitted all the required details and documents as directed by the Commission to enable it to pass appropriate orders in view of the directions of the Hon'ble APTEL in its order dated 10.11.2014. It is a well-accepted fact that regular determination of cost reflective and viable tariff is necessary to minimize tariff shock to the consumers, to minimize un-sustainable cross subsidies and to maintain financial health of the utilities in the long run. KSEB Ltd has also not so far filed any application for determination of tariff relating to 2016-17 or 2017-18, with the details relating to its revenue requirements for the above financial years in accordance with Tariff Regulations, 2014. The Commission is bound to determine tariff applicable to 2017-18 in accordance with the regulations and the orders issued by the Hon'ble APTEL. Therefore the Commission has decided to determine tariff for the year 2017-18 in suo motu proceedings as directed by the Hon'ble APTEL in its order dated 11.11.2011 in OP No.1/2011, as specified in the Tariff Regulations, 2014 and as stipulated in the Tariff Policy, 2016.

1.20 The Commission has, vide notice No. 1007/F&T/Suo motu Tariff Revision / 2016-17 dated 22.06.2016 initiated suo motu proceedings for determination of tariff. In the said notice, the Commission had proposed the following aggregate revenue requirements and expected revenue from charges for the SBU-G, SBU-T and SBU-D of KSEB Ltd for the years 2016-17 and 2017-18 based on the information available with the Commission.

Table 1.2
Estimate of the ARR & ERC of SBU-G, SBU-T and SBU-D of KSEB Ltd vide the
Suo motu proceedings dated 22.06.2016

Particulars	2016-17				2017-18			
	SBU-G	SBU-T	SBU-D	Total	SBU-G	SBU-T	SBU-D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Power Purchase			6700.33	6700.33			7098.57	7098.57
Interest & Finance charges	177.85	256.49	1154.51	1588.85	178.30	257.43	1175.47	1611.20
Depreciation	172.43	184.25	58.12	414.80	172.43	184.25	58.12	414.80
O&M expenses	72.07	176.89	1376.76	1625.72	76.28	190.18	1491.04	1757.50
RoE	90.38	96.57	30.47	217.42	90.38	96.57	30.47	217.42
Total ARR	512.73	714.20	9320.20	10547.12	517.39	728.43	9853.68	11099.49
Less Non tariff Income			431.00	431.00			439.00	439.00
Net ARR	512.73	714.20	8889.20	10116.12	517.39	728.43	9414.68	10660.49
Revenue from Tariff				10690.87				11260.88
Revenue surplus				574.74				600.39

The Commission had also proposed that, the Commission would take appropriate decision on the determination of tariff for the year 2016-17, after finalising the revenue surplus/ gap for that year and adjusting the same against the revenue surplus/gap, if any determined in the process of truing up of accounts of KSEB Ltd for the previous years. As per the previous orders on truing up of accounts up to the year 2010-11, the net unbridged revenue gap approved by the Commission as on 31-03-2011 is Rs 424.11 crore. KSEB Ltd has filed the application for truing up of accounts for the year 2011-12 before the Commission on 19-11-2014, with a revenue gap of Rs 1934.13 crore. As per the application for truing up of accounts for the year 2011-12, the increase in cost of generation and power purchase over the approved level alone is Rs 731.71 crore. KSEB Ltd had filed the application for truing up of its accounts for the year 2012-13 before the Commission on 21-04-2015, with a revenue gap of Rs 3998.89 crore. The increase in cost of generation and power purchase incurred for the year 2012-13 over the approved level is Rs 2562.96 crore. The revenue surplus / gap, if any, determined in the process of truing up of accounts of KSEB Ltd would also be considered while determining tariff for the year 2016-17. A provisional tariff would be published by the Commission based on the net surplus/gap, so approved, and finalised after duly considering the objections and suggestions of the consumers and other stakeholders.

1.21 The Commission conducted public hearing on the said proposals at Thiruvananthapuram on 27-07-2016.

- (a) During the hearing, Sri. Dijo Kappan representing the domestic consumers submitted that the price of power in the open market has reduced drastically and prayed that the reduction in the cost of power purchase shall be passed on to the consumers through reduction in tariff. As per the regulations, KSEB Ltd should have filed the application for determination of tariff in time. The reason for not filing tariff application on the part of KSEB Ltd is not known and the as such the stand of KSEB Ltd is illegal and improper. The intention behind non-filing of tariff petition is *mala-fide*. He pointed out that huge amounts are outstanding as electricity charges against Government & non-Government organizations. The number of standing counsels engaged by KSEB Ltd should be reduced for avoiding unnecessary legal expenses. Referring to the validity of the existing tariff order, he submitted that collection of electricity charges by KSEB Ltd in the absence of a valid tariff order is illegal.
- (b) Adv. J.Venugopalan Nair, Vice President, Kissan Sabha submitted that the cardamom cultivators are facing huge difficulty due to the change in categorization under LT IV category and prayed that they may be allowed to be charged under LT VA agriculture tariff.

- (c) Sri. George Thomas presented suggestions/ objections on behalf of the Kerala HT & EHT Industrial Electricity Consumers' Association. He requested the Commission to comply with directives of the Hon'ble APTEL and determine tariff based on voltage-wise cost of supply only. He further submitted that, if there is a contradiction between APTEL Order and regulations, the regulations will prevail and therefore requested that RoE as per the tariff regulations 2014 should only be considered. He also requested that the Hon'ble Commission to initiate separate proceedings under section 142 and 146 of the Electricity Act, 2003 against KSEB Ltd for non-compliance with the Tariff Regulations, 2014. He also highlighted the recent daily order dated 18-07-2016 of the Commission on the admissibility hearing on the petition filed by KSEB Ltd seeking extension of validity of tariff orders dated 14-08-2014, 25-09-2014 and 30-09-2014 in OP No.9/2014. In the said proceedings, the Commission observed that it is for the KSEB Ltd to submit application for determination of tariff with all necessary and sufficient documents; and to get orders thereon, without delay. It is not appropriate to request for orders on tariff, without submitting any details. In this context, he pointed out that since there is no valid tariff at present, the tariff being charged presently by KSEB Ltd. is illegal. He requested the Commission to consider the energy demand/ requirement computed based on bottom-up approach instead of top-down approach. The Association suggested a reduction of T&D loss of 0.5% for each year and computed T&D loss at 13.50% and 13.10% for FY 2016-17 and FY2017-18. The association submitted that the interest on the bonds to be issued by the Master Trust amounting to Rs.814 crore may not be allowed and that RoE at the rate of 14% only, may be allowed on the reduced equity capital of Rs.283.91 crore in view of the order of the Hon'ble APTEL. Based on such assumptions, the HT&EHT Association has assessed a revenue surplus of Rs.1925.81 crore for the year 2016-17 as against the revenue surplus of Rs.574.75 crore estimated by the Commission. Similarly, the revenue surplus arrived at for the year 2017-18 is Rs.2014.01 crore as against the revenue surplus of Rs.600.39 crore arrived at by the Commission. The HT&EHT Association also requested that, direction may be given to KSEB Ltd to upload their comments on the *suo motu* petition at their website and also permit all stakeholders to offer remarks on the submission of KSEB Ltd.
- (d) Sri. Noby Joseph, KSSIA, presented the views of Kerala Small Scale Industries Association and submitted that the quality of the power supply and the standards of performance of the licensee should be improved.
- (e) Representing All Kerala Small Scale Flour & Rice Mill Owners Association (AKSSFROA), Sri.Augustin, President of the Association, presented the views of the association and submitted written remarks before the Commission. They prayed that the tariff of LT-IV A category may be reduced.

- (f) Sri. Sambasivan, HINDALCO submitted that surplus power is available in the country at cheaper rates. Hence there is no plausible reason for increase in tariff. He also submitted that the Commission may interfere in the issue of denial of open access to HT&EHT consumers.
- (g) Sri. M.G.Suresh Kumar, represented the Kerala State Electricity Board Officers Association (KSEBOA) submitted that the *suo motu* action initiated by the Commission is *sub judice* in view of the writ petition pending before the Hon'ble High Court of Kerala. He has pointed out various defects / deficiencies in the assessment of ARR &ERC by the Commission. He also requested to approve the entire employee cost as claimed by KSEB Ltd.
- (h) Sri. John Mathew representing the Hindustan News Print (HNL) presented the views and submitted written remarks during the hearing. Sri. Johnny George, representing M/s MRF Ltd submitted that, as there is power surplus in the country, the power can be procured at lower rate, and hence the tariff can be reduced.
- (i) Sri. Shaji Sebastian, on behalf of Kerala Small Scale Industries Association submitted that the small scale industries are taking efforts to reduce the load during peak hours by rescheduling their production. He pointed out that KSEB Ltd should avoid taking up minor generation projects, as their overhead expenses are high resulting in higher project cost. He also highlighted the importance of renewable energy sources.
- (j) Sri.A.R.Satheesh, Carborandum Universal, presented his views on the *suo motu* action initiated by the Commission and pointed out that the price of Naphtha has reduced in 2015-16 by more than half when compared to the price in 2014-15. He stated that KSEB Ltd is selling excess power through power exchanges at a very low rate. He submitted that, the anticipated surplus in ERC may be passed on to the consumers through reduction in tariff.
- (k) KSEB Ltd was represented by Sri.V.K.Joseph, Chief Engineer (Commercial & Tariff), Sri. Bipin Shankar P, Deputy Chief Engineer (TRAC), Sri.K.G.P.Namboothiri, Executive Engineer (TRAC), Sri. Girish Kumar, Finance Officer (TRAC) Smt. Meharunisa, Executive Engineer (TRAC) and Smt.Latha S.V, Assistant Executive Engineer (TRAC). Sri. Bipin Shankar, Deputy Chief Engineer, presented the views of KSEB Ltd on the *suo motu* proceedings initiated by the Commission and responded to the queries of the Commission. KSEB Ltd submitted that, as against the revenue surplus of Rs 574.75 crore estimated by the Commission for the year 2016-17, KSEB Ltd estimated a revenue gap of Rs 1677.99 crore. Similarly for the year 2017-18, KSEB Ltd would have a revenue gap of Rs 2127.25 crore as against the revenue surplus of Rs 600.39 crore estimated by the Commission. KSEB Ltd has presented the details of estimation of various components of ARR and prayed before the Commission to consider the

revenue gap as projected by KSEB Ltd for the years 2016-17 and 2017-18. However, KSEB Ltd also stated that they did not propose to submit any tariff proposals for bridging the revenue gap for the year 2016-17. KSEB Ltd further prayed that the Commission may kindly allow the existing Tariff which was approved by the Commission vide orders dated 14-08-2014, 25-09-2014 and 30-09-2014 in petition No. OP No.9/2014, to continue till the Commission determines the tariff on the present *suo motu* proceedings.

- 1.22 Based on the submissions made by various licensees and other stakeholders the Commission provisionally decided to revise the tariff taking into consideration the statutory provisions, the regulations and the policy directives in the Tariff Policy, 2016. Accordingly the Commission published the resume of the proposed revision of tariff as per notice No. 1007/ F&T/ Suo Motu/2016-17 dated 01-12-2016, which was published in the following dailies on the dates shown against each.

Table-1.3
Details of notice published

Sl. No.	Name of the daily	Date of publication
1	Mathrubhoomi	05.12.2016
2	Deshabhimani	05.12.2016
3	Times of India	05.12.2016

Detailed notice was also published on the website of the Commission.

- 1.23 The Commission conducted public hearings on the proposals contained in the notice dated 1-12-2016 at the following places on the dates shown against each.

Table-1.4
Details of venue and date of public hearing

Sl. No.	Name of the venue	Date of public hearing
1	Conference Hall, Collectorate, Kannur	27.12.2016
2	Conference Hall, Hotel Nalanda, Kozhikode	28.12.2016
3	Municipal Town Hall, Kalamassery, Ernakulam	03.01.2017
4	Town Hall, Thrissur	04.01.2017
5	Conference Hall, Vydyuthi Bhavanam, Pathanamthitta	12.01.2017
6	Municipal Conference Hall, Kattappana, Idukki	13.01.2017
7	Institution of Engineers Hall, Thiruvananthapuram	17.01.2017

- 1.24 A resume of the objections, views and suggestions submitted by the stakeholders is given in Annexure 1. The important common issues raised by the stakeholders and the decisions of the Commission thereon have been discussed in detail subsequently in a separate chapter.

- 1.25 (a) A meeting of the State Advisory Committee (SAC) was convened on 18-1-2017 at Thiruvananthapuram. The SAC mainly discussed the suo motu proceedings initiated by the Commission. In the introductory remarks, the Chairperson briefed the circumstances leading to the suo motu proceedings for determination of tariff for the financial years 2016-17 and 2017-18. The general sentiment of the consumers in the public hearing held in seven places was to avoid the revision of the existing tariff whereas KSEB Ltd is of the view that the expenses incurred by it as per the audited accounts should necessarily be approved by the Commission. The Committee was also briefed about the issues relating to approval of power purchase agreement with RGCCPP of NTPC. The Commission is of the view that the increase in fixed costs is not reasonable considering the age of plant and hours of actual operation. The Commission earnestly believes that the authorities of NTPC would respond positively for the concerns of the Commission and workout practical solutions in this regard. The Chairperson further informed that it would always be better to incur capital expenditure with prior approval of the Commission so that the related depreciation, interests on capital liabilities and return on equity can be approved in the ARR. Shri. A.R.Satheesh, President HT & EHT Association stated that everyone expected a tariff reduction in the suo motu proceedings. He pointed out that KSEB Ltd has vide its letter dated 26-07-2016 stated that it was not proposing any tariff revision. He stressed that the revenue gap of the licensee should not be passed on to the consumers due to delay in filing the application for truing up and insisted to have the cross subsidy reduction roadmap in the tariff proceedings.
- (b) Shri. S.P. Ravi, Chalakudy Puzha Samrakshana Samithi, Pariyaram, Chalakudy stated that the expected reduction in hydro energy generation should be factored in the proceedings and requested for token provision for generation based incentive for off-grid solar systems, which need to be incorporated in the estimate for 2017-18.
- (c) Shri. Damodhar Avanoor, State President, KSSIA pointed out that increase in generation of hydel-power mentioned in the power point presentation does not reveal either the details of new projects or increase in efficiency. He further added that most of the domestic consumers are unaware of the advantages of installing roof-top solar panel even though plenty of roof-top space is available in the State.
- (d) Shri. T. K. Bhaskara Panicker, President, FRAT, specifically stated that the interest of the domestic consumers should be protected. The proposal, impliedly stated that the employee cost of KSEB Ltd is on the higher side and therefore the efficiency of the KSEB Ltd should properly be ascertained. He suggested that a sub-committee consisting of experts from finance, technical

and legal disciplines may be constituted for framing guidelines for reducing the tariff for domestic consumers.

- (e) Shri. S.N. Reghuchandran Nair, President, Trivandrum Chamber of Commerce and National Vice President, CREDAI insisted that mismanagement, if any, should immediately be stopped for increasing the efficiency of the KSEB Ltd and the burden on account of inefficiency should not be passed on to the consumers. He also requested the Commission to write to the Government for changing building rules so that the domestic consumers should compulsorily installed solar panels on the roof-tops.
- (f) Shri. S. Balasubramonian, Smartcity, Kakkanad, Kochi has stated that suo motu proceedings is the power given to the statutory authority to take actions if laws, rules and regulations are not properly followed by the utilities. It is seen that KSEB Ltd has deliberately not filed applications before the Commission on time for approval of tariff and therefore KSEB Ltd is answerable to the public and to the stakeholders. He suggested that KSEB Ltd can have joint ventures with other PSUs all over India, so that they can get power at cheaper rates, which would be beneficial to the State.
- (g) Shri. Kunal Gupta, General Manager, NTPC stated that the concerns expressed by the Commission on the issue of fixed charges has already been taken up with Corporate Commercial Department of NTPC for necessary action.
- (h) Shri. Dharesan Unnithan, Director, EMC, while expressing his views on the suo motu proposal stated that in the study on “Demand-response” jointly conducted by IIT-Mumbai and EMC, it is observed that unnecessary usage of energy by high end consumers of domestic sector especially consumption above 500 units per month and unnecessary usage of energy at religious institutions resulting in wastage of energy, which should be curtailed.
- (i) Shri. P. Valsaraj, Director (Technical) ANERT has expressed that it is high time to formulate a strategy so that the high-end domestic consumers should compulsory be asked to procure renewable energy for their consumption over and above 500 units.
- (j) Shri. N. Venugopal, Director, KSEB Ltd mentioned that KSEB Ltd is a PSU, with responsibility to implement the Govt. policies and therefore cannot be expected to function as a private company. The comparison with other small licensees is also not reasonable. The issues with NTPC has already been taken up by KSEB Ltd. He further informed that KSEB Ltd is now implementing the scheme of complete electrification and it is anticipated that it will be completed by March 2017. The shortfall in hydro generation is to be considered in the suo motu proceedings. He also mentioned that unlike other states, in Kerala, the budgetary support provided by the Government is only less than Rs.50 Crore per annum, while the utilities in the neighbouring States

like Tamil Nadu, Karnataka, Andhra Pradesh, receive Government support of about Rs.4,000 crore to Rs.5,000 crore.

- (k) The Chairperson, in this context, said that the public notice was initially issued on 22/06/2016 and revised on 01/12/2016. The power purchase cost projected in the suo motu proceedings was in accordance with the situations on the date of notification of public notice, which is required to be revised in accordance with the Tariff Regulations, 2014, wherein it is specifically stated that the power purchase cost is uncontrollable expense. The concern of the Commission in the case of extension of the PPA with RGCCCP of NTPC, is not only about the payment of very high fixed charges, but also on the absence of allocation of cheaper power to the State as was being done in the past. He hoped that the positive steps would be taken by KSEB Ltd, NTPC and Government of India for working out a viable solution and the Commission will only be happy to approve such viable solutions, if they are in the interest of KSEB Ltd and its consumers. The total performance of KSEB Ltd in the field of electrification of all the households is extremely credit worthy when compared to the performance in this field by the utilities in other States. Since KSEB Ltd has more than 750 section offices, the electrification of 1,20,000 households is achievable within a short period and the effort put in by KSEB Ltd in this regard is appreciable. Regarding fuel surcharge, it was mentioned that petitions have to be filed by KSEB Ltd on a continuous basis irrespective of the amount to be recovered or refunded. There is no difference of opinion about the efficiency of KSEB Ltd but it should attain better efficiency to sustain the future competitions in power sector. As pointed out in the report of IIM, Kozhikode, much more can be done by KSEB Ltd to improve the performance, to improve the services to the consumers, to improve the efficiency gains and to reduce the costs. Regarding the provision of GBI, the Commission will definitely look into the issue and if something is required to be corrected, it will be corrected. Regarding the solar roof-tops, the Commission has already issued necessary regulations and if any improvement is required, the same will be considered by the Commission. The solar project at Kasaragod, would be completed within a period of one or two months, as the work is going on smoothly. As far as KSEB Ltd is concerned, what is more important is to minimize the peak demand and increase the consumption probably during the night off-peak hours. The Energy Efficiency Services Ltd, Govt. of India has opened an office in Thiruvananthapuram and all industrial units and PSUs may avail the services of Energy efficiency Services Ltd., to improve energy efficiency. Regarding the tariff increase, KSEB Ltd has not yet asked for tariff increase in writing but projected their demand for excess expenditure without stating the source to meet such expenses. In the public hearings, the employees of KSEB Ltd had supported the organization in increasing the ARR amount and at the same time requesting that there should not be any increase in tariff especially for

domestic consumers. It is true that the minimum tariff should be at least 50% of the average cost of supply and the Commission has taken a very lenient view only in the case of agricultural consumers and charitable institutions. The cost coverage for domestic consumers is almost nearing 80% of the average cost of supply.

- (l) Shri. S. Venugopal, Member, KSERC, while sharing his views stated that all the stakeholders have definite roles, rights and duties. It is the duty of the licensee to ensure that the data provided by them are correct and have a clear understanding of the purpose for which the data is supplied. As pointed out by IIM, Kozhikode in their study report on KSEB Ltd, three major parameters effecting customer satisfaction are quality of services, customer complaints redressal and pricing. For quality of services, the Commission has already issued regulations on standard of performance. To measure the standards of performance and the quality of various services and to fix the tariff, the Commission fixed the norms which in turn are based on the data provided by the licensee. IIM report states that, KSEB Ltd as one of the better performing PSUs in India mainly due to two parameters viz., cost of power purchase and low T&D losses. But for these two parameters, the parameters like the cost of manpower and the cost of repairs and maintenance will place KSEB Ltd, among the last in the list. As per the report, technological breakthrough and technological innovation should be imbibed into the system for improving efficiency. The qualified manpower should properly be utilized. The key issue as per the report is wasted manpower, i.e., highly qualified manpower is being used for low level task. Competition in power sector has ushered in thorough changes by providing for open access, cross-subsidy limits, etc., 80% of the total consumers are under domestic category consuming 50% of energy and yielding 34% of revenue. The commercial consumers consume 14% of energy yielding 25% of revenue. Needless to say that everywhere the creamy consumers are targeted first when competition comes in and the competition in the power sector is no exception from the general rule. More efficient employees will also be targeted in the competition field. So utilities have to be more careful especially in the competitive scenario.
- (m) Shri. K. Vikraman Nair, Member, KSERC, insisted on proper system study before incurring capital expenditure on 11kV lines and transformers and enquired about the energy audit conducted by KSEB Ltd. He also pointed out that about 20 lakhs electro-mechanical meters are yet to be replaced in addition to faulty meters and stressed for immediate replacement so as to reduce commercial losses.
- (n) The majority of the Members of the advisory committee did not oppose the minimum tariff increase proposed by the Commission.

1.26 The Commission, after duly considering the views, suggestions and objections submitted by the consumers, the licensees and other stakeholders as well as the views expressed by the Members of the State Advisory Committee, does hereby issue the following orders in the suo motu proceedings initiated as per the notice dated 22.06.2016 and 01.12.2016.

CHAPTER-2
IMPORTANT STATUTORY, REGULATORY AND POLICY FRAME WORKS AND
CASE LAWS RELATING TO DETERMINATION OF TARIFF

2.1 The Electricity Act, 2003, has brought about far reaching changes in the power sector. It has further strengthened and streamlined the regulatory processes, which were commenced in India under the provisions of the Electricity Regulatory Commission Act, 1998. Government of India and the State Governments have issued several rules respectively under Section 176 and Section 180 of the Electricity Act, 2003. The CEA, CERC and SERCs have issued large number of regulations respectively under Sections 177, 178 and 181 of the Act read with other enabling provisions therein. Government of India has issued the National Electricity Policy and Tariff Policy under Section 3 of the Act. The important statutory, regulatory and policy frame works relating to determination of tariff for generation, transmission and distribution are briefly stated below.

Statutory provisions relating to mandatory independent functioning of the SBU-G, SBU-T and SBU-D of KSEB Ltd and the State Load Dispatch Centre

2.2 As per Section 12 of the Electricity Act, 2003, the functions of transmission, distribution and trading can be undertaken only with the licence issued under the provisions of the Act. Section 14 of the Act, authorizes appropriate Commission to grant licence for transmission, distribution and trading in accordance with the provisions of the said section. Section 16 of the Act empowers the Commission to issue regulations on Conditions of Licence. KSEB Ltd and its predecessor in interest namely KSEB, are State Transmission Utility and statutory distribution licensee. The STU is also statutory transmission licensee. Distribution licensee can undertake trading activities in accordance with the provisions in Section 14 of the Act. The State Transmission Utility and the transmission licensee are statutorily prohibited from undertaking generation, distribution and trading of electricity in accordance with the proviso to Sections 39 and 41 of the Act. The State Load Dispatch Centre is constituted by the State Government under section 31 of the Act and its functions are stipulated as per Section 32 of the Act. SLDC is the apex body to ensure integrated operation of power system in the State. The SLDC has to ensure optimum scheduling and dispatch of electricity in accordance with the power purchase agreements, monitor grid operations, keep energy accounts and exercise supervision and control over the intra-state transmission system for the safe, coordinated and economic operation as per the grid standards and Grid Code. In order to ensure just and equitable service to the generating companies, the transmission licensees, the distribution licensees, the trading licensees and to the consumers in the State,

the SLDC has to function independently. That is why, in the second proviso to Section 31 of Act it has been stipulated that the SLDC shall not engage in the business of trading in electricity. A perusal of Sections 14, 31, 32, 33 and 40 clearly show that, the transmission licensee, the distribution licensee and the SLDC shall function independent of each other, with a view to introducing and maintaining open access and competition for ensuring supply of good quality electricity at affordable rates to all citizens of our country.

Re-organisation of erstwhile KSEB under Section 131 of the Act

2.3 Government have, as per the Second Transfer Scheme issued under Section 131 of the Act, reorganized the erstwhile KSEB (the statutory Board constituted under Section 5 of the Electricity (Supply) Act, 1948) into a fully Government owned Company namely, KSEB Ltd. According to the Second Transfer Scheme issued as per GO (P) No. 46/2013/PD Dated 31.10.2013 and published as Statutory Rules and Orders (SRO) No 871/2013 in Kerala Gazette Extra Ordinary No.3103 dated 31.10.2013, the Government has constituted three independent Strategic Business Units (SBUs), namely SBU-Generation, SBU-Transmission and SBU-Distribution. The assets of the erstwhile KSEB have also been re-vested separately in the said SBUs. With a view to complying with the above mentioned statutory provisions, it has been stipulated in the Second Transfer Scheme that, the SBUs shall function independently and shall prepare separate accounts and balance sheets.

Separation of accounts relating to generation, transmission and distribution

2.4 As per sub-section (2) of Section 62 of the Electricity Act, 2003, the Commission can direct any licensee or any generating company to furnish separate details in respect of generation, transmission and distribution, as per the regulations issued by it, for the purpose of determination of tariff. Sub-clause (5) of clause (h) of para 5.11 of the Tariff Policy, 2016, does also stipulates the same. The provisions in the Tariff Regulations, 2014 do also require the licensee to submit separate accounts and other details for generation, transmission and distribution. The Commission had, in its earlier orders, issued directions to KSEB Ltd to submit separate accounts for generation, transmission and distribution.

Tariff Policy, 2016 and Tariff Policy, 2006

2.5 The Tariff Policy, 2016 and the Tariff Policy, 2006 issued by Government of India under Section 3 of the Act have stipulated norms and guidelines for determination of tariff. Few important guidelines stipulated in the Tariff Policy, 2016, are indicated below,-

- (i) MYT system should be introduced for determination of tariff (Ref. Para 8.1)
- (ii) Pass through of past losses should be allowed only to the extent caused by uncontrollable factors (Ref. para 8.2.1(5)). As per the regulation issued by the Commission, only the cost of power purchase and the taxes paid to Government are uncountable items and all the other items such as employee cost, repairs and maintenance cost, administration and general expenses, interest on capital liabilities, interest on working capital, return on equity etc are controllable items.
- (iii) The return on equity (ROE) and return on capital (ROC) shall be fixed by the appropriate Commission, taking into account the rate fixed by the CERC and the risk involved. (Ref. para 2.9 (a)). As per regulation 29 of the Tariff Regulations, 2014 and as per regulation 20 of KSERC (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity under MYT Framework) Regulations, 2006, the RoE has been fixed at 14%.
- (iv) Uncontrollable expenses should be recovered speedily, to ensure that the future consumers are not burdened with past cost (Ref. para 2.9.h (4) of the Tariff Policy). The Hon'ble Supreme Court and Hon'ble APTEL have also issued directives to the above effect. Price adjustment formula should be specified for speedy recovery of variations in the cost of power purchase or in the cost of fuel for generation of power.
- (v) All cost of purchase of power shall be approved unless the power has been purchased violating merit order or at unreasonable rate (Ref. para 8.2.1 (i)).
- (vi) Regulatory asset, if any, should be recovered in a time-bound manner, at the most within 7 years (Ref. para 8.2.2).
- (vii) Any revenue gap on account of the delay on the part of the licensee in filing the application for determination of tariff, shall be to the account of each licensee (Ref. para 8.1.7).
- (viii) The utilities shall prepare and disclose information separately on generation, transmission and distribution (Ref. para 2.9.h. (5)). This policy directive is in tune with Section 62 (2) of the Electricity Act, 2003.
- (ix) The appropriate Commission shall initiate suo motu proceedings for determination of tariff, if the licensee fails to submit in time the application for determination of tariff.
- (x) Tariffs for different categories of consumers shall be fixed in such a way that cross subsidy is gradually minimized and the tariffs progressively reflect the cost of supply. The tariffs for subsidizing and subsidized categories should be fixed in such a way that the tariffs shall be within plus or minus 20% of the average cost of supply of power.

Scope and validity of the regulations issued by the Commission

- 2.6 Section 30 of the Act stipulates that the State Commission shall facilitate and promote transmission, wheeling and inter connection arrangements within its territorial jurisdiction for the transmission and supply of electricity by economical and efficient utilization of electricity. Section 86 of the Act stipulates the functions of the State Commission. Section 50 and Section 57 of the Act empower the Commission to notify Supply Code and Standards of Performance Regulations respectively. Section 61 of the Act empowers the Commission to issue regulations for determination of tariff for generation, transmission and distribution based on commercial principles, with a view to ensuring competition, efficiency, economical use of resources, good performance and optimum investment, for safeguarding the interests of consumers and utilities. It has been stipulated in the said section that multi-year tariff system should be introduced, cross subsidy should be reduced and renewable energy as well as co-generation should be encouraged. Section 62 of the Act deals with determination of tariff and Section 64 of the Act stipulates the procedure for determination of tariff. It has been prescribed in the said sections that, the tariff should be determined separately for sale by generating company, transmission of electricity, wheeling of electricity and for retail sale of electricity and for this purpose separate accounts and other details shall be submitted by the utilities. Tariff shall be determined only after previous publication and public hearing. Tariffs for retail sale shall be fixed preferably for each financial year based on the application submitted by the distribution licensee.
- 2.7 Section 181 of the Act empowers the Commission to make regulations on the 42 items enumerated in clauses (a) to (zp) in sub-section (2) of Section 181. The Commission has issued a large number of regulations in exercise of its power under Section 181 and other enabling provisions such as Sections 50, 57 and 61. The main regulations relating to determination of tariff, issued by the Commission prior to the issuance of the Tariff Regulations, 2014, are,-
- (i) Kerala State Electricity Regulatory Commission (Tariff) Regulations, 2003
 - (ii) Kerala State Electricity Regulatory Commission (Terms and Conditions of Tariff for Retail Sale of Electricity) Regulations, 2006
 - (iii) Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity under MYT Framework) Regulations, 2006
 - (iv) Kerala State Electricity Regulatory Commission (Fuel Surcharge formula) Regulations, 2009

The Tariff Regulations, 2014, which came into force with effect from 14.11.2014 has repealed the regulations mentioned above.

- 2.8 The Hon'ble APTEL and the Hon'ble Supreme Court have held that these regulations are subordinate legislations which are binding on all the licensees, the generators, the consumers and other stakeholders as well as on the Commission, which issued the regulations. It is also a well settled legal position that;
- (1) The powers of judicial review on the provision of Electricity Act, 2003, and the rules and regulations made there under, is vested only in the Hon'ble High Court and the Hon'ble Supreme Court.
 - (2) The rules issued by the Government or the regulations issued by the Commission will continue to be in force till they are quashed by the Hon'ble High Court or by the Hon'ble Supreme Court or are repealed or amended by the authority which issued them.
 - (3) Pendency of litigations is not a bar against implementing the rules or regulations or orders issued by the authorities with jurisdiction and competence, unless such rules or regulations or orders are stayed by the Hon'ble High Court or by the Hon'ble Supreme Court.
- 2.9 KSEB Ltd is bound to implement all such regulations and the statutory provisions in the Electricity Act, 2003. It should also comply with the directions issued by the Hon'ble Supreme Court, the Hon'ble High Court, the Hon'ble APTEL and the Commission. In para 11.15 of its order dated 26.12.2007 on the ARR & ERC for the financial year 2007-08, the Commission had made this position amply clear. Para 11.15 of the said order is quoted hereunder

“11.15 Compliance with the Regulations

It is obligatory that the Licensees shall comply with the regulations published by the Commission in accordance with the Electricity Act, 2003. These regulations are published after extensive consultation with the stakeholders through pre-publication and public hearing and the regulations so finalized are placed before the State Advisory Committee and Government after the publication in the Kerala Gazette.”

The validity and applicability of the Tariff Regulations, 2014

- 2.10 The Commission has, after completing the due procedures as stipulated in the Electricity Act, 2003, notified the Tariff Regulations, 2014, which came into force with effect from 14.11.2014. The said regulations are applicable to all the licensees and generating companies in the State as well as to the Strategic Business Units and State Load Dispatch Centre under KSEB Ltd. KSEB Ltd has filed Writ Petition No. 465/2015 challenging the validity of the said regulations, mainly on the ground that the O&M charges as determined in accordance with the normative values specified in the regulations, would

result in under recovery of the actual expenses incurred by it. The Hon'ble High Court has admitted the Writ Petition, but has not stayed the operation of any of the provisions in the said regulations. Therefore the Tariff Regulations, 2014 are still in force and the provisions therein are applicable to KSEB Ltd also as in the case of other licensees.

Multi-Year Tariff Principles (MYT Principles)

2.11 Clause (f) of Section 61 of the Electricity Act, 2003, stipulates that MYT Principles shall be introduced while issuing the tariff regulations and the Commission has incorporated MYT Principles in the Tariff Regulations, 2014. Clause (h) of para 5.11 of the Tariff Policy, 2016, does also stipulates guidelines for introduction of MYT Tariff.

The policy directives, the regulatory provisions and the directions of the Hon'ble APTEL regarding suo motu determination of tariff by the Commission

2.12 As per the policy directives issued by the Government of India in clause (7) of para 8.1 of the Tariff Policy, 2016, the Commission has to determine tariff in suo motu proceedings if the licensee delays to file or denies to file in time, the application for determination of tariff. Sub-regulation (5) Regulation 11 of the Tariff Regulations, 2014, does also enjoin on the Commission to determine tariff in suo motu proceedings if the licensee delays to file or denies to file in time, the application for determination of tariff. The Hon'ble APTEL has also, in its order dated 11.11.2011, directed the Commission to determine tariff in suo motu proceedings in the case of delay or failure on the part of the licensee to file application for determination of tariff.

Implementation of the judgment dated 10.11.2014 of the Hon'ble APTEL in appeal No. 1/2013 and 19/2013

2.13 The Hon'ble APTEL has, in its judgment dated 10.11.2014 in appeal No. 1/2013 and 19/2013, directed to approve ROE at the rate of 15.5% and to approve the expenses towards increase in DA, payment of gratuity, payment of pension, etc in the case of the employees who were in the service of the KSEB Ltd, without considering the increase in the strength of the employees there after.

Recovery of past losses

2.14 Clause (5) of para 8.2.1 of the Tariff Policy, 2016, stipulates that pass through of past losses should be allowed only to the extent caused by uncontrollable factors. As per sub-clause (4) of clause (h) of para 5.11 of the Tariff Policy, 2016 the controllable costs should be recovered speedily to ensure that future

consumers are not burdened with past cost. It has also been clarified therein that uncontrollable cost would include (but not limited to) fuel costs, cost on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events. As per clause (1) of para 8.2.1, all power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates.

Effect of delay in filing application for truing up of accounts

2.15 The Hon'ble Supreme Court of India has, in its judgment UPPC Ltd Vs NTPC [(2009) 6 SCC 235], directed that the licensee shall, without any delay, file in time the application for truing up of accounts so that the Commission can finalize the amount of revenue gap if any, for the purpose of revising the tariff. The Hon'ble Supreme Court has also held that in the case of delay in filing application for truing up of accounts, the licensee will forfeit its claim to realize the amount of revenue gap in the subsequent years. The rationale behind such decision is that the new consumers who have availed electric connection in the ensuing years, and have absolutely no role in the consumption during previous years, cannot be burdened with the additional charge consequential to the consumption during previous years. The Hon'ble APTEL has also expressed similar views. It has been held by the Hon'ble APTEL in its order dated 08.06.2013, in Appeal No. 115/2012 and in order dated 23.11.2015 in Appeal No. 28/2014 that no carrying cost shall be allowed for the period of delay in filing the application for truing up of accounts. It has also been held that the licensee which delays truing up application cannot be allowed to take profit on account of its own delay. The above decision is not squarely applicable to all cases and it has to be applied cautiously based on merits of each case.

The validity of prudence check and applicability of audited accounts

2.16 The Hon'ble Supreme Court and the Hon'ble APTEL have held that the prudence checks by the Electricity Regulatory Commissions are the essential and inevitable ingredient of the regulatory processes and that the audited accounts are not binding on the Regulatory Commissions while approving the expenditure under the regulatory accounts, for the purpose of determination of tariff.

The licence fee and the application fee

2.17 The Section 16 read with Sections 12, 13, 14 and 15 of the Act empowers the Commission to issue regulations on Conditions of Licence. The licence fee is the fee to be remitted by the licensees in accordance with the regulations

namely, the KSERC (Conditions of Licence for State Transmission Utility) Regulations, 2005 and the KSERC (Conditions of Licence for Existing Distribution Licensees) Regulations, 2006. Clause (g) of sub-section (1) of Section 86 of the Act empowers the Commission to levy fees. The application fee is the fee to be remitted in accordance with the KSERC (Fees) Regulations, 2007 and the KSERC (Conduct of Business) Regulations, 2003 as amended from time to time. The licence fee and the application fee are items which are allowed as pass through while determining tariff and therefore the consumers are the actual payers of the licence fee and application fee.

Legal status of directions issued by the State Government under Section 108 of the Act.

- 2.18 It has been clarified that the directions issued by the State Government under Section 108 of the Act are only in the nature of guidelines, that such direction should be for the purpose of implementation of the provisions of the Act and that such directions shall not impose any impediments to the performance of duties by the statutory authorities.

Separation of Technical and Commercial Loss as per the provisions of National Electricity Policy

- 2.19 The National Electricity Policy issued under Section 3 of the Act stipulates that the technical loss and commercial loss should be assessed separately.

Reduction in cross subsidy and assessment of voltage wise cost of supply

- 2.20 As per clause (g) of Section 61 of the Electricity Act, 2003, the tariff should be fixed in such a way that it progressively reflects the cost of supply of electricity and also reduces cross subsidies in the manner specified by the appropriate Commission. Government of India have stipulated that the tariffs for different categories of consumers shall be within plus or minus 20% of the average cost of supply. As per sub-section (2) of Section 42 of the Act, the State Commission has to introduce open access subject to realization of wheeling charges and cross subsidy surcharges. Tariff Policy, 2016, has stipulated the formula for calculation of cross subsidy surcharge. Assessment of voltage wise cost of supply is absolutely necessary to assess cross subsidy surcharge for various categories of consumers.

Uniform retail sale tariff (RST) and differential bulk supply tariff (BST)

- 2.21 The licensees other than KSEB Ltd, purchase electricity from KSEB Ltd for supply within their jurisdiction. These licensees cater to the requirements of very small number of consumers, compared to the consumer strength of

KSEB Ltd. Except Thrissur Corporation, KDHPCL and Cochin Port Trust, other licensees such as Technopark, Infopark, Cochin Special Economic Zone Authority, Rubber Park India Ltd, KPUPL and Smartcity are statutory licensees supplying electricity to the cluster of consumers within a very small area of their activity. Therefore, instead of fixing different tariffs for a very small number of consumers in such small areas, the Commission has adopted uniform retail tariff for all the consumers of all the licensees and differential bulk supply tariff for each small licensee.

Important Case Laws

2.22 Important case laws of the Hon'ble Supreme Court and important orders of the Hon'ble APTEL, which have been relied upon by the Commission are listed below.

Supreme Court of India

- 1 PTC India Ltd Vs CERC [(2010) 4 SCC 603]
- 2 West Bengal ERC Vs CESC Ltd [(2002) 8 SCC 715]
- 3 Industrial Electricity Users Vs State of AP [(2002) 3 SCC 711]
- 4 WBERC Vs Hindalco Industries Ltd (2010) SCC 713
- 5 UPPC Ltd Vs NTPC [(2009) 6 SCC 235]
- 6 Gujarat Urja Vikas Nigam Ltd Vs Tarini Infrastructure Ltd [(Civil Appeal No 875/2012)]

Appellate Tribunal for Electricity

- 1 In Re. Tariff Revision (Suo motu action on the letter received from the Ministry of Power Government of India [(2014 ELR (APTEL) 350 OP NO. 1/2001]
- 2 Uttar Pradesh Power Corporation Ltd and Others Vs UPERC [(Judgment dated 23.11.2015 in Appeal No. 128 of 2014)
- 3 Bihar State Electricity Board Vs. Bihar Electricity Regulatory Commission [(Judgment dated 8.5.2013 Appeal No. 115 of 2012)]
- 4 Karnataka Power Transmission Corporation Vs KERC and Others [(Judgment dated 4.12.2007 Appeal No. 100/2007)]
- 5 Bihar State Hydro Electric Corporation Ltd Vs Bihar ERC [(2010 ELR (APTEL) 1050 Appeal No. 56 of 2010)]
- 6 Bihar State Hydro Electric Corporation Ltd Vs Bihar ERC [(2010 ELR (APTEL) 1183 Appeal No. 57 of 2010)]
- 7 Balassre Alloys Ltd Odisha Vs Odisha ERC [(2015 ELR (APTEL) 143] Appeal Nos. 218 and 219 of 2012)
- 8 Jindal Steel and Power Ltd Vs Chhattisgarh State ERC (2015 ELR (APTEL) 213 Appeal No. 213 and 2014 of 2013)

- 9 Power Grid Corporation of India Vs CERC and Others [(2014 ELR (APTEL) 0061 Appeal NO.58 of 2012)]
- 10 M.P Power Management Company Ltd Vs CERC [(2014 ELR (APTEL) 1207 Appeal No. 232/2013
- 11 Raigarh Ispot Udyog Sangh Vs Chhattisgarh State ERC and Others [(2014 ELR APTEL: 791 Appeal No. 89/2012)]
- 12 Haryana Power Generation Corporation Ltd Vs Haryana ERC [(2012 ELR (APTEL) 0633 Appeal No. 131/2011)]
- 13 Haryana Vidyuth Presseran Nigam Ltd Vs Haryana ERC and Others [(2012 ELR (APTEL) 1315 Appeal No. 102 of 2011]
- 14 Ramasankar Awasthi Vs UPERC [(2011 ELR (APTEL) 1673 Appeal No. 121 of 2010]
- 15 Haryana Power Generation Company Vs Haryana Electricity Regulatory Commission Appeal No. 131 Of 2011
- 16 Maruti Suzuki India Limited Vs HERC Appeal No. 103 OF 2012
- 17 BSES Rajdhani Nigam Limited Vs DERC Appeal No. 61 OF 2012

CHAPTER-3

REVIEW OF THE IMPLEMENTATION OF THE STATUTORY AND REGULATORY PROVISIONS AND OF THE COMPLIANCE WITH THE DIRECTIVES ISSUED BY THE COMMISSION

- 3.1 The Electricity Act, 2003 and the Rules and Regulations issued thereunder, have cast upon the licensees several duties and functions with regard to uninterrupted supply of good quality power at affordable tariff to the consumers. The Electricity Regulatory Commissions do also have duties and functions in this regard. The Commission has issued several directions to KSEB Ltd with a view to implementing the provisions of the Electricity Act, 2003, the regulations issued there under, the guidelines and Tariff Policy 2006, which has now been replaced by the Tariff Policy, 2016. In view of the statutory and regulatory provisions, the Commission has, in the following paragraphs, examined the status of implementation of the provisions in the Electricity Act, 2003, and in the regulations made there under.
- 3.2 KSEB Ltd, being the Government Company referred to in sub-section (2) of Section 131 of the Electricity Act, 2003, is a statutory licensee as per the fifth proviso to Section 14 of the Act. The erstwhile KSEB, the predecessor in interest of KSEB Ltd was also a deemed licensee under the first proviso to Section 14 of the Act. KSEB Ltd is the State Transmission Utility under Section 39 of the Act and as per the second proviso to Section 14 it is the deemed transmission licensee of the State. As per the first proviso to sub-section (1) of Section 39 and as per the third proviso to Section 41 of the Act, the State Transmission Utility and the transmission licensee shall not engage in the business of trading in electricity. It has been stipulated in the ninth proviso to Section 14 that a distribution licensee shall not require a licence to undertake trading in electricity. Further, as per the provisions of Section 39 and Section 40, the STU as well as transmission licensee has to provide to the distribution licensees, generators and consumers, non-discriminatory open access to its transmission system. Therefore it is evident that one person or company cannot function simultaneously as transmission licensee, distribution licensee and trading licensee in one area of licence.
- 3.3 It is with a view to complying with these statutory provisions, the Government of Kerala as per the Second Transfer Scheme notified as per G.O (P) No.46/2013/PD dated 31.10.2013 and published as SRO No.871/2013 in Kerala Gazette Extra Ordinary 3103 dated 31.10.2013, constituted independent Strategic Business Units (SBUs) for generation, transmission and distribution and stipulated that these SBUs shall function independently and prepare separate accounts and balance sheets. The generation, transmission and distribution assets of erstwhile KSEB were also re-vested

separately in the SBU-Generation, SBU–Transmission and SBU-Distribution for the above purpose. As per the provisions of the Act the SLDC shall also function as an independent unit. The Commission has also issued several regulations under Section 181, Section 16, Section 50, Section 57 and such other provisions in the Act. These regulations are subordinate legislations with statutory force and the power of judicial review on such regulations is vested only in the Hon'ble High Court and the Hon'ble Supreme Court. Therefore the regulations issued by the Commission are binding on the licensees, unless they are quashed or modified by the Hon'ble High Court or by the Hon'ble Supreme Court.

- 3.4 Section 23 of the Electricity Act, 2003, empowers the Commission to issue to the licensees, the directions which are necessary for maintaining the efficient supply, securing equitable distribution of electricity and promoting competition. The Commission may also, by order, provide for regulating supply, distribution, consumption and use of electricity. Section 142 of the Act authorizes the Commission to penalize any person who has contravened any of the provisions of the Act or the Rules or Regulations made thereunder or any direction issued by the Commission.

Failure to comply with the statutory provisions, the directives issued by the Government in the Second Transfer Scheme and the regulations and directives issued by the Commission relating to separation of accounts.

- 3.5 As per the records submitted before the Commission, the SBUs of KSEB Ltd and the SLDC have not started functioning independently and they have not submitted separate accounts and balance sheets. KSEB Ltd has not yet submitted separate details for generation, transmission and distribution as stipulated in sub-section (2) of Section 62 of the Act, in spite of the specific directions from the Commission and this specific directions of Government in the Second Transfer Scheme to prepare separate accounts and balance sheets for the SBU-G, SBU-T and SBU-D. Therefore it is highly necessary that the SBUs and SLDC of KSEB Ltd start functioning independent of each other and preparing accounts and balance sheets separately.

Failure to submit applications for determination of tariff in accordance with the provisions of the Tariff Regulations in force.

- 3.6 As per sub-section (4) of Section 62, no tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year. Therefore it is clear that Commission has to issue orders relating to the tariff applicable to every financial year. As per sub-section (3) of Section 64, the Commission shall, within 120 days from the date of receipt of application under sub-section (1), issue tariff order in accordance with the due

procedures stipulated by the Act and the Regulations. The Commission has issued the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, under section 61 of the Act, which empowers the Commission to specify by regulations the terms and conditions for determination of tariff. As per clause (f) of Section 61, multi-year tariff principles shall be adopted for determination of tariff. As per clause (g) of Section 61 the tariff shall be fixed in such a way that the tariff progressively reflects the cost of supply of electricity and also reduces cross subsidies. As per sub-regulation (1) of regulation 11 of the Tariff Regulations, 2014, the licensee has to submit on or before 30th November, the application for determination of tariff relating to the ensuing financial year. The above date has been fixed in such a way that the Commission can issue tariff order on or before 31st March, (that is 120 days from 30th November), after complying with all the procedures for determination of tariff. The licensee has to submit specific application for determination of tariff duly considering the revenue gap, the regulatory assets, if any, and such other facts. In the past also KSEB had not submitted in time the applications for determination of tariff. In this regard it has to be specifically noted that the application for approval of ARR & ERC is not the application for determination of tariff. The application for determination of tariff shall contain the present tariff structure and tariff, the proposed tariff structure and tariff and the anticipated additional revenue. KSEB Ltd has to submit application for determination of tariff for the first control period consisting of 2015-16, 2016-17 and 2017-18, as per regulation 11 of the Tariff Regulations, 2014. KSEB Ltd has not submitted any application for determination of tariff for the above financial years in accordance with the provisions of the Tariff Regulations, 2014. The Commission has, in its letter dated 11.01.2016, made it clear that the pendency of the WP No.465/2015(G) or the interim order dated 07.01.2015 therein, not invalidated or stayed the operation of any of the provisions in the Tariff Regulations, 2014 and therefore KSEB Ltd has to file proper application for determination of tariff in accordance with regulation 11 of the Tariff Regulations, 2014. KSEB Ltd has also, in the application for truing up of accounts for the financial year 2011-12, contended that pendency of civil appeals before the Hon'ble Supreme Court will not prevent the Commission from processing its application unless the impugned judgment of the Hon'ble APTEL has been stayed by the Hon'ble Supreme Court. But, KSEB Ltd has only submitted an application for approval of composite ARR & ERC for generation, transmission and distribution functions for the financial year 2015-16 without separation of accounts of SBUs and proposal for determination of tariff for various categories of consumers. However in view of the interim order dated 07.01.2015 in WP No. 465/2015(G) the Hon'ble High Court, the Commission has not rejected the application dated 30.03.2015 submitted by KSEB Ltd for the approval of the composite ARR & ERC of all the SBUs under KSEB Ltd for the financial year 2015-16. The application did also not

contain any proposal for determination of tariff and any details in accordance with MYT tariff principles as stipulated in the Tariff Regulations, 2014 and in Sections 61, 62 and 64 of the Electricity Act, 2003. Thus KSEB Ltd has not complied with the relevant statutory provisions in the Electricity Act, 2003, or with the regulations relating to determination of tariff.

Failure of KSEB Ltd to file the applications for truing up accounts in time.

- 3.7 KSEB Ltd has not been filing in time, the applications before the Commission for truing up of its accounts. Being a deemed distribution licensee and the State Transmission Utility, KSEB Ltd and its predecessor in interest namely KSEB, were bound to submit in time the application for truing up of their accounts, with all necessary and sufficient details. As early as in 2009, the Commission had, vide its letter dated 10.11.2009, directed KSEB to submit application for truing up of accounts relating to 2006-07, 2007-08 and 2008-09. KSEB had requested for extension of time for filing the application for truing up of accounts citing various reasons. In view of such applications the Commission had granted time up to 31.01.2010 and thereafter up to 20.02.2010 and 20.03.2010. Since KSEB failed to submit application for truing up of accounts as directed by the Commission, the Commission had in its letter dated 16.04.2010 sought explanation for the delay. In the explanation dated 07.05.2010 KSEB had stated that appraisals from field units were required for preparing the petition for truing up of accounts and the same team of officers were working on various other applications such as for ARR & ERC, fuel surcharge etc. KSEB also submitted that top priority would be given to filing of truing up applications so that the application for 2007-08 and 2008-09 would be filed by 22.05.2010. Thereafter KSEB in its letter dated 21.05.2010 requested time for filing truing up petition for 2007-08 and 2008-09 till the views of the Government are obtained on its claims of return on equity, provision for netting of dues with Government, subsidy receivable from Government, electricity duty etc. On observing that KSEB was deliberately adopting delaying tactics, the Commission rejected the said request and the decisions of the Commission in this regard was conveyed as per letter dated 01.06.2010. Even after one month of this communication, KSEB did not respond or do anything to file the truing up petitions. Under these circumstances the Commission initiated proceedings under Section 142 of the Act and issued notice. At that time the assets and liabilities of the erstwhile KSEB, which were vested in Government as per the First Transfer Scheme issued under Section 131 of the Act, were being managed by the Management Committee headed by the Special Officer appointed by Government of Kerala. A hearing was held on 12.07.2010 after giving notice to the Special Officer and the Secretary to the KSEB. Neither the Special Officer nor the Secretary to KSEB did turn up in person for the hearing held on 12.07.2010. Shri B.Sakthidharan Nair, Advocate appeared to represent

the Secretary to KSEB, before the Commission. He submitted a statement of the Secretary before the Commission and also argued the case. The main contentions put forward by the Secretary to KSEB through his advocate were as follows,-

“a) Notice of the Commission is illegal since procedures contemplated in Section 129 and 130 of the Act are not complied with.

b) As per notification No.GO(MS)37/2008/PD dated 25-9-2008, all functions, properties, interests, rights, obligations and liabilities of KSEB is vested with the State Government. The accounts of the Board is prepared based on Electricity Supply (Annual Accounts) Rules, 1985. Commission has not allowed certain expenses that appear in the book and ARR Statement of the Board filed before the Commission. These figures are arrived at consequent to the directions of the Government. So, clarification from the Government on these matters is necessary for filing the truing up petition.

c) The Commission has not notified the regulation on terms and conditions of Tariff for a deemed licensee like KSEB operating as a single entity performing generation, transmission and distribution.

d) Para IX of the policy direction issued by the Government as per GO(MS)34/06/PD dated 16.12.2006 should be followed by the Commission. The account of the Board is being audited by the C&AG based on Section 185(2)(d) of the Electricity Act, 2003 and Para IX of the above said Government Order is valid and binding. “.

3.8 The Commission analysed the facts of the case in view of the relevant regulations and statutory provisions and found that the failure of KSEB to submit the truing up petitions is against the orders of the Hon'ble Supreme Court and the Hon'ble APTEL. In the order in Appeal No. 100 of 2007 (KPCL Vs KERC & Others), the Hon. APTEL has held that,-

“Invariably, the projections at the beginning of the year and actual expenditure and revenue received differ due to one reason or the other. Therefore, truing up is necessary. Truing up can be taken up in two stages: Once when the provisional financial results for the year are compiled and subsequently after the audited accounts are available. The impact of truing up exercises must be reflected in the tariff calculations for the following year. As an example; truing up for the year 2006-07 has to be completed during 2007-08 and the impact thereof has to be taken into account for tariff calculations for the year 2007-08 or/and 2008-09 depending upon the time when truing up is taken up. If any surplus revenue has been realized during the year 2006-07, it must be adjusted as available amount in the Annual Revenue Requirement for the year 2007-08 or/and 2008-09. It is not desirable to delay the truing up exercise for several years and then spring a surprise for the

licensee and the consumers by giving effect to the truing up for the past several years.”

3.9 Further, Hon'ble Supreme Court in UPPCL and Others Vs NTPC Limited in (2009) 6 SCC 235 has ruled that additional costs shall not be passed on to the new tariff since some persons who are consumers during the tariff year in question may not continue to be consumers and some new consumers might have been added to the system and there is no reason why they should bear the brunt. Hence, it is clear that timely filing of applications for truing up of accounts is inevitable to maintain the financial stability and accountability of any utility in a regulatory regime.

3.10 Based on the above facts the Commission had found that, KSEB should have submitted the truing up petition for 2007-08 by 2008-09 and for 2008-09 by 2009-10. The Commission in its letter dated 01.06.2010 informed KSEB of the necessity of filing truing up petition in view of the decision of the Hon'ble Supreme Court and the Hon'ble APTEL. The Commission also intimated the decision to take action under Section 142 of the Act. Even after considerable time, KSEB did not comply with the directions issued by the Commission with regard to filing of truing up petitions. In this background, the contentions of KSEB were examined by the Commission and it was found as follows,-

a) *Section 129 of the Act refers to the power of the Commission to secure compliance, in the event of any contravention of any of the conditions of licence or conditions for grant of licence by a licensee or the contravention of any provision of the Act by a generating company. Section 130 of the Act prescribes the procedure to be followed for securing compliance under Section 129. These provisions are not invoked in the present proceedings. But action is taken under Section 142 of the Act against the Board for non-compliance of the direction of the Commission. Section 142 confers the necessary jurisdiction, hence the argument of the Board that the notice issued is illegal is not valid.*

b) *As per the contention of the Board, vide G.O.(MS)37/2008/PD dated 25-9-2008 all functions, properties, interests, rights and obligations of KSEB are vested with the State Government. As per clause 5(1) of the transfer scheme, all rights and liabilities of the Board shall be administered by the Government in the name as 'Kerala State Electricity Board' by appointing a Managing Committee and a Special Officer for continued operations. The liabilities include all debts, duties, obligations, and other outgoings including statutory liabilities. As per Clause 4(2), rights, responsibilities, liabilities and obligations in respect of personnel and personnel related aspects are excluded. As per Clause 5(3), the liabilities are with the transitional entity, which is bound to provide the details sought by the Commission. No provision in the*

Act provides that the obligations of the licensee are dispensed with if the transfer scheme is affected. Such scheme of things is not envisaged in the Act as it creates a vacuum in the functioning of the licensees. The provision under clause 4(2) itself weakens the claim of the Board that it is a Government department. These arguments do not suffice to provide an escape from the obligation of filing the truing up petition.

- c) *The argument that there is no regulation notified for determination of tariff for a deemed licensee like KSEB is also not acceptable, since most of the licensees in Kerala are deemed licensees and regulations notified are applicable to all licensees unless any one is specifically excluded. The Commission has issued KSERC (Tariff) Regulations, 2003 for enabling the filing of ARR & ERC of the Board. The Board has been following this for filing ARR&ERC petition so far. Truing up petitions filed upto 2006-07 were based on this. If the ARR&ERC for a particular year is approved and is implemented, there is no justification for not filing truing up petitions in the name of new regulations to be made. Truing up petitions contain basically actual expenditure against approved expenditure and deviations, the reasons for the deviations and the final position regarding expenditure and revenue showing the deficit or surplus, which will have to be considered for subsequent years. The justifications for the deviations will have to be critically examined by the Commission. The Board has now filed a petition for issuing regulation specifying the terms and conditions for determination of tariff for the Board which will be considered on merits. In any case, the issue in question refers to a period prior which ARR&ERC orders are available and the argument of the Board does not justify the non-filing of the truing up petitions 2007-08 and 2008-09. Moreover, it has been held by the Hon'ble Supreme Court in Kerala State Electricity Board Vs S.N.Grinda Prabhu and Bros. and Others reported in (1986) 4 SCC 198, that making of regulation is not a precondition to the tariff fixation or price fixation or security charge fixation. There are also other decisions on the same line such as AIR (58), 1971, 2 SCC 16 and AIR 1983 SCC 1296. These decisions are relied on by the Hon'ble Supreme Court in the decision reported in (2010) 4 SCC 603. Thus the argument that regulations are not notified for truing up petition cannot be accepted. In any case, new regulations will have only prospective effect and the Board cannot seek to hide behind the request for some new regulations to be made.*
- d) *As regards the preparation of Accounts as per Electricity Supply Annual Accounting Rules (ESAAR) 1985 and the directions issued under Section 108 of the Act, the Board is harping on its*

contentions on a settled position of law. There is no dispute over statutory accounting procedures being followed by KSEB as per ESAAR 1985. The Commission has not refused to go by the account so prepared under ESAAR 1985 so far. The Commission has no objection to this. However, for tariff determination, as held by Hon. Supreme Court in WBERC Vs CESC reported in 2002(8) SCC 715 the Commission is not bound by the audited accounts of the licensee in deciding which all items of expenditure should be passed on to the consumers. This stand was further endorsed by Hon. APTEL in the appeal filed by KSEB itself in appeal No.94 of 2008.

e) *It is pertinent to note the reply letter dated 21-5-2010 of KSEB which states as follows:*

“The accounts of KSEB for the year 2007-08 and 2008-09 had also been prepared on similar lines and in the absence of any regulatory guidelines to the contrary we were considering the filing of truing up petitions for 2007-08 and 2008-09 based on the annual accounts, as done in the past. KSEB now feels that filing the truing up for the year 2007-08 and 2008-09 will again meet the same treatment as what had happened for the accounts for the financial year 2006-07. (emphasis added) This is not a tenable argument and cannot be accepted as a reason for not filing the truing up petition for subsequent periods. If the Board is aggrieved by the earlier Order, statutory remedies are available to the Board as per the Act to challenge the Order issued by the Commission at the appropriate forum or prefer a review petition before the Commission. The position of the Commission has been made clear in the Order itself. The Board seems to be piqued by the stand taken by the Commission in the following matters in its order dated 14-5-2010 on the truing up petition for 2006-07 as can be made out from their letter dated 21-5-2010.

- i. Board’s claim on return on equity*
- ii. Provision for netting off dues between Government and KSEB*
- iii. Shortfall in revenue for giving 20 paise rebate*
- iv. Retaining the electricity duty collected by KSEB*

As stated in the letter dated 21-5-2010, KSEB wants Government’s clarification on these matters before filing the truing up petition. In fact it can be seen that the so called clarifications awaited from the Government need not delay the filing of truing up petitions. The comments on these issues are as under:

- I. *The Commission can allow the Board to earn a return on equity. However, as per the G.O (MS) No. 25/02/PD dated 09.10.2002 there is no equity in the Books of accounts of the Board. This was pointed out by C&AG as “the equity capital accounted is against the provisions of Electricity (Supply) Act 1948 and in contravention to the G.O dated 19.10.2002”. But, the Commission has made it clear that the actual return on equity if any will be allowed as and when a case is presented by the Board and as an adhoc measure even allowed Rs.50 Crore. Hence the issue is not closed yet and it is for the Board to show its equity or any basis for calculating return on equity.*

- II. *Regarding the proposal of netting off dues and writing off of receivable from Government, the Commission stated the position considering the records placed before the Commission that no Government order was issued agreeing to the proposal. The C&AG in his Comments on the Accounts of the Board for 2006-07, reported that “The fact that the netting of dues to Government of Kerala require the approval of the Full Board and that of the Council of Ministers of Government of Kerala had neither been obtained nor disclosed adequately in the notes. Therefore the adjustment/netting off the Government dues/dues to Government to extent of 2483.05 Crore lacked proper authority”. Further writing off is resorted to when debtors are insolvent. There is no merit in writing off the dues from a sovereign Government, so as to weaken the financial position of the Board. It was also stated that this issue can also be reconsidered by the Commission when necessary documents are placed before it.*

- III. *Regarding withdrawal of demand of 20 paise arising from the rebate on account of non-receipt of subsidy from Government is a more serious case of violation of the provisions of the Act which directly affects the finances of the Board. Board has allowed the rebate of 20 paise to domestic and commercial consumers till November 2007. Instead of taking steps to realise the amount from the Government, the Board has withdrawn the demand from the books, thereby weakening the position of the Board to claim subsidy from the Government. Further, by removing the demand from the books, the Board has reduced the tariff fixed by the Commission by 20 paise/unit, which*

amounts to violation of the Act since the Board has no authority to change the tariff decided by the Commission. If any amount is receivable from the Government same has to be realised from the Government rather than waiving it. The Commission can be moved to review the order on receipt of the amount from Government or its adjustment from the electricity duty payable to the Government.

IV. Regarding electricity duty payable to the Government but retained by the Board, the Commission has stated the actual position. It was only an observation and no decision is taken which can aggrieve the Board. The Supreme Court decision submitted by the Board relates to whether interest on borrowings on non-receipt of subsidies can be taken as a part of ARR. This aspect has nothing to do with the issue now in question.

f) Hence the argument that the clarifications that are necessary from the Government on issues raised by the Board do not appear to have much relevance since the Commission has addressed these issues. Further, the clarifications the Board now seeks from the Government are not new issues as far as the Board is concerned. It is pertinent to note that the Board has not sought a specific time for getting clarification from Government so as to file the truing up petition. If the Board has any interest in getting the clarification, they could have obtained it by this time since the Board themselves claim that they are just like a Government Department now. Even if such clarification is required it has to be provided in a time bound manner. The discussion above on the issues projected by the Board is done only to show the position of the Commission on these issues and their lack of relevance as regards filing of truing up petitions.

3.11 The Commission further found that the stand taken by KSEB in its letter dated 21-5-2010 that “KSEB now feels that filing the truing up for the year 2007-08 and 2008-09 will again meet the same treatment as what had happened for the accounts for the financial year 2006-07” overlooking the obligations under the Act showed the attitude of willful non-compliance of KSEB despite statutory remedies available. From the contention of KSEB presented before the Commission it appeared that KSEB considered itself immune from the provisions of the Electricity Act on the pretext that it is a Government Department as per the First Transfer Scheme issued vide GO (MS) 37/2008/PD dated 25.09.2008 and published as Statutory Rules and Orders (SRO) No 990/2008 in Kerala Gazette Extra Ordinary No.2090 dated

25.09.2008. KSEB failed to understand that even if it is Government Department, under clause 5 (1) and clause 5(5) of the said Government order and as per third proviso to Section 14 of the Act, it continued to be a licensee under the provisions of the Electricity Act and all liabilities and obligations of a licensee under the Act have to be fulfilled. The Commission had also found that there was substantial revenue surplus accumulated by KSEB from 2006-07 onwards. In the order dated 14-5-2010, the Commission after the truing up for 2006-07 arrived at a revenue surplus of Rs.1035.85 Crore. This was after allowing Rs. 50 Crore each for provisional returns and incentive for generating revenue by sales outside. On a preliminary scrutiny of the available provisional accounts of 2007-08, the Commission observed that about Rs.1200 crore surplus was available in 2007-08. The Commission observed that the intention of KSEB might be to conceal such surplus from being noticed by the consumers who may clamour for reduction of tariff. It is to be remembered that KSEB projected a deficit of Rs.2219 Crore in the ARR&ERC petition for 2010-11 which would have caused an increase of about 150 paise per unit. If the truing up was done in time from 2006-07 onwards, KSEB would have found it difficult to claim such deficit which would necessitate drastic tariff revision.

- 3.12 The Commission, based on the examination of the contentions, found that there was no material reason advanced by KSEB for not submitting the application for truing up of accounts which were long overdue. KSEB had no case that they had not finalized the petition or they were still collecting data/materials. By not filing and delaying the truing up petitions, KSEB was thwarting the efforts of the Commission to update the accounts of KSEB as per the approved levels, thereby denying the opportunity to the Commission as well as the consumers to assess the exact revenue surplus or revenue gap position in the previous years. The Commission found that it was not proper for the Commission to struggle to obtain from KSEB, the truing up petitions due in 2008 and 2009 even in 2010-11. It was evident that KSEB was deliberately delaying and avoiding the filing of the truing up petition in the pretext of awaiting clarification from Government only to prevent the truing up exercise, the result of which they might like to withhold it from the public eye. The Commission had also found that such an act of withholding information was as good as defrauding the consumers, intentionally creating opacity, offending principle of transparency and showed defiance of law and legal authorities, making the regulatory process a mockery.
- 3.13 Since the non-compliance of the directions of the Commission by KSEB by not filing the truing up petitions for 2007-08 and 2008-09 was established the Commission issued the following orders on 17.08.2010.

“ On the basis of the finding noted above, the Commission decides to treat this case as a very serious instance of non-compliance and to

impose an exemplary penalty for non-compliance of the directions of the Commission. The Commission, therefore imposes a penalty of Rs.1,00,000 (Rs.One lakh only) on the Board for not complying with the directions to file truing up petitions for the year 2007-08 and 2008-09. The Board is once again directed to file the above truing up petitions before 6th of September 2010. For any delay thereafter the Board shall pay an additional penalty at the rate of Rs. 5000/- (Rs. Five thousand only) for each day of delay. The penalty of Rs.One lakh should be deposited with the Secretary of the Commission within one month from the date of this Order. The penalty amount cannot be passed on to the consumers as a pass through item of expenditure. This order is appealable under Sec 111 of the Act to the Appellate Tribunal for Electricity, New Delhi within a period of 45 days.”.

3.14 KSEB Ltd had then filed Writ Petition No. WP (C) 26994 / 2010 against the order dated 17.08.2010 of the Commission with the following prayers,-

“

- i. Issue a writ of certiorari, or such other writ order or direction, calling for the records of the case, up to and including Exhibit P1 and to quash Exhibit P1, and all actions / penalties ordered therein.*
- ii. To issue a writ of mandamus to the 1st Respondent commanding it to frame and notify Regulations relating to the Terms and Conditions of Tariff as is mandated under Section 61 of the Electricity Act, 2003.*
- iii. To declare as illegal any attempt of the 1st Respondent at truing up of the Petitioner’s accounts, contrary to Exhibit P 11 and in the absence of any Terms and Conditions of Tariff required to be framed under Section 61 of the Electricity Act.*
- iv. Pending adjudication of this Writ Petition, to stay all further proceedings pursuant to Exhibit P1.*
- v. To declare that the 1st Respondent is bound by the Exhibit P11 and other policy guidelines given by the 2nd Respondent and on the facts and circumstances of the case, the 1st Respondent is bound to await the response from the 2nd Respondent on the issues raised by the Petitioner before the Respondent.*
- vi. To grant such other writs/ orders / directions that this Hon’ble Court may deem fit and proper to grant on the facts and in the circumstances of the case.”.*

3.15 Exhibit P11 is GO (MS) No.34/2006/PD dated 16.12.2006 giving policy guidelines to the Commission. In the said Writ Petition KSEB had contended that it was the distribution licensee, State Transmission Utility and the generating company and that the Commission had not framed and notified necessary regulations for tariff determination common to generation,

transmission and distribution licensee. KSEB had also contended that the State Government had issued policy guidelines to the Commission to follow the accounts of KSEB as audited by the C&AG and that the directions of the Commission to file separate petitions for truing up of accounts was not in order. In sub-paragraph (h) of para 6 of the Writ Petition No. WP (C) 26994/2010, KSEB had submitted the following averments before the Hon'ble High Court,-

“h. Under a mistaken notion that Truing-up has to be done by filing petitions before the 1st Respondent, the petitioners had been filing such petitions till the year 2005-06. For the year 2006-07, the Petitioner had filed a petition containing the accounts as audited by the C& AG before the 1st Respondent for the purpose of truing-up exercise. The 1st Respondent had disposed of the above petition vide its order No. OP No. 15/2010 dated 14.5.2010, a true copy of which is produced herewith as Exhibit P2.”

KSEB does also appear to be unaware of the fact that the Commission is duty bound, in the processes of truing up of accounts, to conduct prudence check on the audited accounts of the licensee. While making such submission KSEB had, either by default or by design, forgotten or withheld the decision of the Hon'ble Supreme Court in WBERC Vs CESC reported in 2002 (8) SCC 715 to the effect that the Commission is not bound by the audited accounts of the licensee in deciding which all items of expenditure should be passed on to the consumers. KSEB had also not presented the views expressed by the Hon'ble APTEL in its order in appeal No. 94/2008 filed by KSEB itself.

3.16 In respect of the direction issued by the Government as per GO (MS) No.34/2006/PD dated 16.12.2006 and GO (MS) No.25/15/PD dated 15.07.2015 the following facts and legal provisions have to be carefully examined.

- (i) As per Section 12 of the Electricity Act, 2003, no person shall transmit or distribute electricity unless he is authorized to do so by a licence issued by the Commission under Section 14 of the Act. KSEB Ltd is the State Transmission Utility under Section 39 of the Act. KSEB Ltd is also a distribution licensee as per Section 14 read with Section 131 of the Act. It has been stipulated in proviso to sub-section (1) of Section 39 that the State Transmission Utility shall not engage in trading of electricity. As per the second proviso to Section 14 of the Act State Transmission Utility is a deemed transmission licensee. As per the scheme of law it can easily be found that transmission and distribution business shall be carried out independently by State Transmission Utility and the distribution licensee, even if they are under same corporate office of the Government Company namely KSEB Ltd.

- (ii) As per clause (f) of Section 61 of the Act the Tariff regulation shall be on multi-year tariff principles. KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, have been issued under Section 61 of the Act. Though KSEB Ltd has filed WP No.465/2015 challenging certain provisions in the Tariff Regulations, 2014, the Hon'ble High Court has not stayed the operation of any of the provisions of the said regulations. Therefore KSEB Ltd cannot claim any exemption or exception from the implementation of the Regulations issued by the Commission including the Tariff Regulations, 2014. KSEB Ltd itself has in its application for truing up of accounts relating to 2011-12, contended that pendency of civil appeal before the Hon'ble Supreme Court is not a bar against processing of its application for truing up. All the other licensees in the state are following the said regulations. While submitting remarks of the applications submitted by the small licensees for the approval of their ARR & ERC, KSEB has contended that such applications shall be processed only in accordance with the provisions of Tariff Regulations, 2014. Further KSEB has also been submitting application for approval of cost data, approval of surcharge etc under the provisions of Tariff Regulations, 2014. It is a well-established legal principle that one cannot approbate and reprobate at the same time. Therefore KSEB cannot selectively implement certain provisions of the regulations and repudiate certain other provisions which insists on financial discipline. Similarly pendency of writ petition No.465/2015(G) filed by it challenging the provisions of Tariff Regulations, 2014 will not invalidate any of the provisions of the said regulations unless the Hon'ble High Court issues orders to that effect. It is a riddle, how and why, KSEB Ltd which has a huge contingent of expert employees in the fields of finance, accounts, law and engineering, has failed to appreciate the above legal positions.

Contradictory stands taken by KSEB Ltd with regard to applicability of regulations issued by CERC and by KSERC.

3.17 In sub-paragraph (f) of paragraph 6 of the Writ Petition No.26994/2010, KSEB Ltd had contended as follows,-

“In fact the rates as notified by the CERC can be applicable to generating companies and transmission licensees owned and controlled by the Central Government and cannot be made applicable to the State Utilities such as petitioner.”

The said Writ Petition is still pending disposal. In the Writ Petition 465/2015(G) filed by KSEB Ltd, it has contended that the provisions relating to RoE in the regulations issued by CERC should be made applicable to KSEB Ltd. It can be seen that KSEB Ltd is taking diametrically opposite

stands in respect of applicability of regulations issued by CERC, to suit its convenience. In fact, as per the statutory provisions in the Electricity Act, 2003, the State Transmission Utility has to be governed by the regulations issued by the SERC. As per the First Transfer Scheme notified as per G.O (MS) 37/2008/PD dated 25.09.2008 and published as SRO No.990/2008, the assets, liabilities, rights and interests of the erstwhile KSEB stood transferred to and vested in Government. Such assets and liabilities were being managed by a Management Committee constituted by the Government under a Special Officer. The Government thereafter formed a fully owned Government Company namely, KSEB Ltd, which was incorporated on 14-01-2011. It was only as per the Kerala Electricity Second Transfer Scheme (re-vesting) notified as per G.O (P) No.46/2013/PD dated 30.10.2013 and published as SRO No.871/2013 in Kerala Gazette Extra Ordinary 3103 dated 31.10.2013, the Government re-vested the assets and liabilities of the erstwhile KSEB in the Government Company namely, KSEB Ltd. During the period from 25.09.2008 to 31.10.2013, neither the KSEB which was constituted under the provisions of the Electricity (Supply) Act, 1948 nor KSEB Ltd incorporated under the provisions of the Companies Act, 1956, was functioning as the State Transmission Utility and the distribution licensee. It was in fact the Management Committee constituted by the State Government which was functioning as the STU and the distribution licensee, representing the Government. KSERC is not expected to make regulations specifically and exclusively for such transient intermediary entity like Management Committee which was constituted only as a transitional arrangement. The regulations issued by the Commission to govern the STU and the existing distribution licensee are applicable to the Management Committee also, which was functioning as STU or distribution licensee. KSEB Ltd cannot, at its convenience and choice, pick and choose the provisions from the regulations issued by the CERC and by the SERC, for implementation.

- 3.18 KSEB Ltd has not successfully challenged any of the regulations issued by the Commission. Until the regulations issued by the Commission are successfully challenged before the Hon'ble High Court or before the Hon'ble Supreme Court, such regulations are binding on every licensee including KSEB Ltd. Only the Hon'ble High Court and the Hon'ble Supreme Court have the authority to quash, invalidate or modify the regulations issued by the Commission. Therefore KSEB Ltd is bound to implement the regulations issued by the Commission. It has been clarified that the directions issued by the State Government under Section 108 of the Act are not mandatory in nature and that such directions are only guidelines. It has also been clarified that such directions shall be issued only in matters of policy involving public interest and that they shall be issued for the purpose of implementing the provisions of the Act. It is also been held that the directions issued under Section 108 of the Act cannot modify or supersede the regulations issued by

the Commission in exercise of its powers under the provisions of Electricity Act, 2003. It has also been held by the Hon'ble APTEL and Hon'ble Supreme Court that the statutory audit conducted by the C&AG and the prudence check conducted by the Regulatory Commissions are totally different and serve different purposes. In the statutory audit the C&AG mainly examines whether or not the expenditure has been incurred in accordance with the rules and regulations applicable to KSEB Ltd. In the process of prudence check, the Commission examines the essentiality of the expenditure for improving the supply of electricity and services to consumers. The contentions of KSEB Ltd to the effect that the accounts as audited by C&AG are binding on the Commission and therefore there is no need to file petitions for truing up of accounts are not legally valid. However the history so far indicates that KSEB Ltd has been, on one ground or the other, reluctant to file truing up petitions in time with all necessary details in accordance with the relevant regulations.

- 3.19 Sub-section (3) of Section 86 of the Electricity Act, 2003, stipulates that the State Commission shall ensure transparency while exercising its powers and discharging its functions. It has been specifically stated in the preamble of the Act that taking measures conducive to development of electricity industry, promoting competition, protecting interests of the consumers, supply of electricity to all areas, rationalization of electricity tariff and ensuring transparent policies are the important objects of the Electricity Act, 2003. As per the provisions of the Right to Information Act, any citizen is entitled to get any information relating to the activities and accounts of the licensees under the Act. In fact the consumers are the persons who actually meet all the prudent expenses of the licensee as assessed by the Commission and passed on to the consumers by way of tariff. Therefore the consumers have the right to know about the accounts of actual expenses incurred by the licensee and the duty to subject such accounts of actual expenses to public audit. Similarly the Commission has the right and duty to obtain the audited accounts of actual expenses incurred by the licensee and to subject such audited accounts of actual expenses to prudence check for the purpose of passing on such expenses to the consumers by way of tariff. KSEB Ltd being a statutory State Transmission Utility and distribution licensee, fully owned by the Government has a prime and foremost duty to submit its accounts before the Commission for prudence check. The regulations also provide for such prudence check by the Commission. It is a well-established legal position that executive direction cannot have over riding effect on the statutory provisions. The directions issued by the Government under Section 108 of the Act shall be in accordance with the provisions of the Act and they should be issued with a view to implementing the Act. This legal position has been made clear by the Hon'ble APTEL and the Hon'ble Supreme Court. It has also been clarified that the directions issued by the Central Government under Section 107 and by the State Government under Section 108 are only in the nature of

guidelines and they are not mandatory. In this regard the following legal opinion given by Shri. Goolam E Vahanvati, Attorney General for India in his letter dated 17 August 2009 addressed to the Central Electricity Regulatory Commission and the Forum Of Regulators is highly pertinent. It has been clarified by him that,

- a) The Central and State Commissions shall, in matters of policy involving public interest, be guided by such directions given to them in writing by the Central or State Government respectively.
- b) The Electricity Regulatory Commissions are independent quasi-judicial bodies constituted under the statutory provisions to perform quasi-judicial, quasi legislative and adjudicatory functions and in the discharge of such functions they cannot be directed to decide matters in a particular manner. (See Orient Paper Mills v. Union of India, AIR 1969 SC 48)
- c) The word used, in Sections 107 and 108 is 'guided' and not 'bound'. To guide only means to 'show or indicate the way to'. It does not have the force of an order or command, which must be obeyed.
- d) The direction issued under Section 107 and 108 cannot be said to require mandatory compliance in a manner that deprives the Commission of the power to make its own decision as, opposed, to what it may be guided to make.
- e) The distinction between a direction and guidance is well settled in Laker Airways Ltd. v. Department of Trade, [1977] 2 All E.R. 182.
- f) The Commissions ought to take into account the directions given by the Central or State Government, as the case may be, the manner of doing so is for the Commissions to decide.
- g) The legal position is settled by judgments of the Supreme Court in Real Food Products Ltd. v. A.P. State Electricity Board and Others, (1995) 3 SCC 295 and in Chhittoor Zilla Vyavasayadarula Sangham v. A.P. SEB, (2001) 1 SCC 396, the question before the Court was whether the direction of the State Government on the question of policy was binding on the Electricity Board.
- h) The directions that are issued by the Central or State governments are one of many such factors that are taken into account by the respective Commissions and the discretion of the Commissions is not taken away by such directions. What weight is to be accorded to each factor is for the Commissions to decide, in the exercise of their statutory functions and in public interest.”

Therefore it can easily be found that KSEB cannot take shelter under its own self-serving interpretation of the legal provision to shirk its own duties and responsibilities under the Act and the regulations issued thereunder.

3.20 The Commission had granted upward revisions of retail supply tariff (RST) during 3 successive years as per its order dated 28.04.2012 in OP No.

3/2012, order dated 30.04.2013 in OP No. 2/2013 and order dated 14.08.2014 in OP No. 9/2014. While issuing the above orders Commission had given various directives for improving the efficiency gains, financial health and performance of KSEB Ltd and for improving service to the consumers.

- 3.21 The Commission had given similar directives subsequently also. KSEB itself had, in its reply affidavit dated 06.11.2010 filed in OP No. 20/2010 had submitted that it had taken decision to file separate ARR and ERC for the licensed businesses and for the generation from the year 2011-12 onwards. Government of Kerala has also, in the Second Transfer Scheme dated 30.10.2013 notified under Section 131 of the Act, directed that the strategic business units of KSEB Ltd shall function independently and prepare separate accounts and balance sheets. So far KSEB Ltd has not submitted before the Commission, the separate accounts and balance sheets relating to the transmission licensee, the distribution licensee, the State Load Dispatch Centre and the generation business. Thus, by design or default, KSEB Ltd appears to have failed to comply with the relevant statutory provisions in the Electricity Act, 2003, the policy directives of Government of India, the regulations and directives issued by the Commission and the directions issued by the Government of Kerala in this regard. It has also failed to honour its own undertaking in this regard in the reply affidavit filed before the Commission.

Recalcitrant approaches and inconsistent strategies of KSEB / KSEB Ltd

- 3.22 As early as on 16.04.2004 while issuing orders approving the ARR & ERC relating to the financial year 2004-05, the Commission had directed to improve billing and revenue collection efficiency and to minimize outstanding arrears. It was also directed to complete computerization of billing and revenue collection on or before 01.05.2004 and to complete replacement of faulty and sluggish meters.
- 3.23 In the order dated 23.03.2005 in the matter of ARR & ERC for the financial year 2005-06, the Commission had directed KSEB to submit on or before 31.05.2005, the necessary and sufficient data and other details for firming up the results of the preliminary study conducted by the Commission on average cost of supply to different categories of consumers. The Commission had also directed KSEB to
- (i) The separate ARR & ERC in respect of transmission licensee and distribution licensee.
 - (ii) File on or before 30.04.2005, the application of determination of transmission charges.
 - (iii) Submit the proposals for determining wheeling charges.

- (iv) Modernize SLDC, make it independent and submit its accounts separately.
- (v) Submit the application for approval of voltage wise technical loss and the plan to reduce it.
- (vi) Submit comprehensive plan for borrowing and repayment
- (vii) File scheme for the speedy recovery of arrears of revenue
- (viii) Obtain approval for the capital expenditure, and
- (ix) Obtain approval for the investment plan

3.24 In the order dated 30.03.2006 in the matter of ARR & ERC for the financial year 2006-07, the Commission had directed KSEB to submit separate accounts for generation, transmission and distribution functions. It was also directed to submit complete data and results of study for determining cost of service to various categories of consumers and to submit application for determination of tariff under MYT Regime as per para 5.3 (h) of Tariff Policy, 2006. Further directions were also issued to expedite the followings,-

- (i) Timely execution of capital works without delay and their monitoring (para 10.1.2)
- (ii) Speedy collection of arrears of electricity charges (para 10.1.3)
- (iii) Segregation of technical and commercial loss and assessment of voltage wise technical loss (para 10.1.5)
- (iv) Separation of accounts for generation, transmission and distribution (para 10.1.6).
- (v) Filing of petition for transmission tariff (para 10.1.6).
- (vi) Modernizing SLDC and making it independent (para 10.1.6).
- (vii) Proposal for notification of open access regulations (para 10.1.6).
- (viii) Computerization of billing, revenue collection, sale of power, connected loads and such other details (para 10.1.7)
- (ix) Optimization of employee cost

In para 10.2.8 the Commission had also called for various techno-economic details such as the reactive power loading on power plants, the findings in energy audit conducted by KSEB, the time and cost overrun of the projects, the power plant wise cost of generation and the details of load flow studies.

3.25 In the order dated 26.11.2007 in the matter of ARR & ERC for the financial year 2007-08, the Commission had given directives to submit,-

- (i) Details for determination of cost of service to various categories of consumers.
- (ii) Separate accounts for generation, transmission and distribution.
- (iii) Segregation of technical and commercial loss
- (iv) Voltage wise loss and measures for reduction of loss.
- (v) Proposals for determination of transmission tariff

- (vi) Proposals for determination of wheeling charges, surcharge for open access.
- (vii) Details relating to independent function of SLDC
- (viii) Proposal for replacement of faulty meters.
- (ix) Proposal for optimizing employee cost

3.26 In the orders dated 19.04.2008 / 17.04.2009 / 17.05.2010 and 01.06.2011 the Commission had issued orders in the matter of ARR & ERC for the financial year 2008-09, 2009-10, 2010-11 and 2011-12 respectively. In the above orders also the Commission had re-iterated most of the above directions to KSEB with special emphasis on submission of details relating to,

- (i) Separation of commercial and technical loss,
- (ii) Voltage wise cost of supply,
- (iii) Replacement of faulty meter,
- (iv) Optimization of employee cost,
- (v) Separation of accounts for generation, transmission and distribution,
- (vi) Modernization of SLDC and making it functionally independent,
- (vii) Determination of transmission and wheeling charges
- (viii) Approval of capital expenditure
- (ix) Project implementation and monitoring with a view a assessing time and cost overrun.

3.27 In Chapter IX of the Tariff Order dated 28.04.2012 in the matter of approval of ARR & ERC and the determination of tariff for the financial year 2012-13 the Commission had given the following directives,-

1. *The Board shall take up Demand side Management activities for reducing demand and consumption in the State during 2012-13. Proposal for extension of ToD metering to all LT consumers with connected load 10kW and above should be submitted to the Commission before 31-7-2012. The Board shall also submit a comprehensive proposal on energy conservation before 31-8-2012. The agencies such as EMC may be associated for preparation and execution of DSM activities.*
2. *The website of the Kerala State Load Despatch Centre should be revamped / remodelled effectively so that the system details are uploaded and made available on a daily basis, as done by the Load Despatch centres in other states, to ensure transparency in the system statistics.*
3. *The Board should prepare and submit a revised capital investment plan for Generation/Transmission/Distribution wings with appropriate funding plan for the year 2012-13 before 30-6-2012 for Commission's scrutiny and approval.*

4. *The Board should finalise long term contracts for power purchase, including the Case-I bidding immediately. The Board should take advance action for booking corridors so that power restrictions are reduced to the minimum levels in the ensuing months.*
5. *The Board shall study and report the voltage level loss as well as technical-commercial separation of T&D loss within four months from the date of the Order. The frequency of studies shall be increased especially in transmission by periodically taking into consideration seasonal load flow variations and the results may be reported to the Commission in a consolidated form. In the case of loss studies in distribution, the Commission had already issued guidelines for taking up more representative sample studies and making a consolidated report. The consolidated report of loss studies in transmission and distribution shall be submitted to the Commission by 1-10-2012.*

3.28 In Chapter X of the Tariff Order dated 30.04.2013 for the financial year 2013-14, the Commission had given the following directives,-

“10.1 The Commission expresses its serious concern over the rapidly increasing average cost of supply of power and over its contributory factors such as:

- i. rapidly increasing share of the cost of purchase of power, especially the prohibitively costly power from liquid fuel stations and from power exchanges.*
- ii. inordinate delays in the cost efficient and timely implementation of generation, transmission and distribution projects with project specific funding programmes*
- iii. tardy progress in replacement of faulty and sluggish meters with accurate electronic meters with time bound targets.*
- iv. inordinate delay in computerization of billing.*
- v. lethargic approach to the measures to keep under control the employee cost which has been increasing at an unprecedented rate in the recent past.*
- vi. non-proactive attitude and approach towards the investments in the projects for harnessing non -conventional and renewable energy sources.*
- vii. delay in implementation of effective programmes for demand side management and energy conservation activities with tangible results.*
- viii. insufficiency of various cost efficiency measures which would help improve the Board to come out of the present financial crisis.*

- 10.2 *In view of the facts and circumstances the Commission gives the following directives for immediate and time bound implementation and for periodic reports.*
- i. the weighted average cost of power purchased from traders and power exchanges and availed through unscheduled inter change in each month during the financial year 2013-14, shall not exceed Rs.5.00 per unit. The Board shall submit on or before 10th of every month, a monthly report to the Commission, containing all relevant particulars of such purchases, such as source, quantum, rate and weighted average cost of power purchased during the previous month.*
 - ii. the total quantum of energy drawn from the liquid fuel stations such as RGCCPP, KDPP, BDPP etc. in FY 2013-14 shall not exceed the quantum provided in the Table 5.28 of this order.*
 - iii. non-compliance of the above directives may lead to disallowance of the extra expenses during truing up exercise.*
- 10.3 *On expiry of the prevailing PPA with liquid fuel based IPPs such as BSES, KPCL etc., power should not be drawn from these stations under any circumstances, unless the developers convert the stations to LNG or pool sufficient quantum of cheaper power from other sources, so that the pooled tariff is well within the merit order for dispatch. Appropriate advance notice may be issued to such developers within 3 months from the date of issue of this order.*
- 10.4 *In order to give a boost to the renewable and alternate sources of energy, the Board shall take all possible proactive steps and provide connectivity within 3 months, to the grid at appropriate voltage levels for all developers of small hydro projects, wind energy, solar electricity and electricity from bio mass and municipal waste, including roof top solar developers, after finalizing the technical protocol related to safety, protection ,isolation etc.*
- 10.5 *The Board shall submit proposal to the Commission on the commercial arrangements including net metering, feed in tariff, energy banking etc in relation to solar electricity upto 1 MW capacity within 3 months. Solar power above 1 MW should be bought by the Board only through competitive bidding route or APPC-REC route.*
- 10.6 *The Board should prepare and submit before 30.6.2013 a revised capital investment plan for generation, transmission and distribution wings with appropriate funding plan for the year 2013-14 with tangible physical and*

financial targets for the scrutiny, approval and periodic review of the Commission.

- 10.7 The Board shall streamline the power purchase functions in a professional manner and take advantage of the market fluctuations effectively. The Board should finalize long term contracts for power purchase, including the Case-1 bidding immediately. The Board should take timely advance action for booking corridors so that power restrictions are reduced to the minimum levels in the ensuing months.*
- 10.8 The Board shall conduct a comprehensive study on losses in the system and report the voltage level loss as well as technical commercial separation of T&D loss within 6 months from the date of the order.*
- 10.9 The implementation of R-APDRP (Part-A&B) projects shall be accorded top priority and time bound action should be taken. Monthly progress reports should be submitted by the Board, to the Commission on or before 20th of the succeeding month.*
- 10.10 The Commission directs that the Board should have a specific time bound target for replacing faulty meters and old electro mechanical meters. A program should be evolved to replace all such meters in the system within a specified time limit with good quality meters to ensure correctly metered supply.*
- 10.11 As soon as the re-vesting process is over, the Board may approach the Commission with a proposal for splitting up the approved ARR & ERC for the re-vested entity.*
- 10.12 The management of the Board shall make special efforts to ensure that the directives given by the Commission as stated in paragraph 5.111 of this order are complied with and shall submit on or before 30.6.2013, an action plan for the implementation of the said directives with tangible targets and time frames. While appreciating the fact that the Board, being a public sector undertaking, cannot retrench its staff or reduce their emoluments, there is no reason why re-deployment, training, re-skilling, job enrichment, re-fixation of job contents and targets for various classes of employees etc. cannot be resorted to as directed earlier. Since tangible and effective steps are not seen taken by the Board to contain the unprecedented growth of employee cost in the recent past, the Commission is constrained to advise the Board management to review and take appropriate action with regard to the following:
 - i. re-deployment of staff in the closed and redundant units for urgent and unavoidable works.**

- ii. *computerization of billing using personal digital assistance (PDA) to be distributed to meter readers so that the entire data relating to billing can be transferred electronically without any error to the computers in the section offices, and consequently several hundreds of staff now being engaged for data entry relating to billing at section offices can be redeployed for other works and the daily target for spot billing can be suitably revised.*
- iii. *review the output of several field units engaged in survey, investigation etc. with a view to optimizing their output and redeploying excess staff if any*
- iv. *utilization of unutilized or underutilized skills of the technical staff for revenue earning consultancy or other works as is being done in central PSU like BSNL, especially in view of the fact that various Government Departments and Local Self Government Institutions in the State experience shortage of technical staff for execution of their civil and electrical works.”*

3.29 In Chapter X of the Tariff Order dated 14.08.2014 for the financial year 2014-15, the Commission had given the following directives,-

“The Commission has been issuing directives in the successive ARR&ERC orders, and it is noted that many of the directives issued were not fully implemented. The Commission views this seriously. The Commission urges that the licensee should implement the directions and report the compliance. In addition to these directives, the following directions are also issued.

1. Re-organisation of the Board:

- a) *As per the notification dated 31-10-2013, Government of Kerala have re-vested the assets, liabilities etc., in the company namely Kerala State Electricity Board Limited (KSEB LTD). As per the notification, any subsequent changes in the transfer scheme to be effected shall be made within the period of one year ie., before 31-10-2014. The opening balance sheet of KSEB LTD as on 1st April 2012, was notified in the said notification. This balance sheet was provisionally modified by KSEB LTD as on 1-4-2013. The Commission hereby directs that as mentioned in the Government notification, any further changes proposed shall be made within the stipulated date and got approved by Government. Separate balance sheets may also be prepared for strategic business units (SBU) and suitable transfer price mechanism be put in place. The details of the same shall be submitted before the Commission as soon as it is finalized.*
- b) *Separate balance sheets for SBUs shall be filed from the petition for approval of ARR for the financial year 2015-16 onwards.*

- 2. Statutory requirements as per Companies Act :**
- a) *The KSEB LTD shall complete all formalities relating to corporatization in a time bound manner*
 - b) *The KSEB LTD shall also complete all the statutory requirements such as adoption of accounting policies etc., as per the requirements of Companies Act within the time limit, and in any case before filing the next ARR petition.*
- 3. Formation of Master Trust and issue of bonds:** *KSEB LTD shall comply with the following directives regarding formation of Master Trust:*
- a) *KSEB LTD shall complete the formation of Master Trust on or before 30th of October 2014, the last date fixed for notification of the Final Transfer Scheme and submit all details to the Commission.*
 - b) *The KSEB LTD shall issue the bonds as required for the formation of Master Trust and the interest shall be credited to the fund on a monthly basis.*
 - c) *The amount due from the government to be adjusted against the electricity duty shall also be adjusted and credited to the fund on a monthly basis.*
 - d) *The payment of pension shall be effected from the Master Trust once it is formed.*
 - e) *A monthly progress report on all the credits and debits to the fund shall be submitted to the Commission promptly.*
 - f) *The details of the methodology adopted and the estimation of yearly contribution of pension for the existing employees shall be submitted as part of the ARR&ERC petition.*
 - g) *If the constitution of the Master Trust and the transfer of interest on the bonds are delayed, the corresponding interest charges will be deducted from the interest due.*
- 4. Optimization of employee cost :** *As mentioned in Chapter 5, allowing provision for pay revision, shall be subject to compliance of the following directions:*
- a) *Pay revision exercise shall be done by an independent external committee.*
 - b) *The terms of reference for such pay revision panels should include prescribing measurable productivity guidelines for all cadres, gainful re-deployment of surplus staff, incorporating the impact of computerization on the work norms etc.*
 - c) *The recommendations of the Pay Revision Committee on these issues should also be included in the long term settlement and implemented in a time bound manner*
 - d) *KSEB LTD shall explore and implement schemes and programmes for utilization of unutilized or underutilized skills of the technical cadre for revenue earning consultancy or contracts outside.*

5. Tariff Subsidy for consumers:

- a. *KSEB LTD shall implement the orders on subsidy announced by the Government only as per the provision of Section 65 of the Electricity Act, 2003. Unless the amount equivalent to subsidy is received in advance from the Government, no subsidy shall be granted to the consumers.*
- b. *Any subsidy schemes in vogue without the express sanction of the Commission shall be stopped forthwith and the same can be implemented only with the approval of the Commission. For this purpose, the KSEB LTD shall approach the Commission with definite proposal giving all details including the financial commitment and source of funding.*
- c. *The accounting of subsidy at the field units are also not proper and inconsistent with the directions issued by the Commission. The demand raised in the consumers bill shall be as per the tariff approved by the Commission and the subsidy if any shall be shown as deductions from the demand. Further the total demand /revenue from sale of power shall be aggregated from the field level without subsidy and subsidy amount so extended shall be shown separately in the books.*
- d. *The licensee is further directed to comply with the conditions given in letter of the Commission dated 28-5-2013 on accounting of subsidy and furnish the reports as directed on time.*
- e. *It is also clarified that if any subsidy is allowed without receiving the subsidy in advance from Government or without the express sanction of the Commission, the responsibility will entirely rests with the licensee only and shall not be allowed to pass on to the consumers.*

6. Power purchase

- a) *Purchase of power from the traders and exchanges over and above the contracted power for meeting the demand including the compensatory purchase on account of short fall in hydro /CGS/other sources shall be limited to a price not more than Rs5/kWh at the Kerala periphery.*
- b) *KSEB LTD shall immediately assess the long term deficit in availability of power and contract for long term power purchase through case -1 bidding process.*
- c) *KSEB LTD shall submit the petitions for approving the fuel surcharge as per the provisions of the relevant regulations in a time bound manner.*

7. Other directives

a) *KSEB LTD shall scrupulously endeavour to meet RPO obligation including solar power obligation and submit the periodic report on the compliance, to the Commission.*

3.30 From the above facts it can easily be seen that the Commission has been continuously giving directions to KSEB / KSEB Ltd with a view to streamlining its activities, improving the productivity of human resources, improving the efficiency gains and increasing the consumer satisfaction, with special emphasis on the following.

- (i) Submission of separate accounts and ARR for generation, transmission and distribution functions which are done by the SBU-G, SBU-T and SBU-D.
- (ii) Submission of voltage wise cost of supply and cost of service applicable to various categories of consumers.
- (iii) Separation of technical and commercial losses.
- (iv) Optimization of employee cost.
- (v) Submission of proposal for determination of transmission charges and wheeling charges.
- (vi) Speedy replacement of faulty and sluggish meters.
- (vii) Modernizing SLDC and making it functionally and financially independent with separate accounts.
- (viii) Implementation of the regulations relating to Renewable Energy.
- (ix) Undertaking activities for improving demand side management, energy audit and energy efficiency.
- (x) Approval of capital expenditure.
- (xi) Project monitoring with a view to assessing impacts of time and cost overrun.
- (xii) Constitution of Master Trust for disbursement of pension and the transfer of funds to the said trust as approved by the Commission.
- (xiii) Computerization of billing, revenue collection, preparation of accounts, disbursement of pay and allowances, disbursement of pension and provident fund.

The Commission has also been expressing its serious concern over the non-compliance of the above directions by KSEB Ltd.

Failure to submit proposal for approval of voltage wise cost of supply

3.31 The Commission had been giving directions to KSEB / KSEB Ltd to conduct necessary studies and to submit proposal for determination of voltage wise cost of supply to different categories of consumers. KSEB / KSEB Ltd has not so far submitted to the Commission, the application for the same with all necessary and sufficient data and details from the studies conducted by it.

Failure to separate technical and commercial loss

3.32 The Commission has been given directives to KSEB Ltd to submit proposal for the approval of separate technical and commercial losses. Recently the Parliamentary Committee on Power and Government of India have also given direction to separate technical and commercial loss. KSEB Ltd has not so far submitted application in this regard with supporting data and documents

Failure to submit separate accounts and balance sheets for SBU (G), SBU (T), SBU (D) & SLDC

3.33 KSEB Ltd has not so far submitted separate accounts and balance sheets for SBU (G), SBU (T), SBU (D) & SLDC. The statutory provisions, the regulations and the directives of Government in the Second Transfer Scheme have not been complied with by KSEB Ltd.

Renewal of PPA with RGCCPP, Kayamkulam of NTPC without the approval of the Commission.

3.34 In view of the prohibitive cost of naphtha, it is not possible to schedule power from RGCCPP in accordance with the merit order dispatch system. Therefore the Commission had directed KSEB Ltd, not to renew any PPA for the purchase of power from any liquid fuel based plants. KSEB Ltd is seen to have renewed the PPA with RGCCPP, Kayamkulam for 12 years without getting due approval from the Commission and in violation of the directives issued by the Commission. In the past when KSEB was contractually obliged to pay to NTPC, a huge fixed charge amounting to more than Rs.200 crore per annum for the RGCCPP, Kayamkulam (360 MW), both NTPC and Government of India had collectively ensured 360 MW of cheaper power, so that the rate of bundled power was within the merit order for scheduling. No such cheaper power is seen ensured by KSEB Ltd, nor has NTPC assured such power. Hence the action of KSEB Ltd in having renewed the PPA with RGCCPP of NTPC without ensuring availability of cheaper power is in disregard to the directions given by the Commission and against public interest.

Failure to obtain in time, the prior approval for investment.

3.35 The KSEB Ltd is not in the practice of obtaining prior approval for the investments in various projects.

Failure to obtain in time, the prior approval for the purchase of power.

3.36 The KSEB Ltd is not in the practice of obtaining prior approval for the purchase of power.

Failure to implement the directions relating the optimization of employee cost.

3.37 The Commission has been continuously expressing serious concerns over the steep and alarming increase in the employee cost and giving directions to optimize the employee cost. Such directions included the following,-

1. Redeployment of underutilized staff.
2. Training and re-skilling of employees to take up assignments associated with reforms and modernization.
3. Job enrichment and redesigning of job content.
4. Computerization of billing using PDA and electronic transfer of billing data to computer to avoid engaging persons for data entry in the sections numbering to more than 750.
5. Computerization of revenue collection and facilitation of e-payment without much additional cost to the consumers, so that the licensee can ensure earlier payment of dues.
6. Commencement of technical consultancy as is being done by civil engineers of BSNL and Hindustan Life care Ltd.
7. Constitution of independent committee for pay revision.
8. Improvement of non-tariff income using the service of underutilized staff.
9. Computerization of pay and allowances, PF and pension and such other service matters.
10. Computerization of accounts.
11. Computerization of inventory management, purchases and tendering system.

The licensee has not submitted any details to show that it has implemented such directions with desirable results. On the other hand, the claims of KSEB Ltd towards the employee cost, are increasing disproportionately.

3.38 KSEB Ltd is a very important PSU which provides infrastructure required for the development of economy and the improvement of standards of living of the people. Unless KSEB Ltd adopts ways and means to improve its efficiency both in terms of providing better service to the people and supplying quality power at affordable rates, it would be difficult for it to withstand the competition in power sector. Therefore in the long term interest of the institution it would be better for KSEB Ltd to comply with the statutory provisions, regulations, policy guidelines and directives issued by the Commission.

CHAPTER - 4

METHODOLOGY ADOPTED FOR DETERMINATION OF THE AGGREGATE REVENUE REQUIREMENTS OF THE STRATEGIC BUSINESS UNITS (SBU-G, SBU-T AND SBU-D)

- 4.1 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. 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. However, KSEB Ltd has not filed the same for the year 2016-17 before the Commission. In the absence of the same, the Commission has initiated the determination of the aggregate revenue requirements (ARR) of each SBUs (SBU-G, SBU-T and SBU-D) of the KSEB Ltd on *suo motu* basis.
- 4.2 Clause (viii) in paragraph- 5 of the Second Transfer Scheme dated 31st October-2013, states as follows:
'within the provisional period of one year from the date of re-vesting, the accounts of the three SBUs will be segregated so as to facilitate the evaluation of financial performance of these units. Separate balance sheets will be prepared for the three SBUs and suitable transfer pricing mechanism between the SBUs shall be worked out by the Transferee taking into consideration the financial soundness of the three SBUs'
However, KSEB Ltd is yet to submit the separate accounts and balance sheets of each SBU and the proposal for the transfer pricing policy adopted to price the transactions among the SBUs. Further, KSEB Ltd has not submitted the application for the approval of the ARR and for the determination of tariff of the each SBU separately as required under Regulation-11 of the Tariff Regulations. In the absence of all the necessary and sufficient details from the licensee, it is difficult to estimate the ARR of the each SBU, separately and accurately. The Commission has, therefore made reasonable estimations of the items of expenditure.
- 4.3 Regulations 44, 60 and 81 of the Tariff Regulations, 2014 stipulate principles for determining the normative O&M expenses for SBU-G, SBU-T and SBU-D of the KSEB Ltd. However, KSEB Ltd has been accounting the components of expenditure such as O&M expenses, depreciation, interest and finance

charges and return on equity (RoE) in a composite manner as it is a single integrated utility.

- 4.4 Sub regulations (19) and (20) to Regulation -11 of the Tariff Regulations, 2014, provide for apportioning the total expenditure and common expenditure among the regulated business on proper basis and justification. The relevant portion of the regulations is extracted below.

“(19) During the first year of the first control period, if an integrated utility has not prepared separate accounts for the businesses of generation, transmission, distribution and load dispatch, the Commission may, at its discretion, allow such utility to apportion the total expenditure among such businesses with proper basis and justification for such apportionment.

(20) An integrated utility may be allowed by the Commission, to apportion its common expenses among the regulated businesses on proper basis and justification.”

- 4.5 The Commission adopts the following principles/basis for estimating and apportioning the common expenses including depreciation, interest on the outstanding loans and bonds, interest on the general provident fund, interest on the bonds issued to the Master Trust, return on equity etc. The details are given below.

Depreciation

- 4.6 KSEB Ltd has not filed before the Commission, the application for the approval of ARR and for the determination of tariff for the years 2016-17 & 2017-18. In the absence of details of fixed assets of SBU-G, SBU-T and SBU-D for estimating the depreciation for the years 2016-17 and 2017-18, the Commission has provisionally estimated in the notice dated 26.06.2016, the depreciation for the year 2016-17 at Rs 414.80 crore, ie., at the same level as that approved by the Commission for the year 2014-15 vide the order dated 14-8-2014. The relevant portion of the order pertaining to approval of depreciation by the Commission for the year 2014-15 is extracted below.

“5.81 The licensee has estimated Rs.601.17 crore as depreciation for the year 2014-15 for all assets including those created from contributions and grants. The total GFA as on 31-3-2014 is estimated at Rs.13712.31 crore. In the absence of details of assets based on vintage, the Commission is constrained to estimate the depreciation on an adhoc basis provisionally with available information. The contribution/grants for creation of assets as on 31-3-2013 given by the licensee in the previous petition is Rs.3893.61 crore. The addition for the year 2013-14 is Rs.357.46 crore. Accordingly, the depreciation for the purpose of ARR&ERC is estimated as shown below:

	Particulars	Amount Rs. crore	
1	GFA as on 1-4-2014	13712.31	
2	GFA as on 1-4-2002	4788.45	
3	Average rate of depreciation	3.26%	
4=(3X2)	Depreciation for the assets existing prior to 1-4-2002		155.92
5=(1-2)	GFA after 1-4-2002	8923.86	
6	Average rate of depreciation	4.99%	
7=(5x6)	Depreciation for the assets capitalised after 1-4-2002		445.25
8=(4+7)	Total Depreciation claimed		601.17
9=(8/1)	Average rate of depreciation claimed	4.38%	
10	Contribution & Grants as on 1-4-2013 as per Tariff	3893.61	
11	Consumer contribution 2013-14	357.46	
12	Total contribution & grants	4251.07	
13=(12*9)	Depreciation for assets created out of grants		186.37
14=(8-13)	Allowable depreciation for 2014-15		414.80

5.82 *The depreciation allowable provisionally for the year 2014-15 is Rs.414.80 crore. The depreciation allowable at the time of truing up will be subject the fulfillment of conditions mentioned above and in its absence, eligible depreciation will be as per the rates of CERC regulations applicable for the period 2004-09 only.”*

- 4.7 The depreciation so arrived at, is apportioned among the SBU-Generation, SBU-Transmission and SBU-Distribution of KSEB Ltd in the ratio of opening GFA balances for SBU-G, SBU-T and opening GFA balance excluding consumer contribution for SBU-D as on 31-10-2013.

Table 4.1
Estimate of depreciation for the years 2016-17 & 2017-18 as per the notice under *suo motu* proceedings

SBU	GFA as on 31-10-2013 (Rs. Cr)	(%) of GFA	Depreciation(Rs. Cr)
SBU-G	3658.9	41.57	172.43
SBU-T	3909.6	44.42	184.25
SBU-D	1233.4	14.01	58.12
Total	8801.8	100.00	414.80

*GFA excluding asset created out of consumer contribution

Objections of stakeholders

- 4.8 KSEB Ltd, HT&EHT Industrial Electricity Consumers Association (hereinafter referred as HT&EHT Association) and other stakeholders have not submitted any remarks on the principles adopted by the Commission for estimating the depreciation expense pertaining to the years 2016-17 and 2017-18.

Analysis and Decision of the Commission

- 4.9 Since the licensee has not submitted necessary and sufficient details for estimating the depreciation, the Commission has adopted the depreciation approved by the Commission for the year 2014-15 vide the order dated 14.8.2014 in OP No, 09/2014 as depreciation for the years 2016-17 and 2017-18. Accordingly, the Commission estimates Rs 414.80 crore as the total depreciation for assets owned and operated by KSEB Ltd in its different SBUs. Further, the depreciation so arrived at, is apportioned among SBU-G, SBU-T and SBU-D as detailed in the table 4.1 above.
- 4.10 Since the stakeholders have not submitted any specific remarks on the depreciation, the Commission approves the depreciation of SBU –G,SBU-T and SBU-D for the years 2016-17 and 2017-18 at Rs 172.43 crore, Rs 184.25 crore and Rs 58.12 crore respectively.

Interest & Finance charges

- 4.11 In the notice dated 22.06.2016 in the *suo motu* proceedings (hereinafter referred to as the suo motu notice), the Commission has estimated the total outstanding loans for the year 2016-17 at Rs 4200 crore and approved interest @11.00% amounting to Rs 462.00 crore for the years 2016-17 and 2017-18. Further, the total interest on long term capital liabilities has been apportioned among SBU-G, SBU-T and SBU-D in the ratio of the net fixed assets. Since the licensee has not submitted necessary and sufficient details regarding the asset addition made during the last two years, the Commission is in the dark regarding the details of such expenditure, the NFA as on 31.10.2013 has been considered by the Commission as the base for apportioning the interest and finance charges in the suo motu notice. The details are given below.

Table 4.2
Apportionment of outstanding capital liabilities

SBU	NFA as on 31-10-2013 (Rs. Cr)*	(%) of NFA	Interest on capital liabilities (Rs. Cr)
SBU-G	1918.3	27.85	128.65
SBU-T	2300.5	33.39	154.28
SBU-D	2670.0	38.76	179.07
Total	6888.8	100.00	462.00

* NFA excluding asset created out of consumer contribution

- 4.12 The total amount of security deposit furnished by the consumers will increase
- When the tariff is increased;
 - When the consumption is increased;
 - When the number of total consumers is increased.

Outstanding security deposit as on 01-04-2016 is taken as Rs 2145.00 crore and the same as on 01-04-2017 is taken as Rs 2315.00 crore, after considering the trends of the previous years and considering the actuals of 2014-15 as disclosed in the annual accounts of the licensee. The interest on the security deposit is calculated @ 8% per annum. The interest on the security deposit is allocated solely to SBU-D.

- 4.13 As per Regulation 31 of the Tariff Regulations, 2014, the interest on bonds issued by KSEB Ltd to service the terminal liabilities of its employees shall be allowed to be recovered through tariff, at the rates specified in the relevant orders issued by Government of Kerala. As per the G.O (P) No. 2/2015/PD dated 28th January 2015, the total value of bonds to be issued to the Master Trust is Rs.8144.00 crore which will carry interest at the rate of 10% per annum. Provision for interest on bonds to be issued to Master Trust is apportioned among SBU-G, SBU-T and SBU-D in the proportion of the number of employees in SBU. The details are given below.

Table 4.3

Apportionment of Provision for interest on Bonds to be issued to Master Trust

SBU	Proportion of employees	Interest on bonds (Rs crore)	
		2016-17	2017-18
SBU-G	5.15%	41.94	41.94
SBU-T	10.70%	87.14	87.14
SBU-D	84.15%	685.32	685.32
Total	100.00%	814.40	814.40

- 4.14 With regard to the GPF, the balance as mentioned in the annual accounts of the licensee for the year 2014-15, has been adjusted based on the average trend of incremental changes of the past three years. Thus the GPF balance as on 01-04-2016 is taken as Rs 1500.00 crore and the same as on 01-04-2017 is taken as Rs 1600.00 crore. The Commission has approved interest on GPF @8.75% per annum. The total interest on GPF is apportioned among SBU-G, SBU-T and SBU-D in the proportion of employees. The details are given below.

Table 4.4

Apportionment of interest on GPF among SBUs

SBU	Proportion of employees	Interest on GPF (₹ crore)	
		2016-17	2017-18
SBU-G	5.15%	6.76	7.21
SBU-T	10.70%	14.04	14.98
SBU-D	84.15%	110.45	117.81
Total	100.00%	131.25	140.00

- 4.15 Accordingly, the interest and finance charges determined for the SBU-G, SBU-T and SBU-D of KSEB Ltd as per the suo motu proceedings are apportioned as detailed below.

Table 4.5
Interest & finance charges as per the suo motu proceedings

Sl No	Particulars	SBU-G		SBU-T		SBU-D		Total	
		2016-17	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on outstanding capital liabilities	128.65	128.65	154.28	154.28	179.07	179.07	462.00	462.00
2	Interest on security deposit	0.00	0.00			171.6	185.2	171.60	185.20
3	Interest on GPF	6.76	7.21	14.04	14.98	110.44	117.81	131.24	140.00
4	Other interest	0.52	0.52	1.07	1.07	8.41	8.41	10.00	10.00
5	Interest on bonds issued to Master Trust	41.94	41.94	87.14	87.14	684.98	684.98	814.06	814.06
	Total	177.87	178.32	256.54	257.47	1154.5	1175.47	1588.91	1611.26

Objections of the Stakeholders

- 4.16 KSEB Ltd has submitted that, the total outstanding loans and bonds as on 31-03-2016 as Rs 3753.51 crore and has also proposed an additional borrowings amounting to Rs 2900.00 crore along with repayment amounting to Rs 2125.87 crore during the year 2016-17. Thus the total closing balance of outstanding capital liabilities for the year 2016-17 is estimated at Rs 4527.63 crore. KSEB Ltd has thus claimed Rs 543.34 crore as interest and finance charges for the year 2016-17, for the outstanding capital liabilities.
- 4.17 Regarding the interest on GPF, KSEB Ltd has claimed the interest on GPF for the year 2016-17 at Rs 152.47 crore and the same for the year 2017-18 is Rs 183.14 crore.
- 4.18 KSEB Ltd has not commented on the methodology adopted by the Commission for apportioning the interest on outstanding capital liabilities, interest on GPF and interest on bonds issued to Master Trust among SBU-G, SBU-T and SBU-D.
- 4.19 Regarding constitution of the Master Trust for payment of pension liabilities, KSEB Ltd has mentioned that it has completed all procedural requirement with regard to the formation of Master Trust and necessary internal arrangement were also put in place for the disbursement of pension. However KSEB Ltd could not issue bonds to Master Trust owing to the fact that Income Tax department has not granted tax exemption on the income earned by Master Trust. KSEB Ltd requested the Commission to note that, if the bonds

amounting to Rs.8144 crore are issued by Master Trust, periodic interest has to be transferred to Master Trust Fund, which would be taxable in the hands of the Trust since Income Tax exemption is yet to be obtained. In case tax exemption is not received, thirty percent of the income will have to be remitted as Income Tax and the trust will not be in a position to carry out its obligations with the balance amount.

4.20 KSEB Ltd further stated that they have been vigorously pursuing the matter with the Income Tax Department for obtaining tax exemption for the interest income of Master Trust. Once the issue is sorted out the Master Trust will be made fully operational.

4.21 The HT&EHT Association further submitted that, since the Master Trust is yet to be made fully operational, the interest on bonds issued to Master Trust shall not be considered for approval and has mentioned that in the context of interest on these bonds, the Hon'ble APTEL, in its judgment dated 18.11.2015 in Appeal No.247 of April 2014, has ruled inter alia as under:

".....As regards the interest expenses on account of the Bonds to be issued to the Master Trust for meeting the terminal liabilities as per notified Transfer Scheme, payment of terminal liabilities is a statutory obligation and it would be appropriate to allow the interest on these Bonds in the ARR and tariff. However, the corresponding expenses would have to be reduced from the employee expenses being allowed by the Commission, since the employee expenses allowed in earlier years also include the component of terminal liabilities as actually incurred"

4.22 The HT& EHT association has submitted that, in the absence of actual details of the loans and bonds availed during the year 2015-16, the closing balance of outstanding capital liabilities as per the ARR order for the year 2014-15 may be considered.

Analysis of the Commission

4.23 The Commission has examined the submissions of KSEB Ltd and HT&EHT Association. The interest on outstanding bonds and loans claimed by KSEB Ltd is Rs 543.34 crore as against Rs 462.00 crore estimated by the Commission. It is pertinent to note that the licensee has not filed any application before the Commission through a duly authenticated affidavit which details the loans availed and repaid during the relevant year.

4.24 KSEB Ltd vide the submission dated 8-09-2016 has informed that, the outstanding loans and bonds as on 31-03-2016 amounts to Rs 3753.51 crore. The KSEB Ltd has also not submitted the relevant details required in

accordance with the provisions of the Tariff Regulations, 2014, to enable the Commission to approve after prudence check, the ARR and ERC for the financial year 2015-16. KSEB Ltd had submitted certain details of the capital investment along with application for approval of the composite ARR&ERC of KSEB Ltd for the year 2015-16. The Commission provisionally adopts the opening balance of the outstanding loans and bonds as on 31-03-2016 as Rs.3753.51 crore.

- 4.25 Regulation 23 of the Tariff Regulations, 2014 and regulation 21 of the KSEB (Conditions of Licence for Existing Distribution Licensees) Regulations, 2006, stipulate that approval of the Commission is mandatory for the capital investments of the licensee. Since KSEB Ltd has not filed any application for investment approval as per Annexure IV to the Tariff Regulations, 2014, the Commission cannot approve the interest on the additional borrowings, if any, for the capital investment proposed for the year 2016-17.
- 4.26 The Commission after taking into consideration the outstanding loans and bonds at Rs 3753.14 crore as on 31-03-2016, availed at an average interest rate at 11% per annum estimates an amount of Rs 412.85 crore as interest charges. The total interest on long term capital liabilities as approved is apportioned among SBU-G, SBU-T and SBU-D in proportion to the gross fixed assets. In the absence the details of the asset additions from the side of the licensee etc, the Commission has considered the GFA as on 31-10-2013 as the base for apportioning the interest expenses. The details are given below.

Table 4.6
Interest on the outstanding long-term loans and bonds as on 31-03-2016

SBU	GFA as on 31-10-2013 (Rs. Cr) *	(%) of GFA	Interest on outstanding capital liabilities(Rs. Cr)
SBU-G	3658.90	41.57	171.62
SBU-T	3909.60	44.42	183.39
SBU-D	1233.40	14.01	57.84
Total	8801.80	100.00	412.85

* GFA excluding asset created out of consumer contribution

- 4.27 The Commission does also approve the interest on the outstanding amount of GPF, as proposed in the *suo motu* proceedings.
- 4.28 As per the Regulation 31 of the Tariff Regulations, 2014, the interest on bonds issued by KSEB Ltd to service the terminal liabilities of its employees shall be allowed to be recovered through tariff, at the rates specified in the relevant orders issued by Government of Kerala.

- 4.29 As per the G.O (P) No. 2/2015/PD dated 28th January 2015, the total bonds to be issued to the Master Trust are for Rs 8144.00 crore @10% interest rate. The interest on bonds issued to Master Trust is apportioned among SBU-G, SBU-T and SBU-D in the proportion to the number of employees in each SBU. KSEB Ltd has mentioned that they have completed the formalities of formation of Trust and that they are pursuing the case for availing Income Tax exemption on the interest income earned by the Trust with the Income Tax Authorities. With the introduction of Tariff Regulations 2014, the employee expenses has been included as a part of O&M norms and those do not contain the pension expenses. Since, pension expenses is a statutory obligation and the same has to be paid, the Commission provisionally approves a provision for interest on bonds to be issued to the Master Trust as proposed in the *suo motu* notice dated 22-6-2016, as detailed under Table 4.3 above. The Commission directs KSEB Ltd to pursue the case with Income Tax authorities and the progress of the same shall be intimated to the Commission by the financial year end.
- 4.30 KSEB Ltd has not submitted the necessary and sufficient details for estimating the working capital. KSEB Ltd is functioning as three independent strategic business units, namely SBU-G, SBU-T and SBU-D. In the case of SBU-G most of the generating stations are hydro-electric projects which require no fuel. LSHS based KDPP and BDPP are seldom scheduled and therefore the requirement for working capital is negligibly small for SBU-G. So is the case with SBU-T. In the case of SBU-D, the requirement of working capital is met by the security deposit obtained from the consumers which amounts to about Rs. 2145 crore. The interest on security deposit furnished by the consumers, is included in the interest and finance charge of SBU-D. Therefore it is found that there is no need for providing interest on working capital separately.
- 4.31 Hitherto, while approving the ARR, the Commission has been providing interest on the outstanding security deposit at the beginning of each financial year, as claimed by KSEB Ltd. However, as per the applications for approval of truing up of accounts, it is seen that, the actual disbursement on interest on security deposit was less by 30% than the same claimed by KSEB Ltd. Considering this fact, the Commission estimates interest only on 70% of the outstanding security deposit claimed by KSEB Ltd. The Commission reiterates that, the actual interest on security deposit provided to the consumers as per the Regulation-72 of the Kerala Electricity Supply Code, 2014 only approved while truing up of accounts for the year 2016-17 and 2017-18.

4.32 Thus the total interest and finance charges approved for the years 2016-17 and 2017-18 are detailed below.

Table 4.7
Interest and finance charges approved for the years 2016-17 and 2017-18

Sl No	Particulars	SBU-G		SBU-T		SBU-D		Total	
		2016-17	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on outstanding capital liabilities	171.62	171.62	183.39	183.39	57.84	57.84	412.85	412.85
2	Interest on security deposit	0	0			120.12	129.64	120.12	129.64
3	Interest on GPF	6.76	7.21	14.04	14.98	110.44	117.81	131.24	140
4	Other interest	0.52	0.52	1.07	1.07	8.41	8.41	10	10
5	Provision for Interest on bonds to be issued to Master Trust	41.94	41.94	87.14	87.14	684.98	684.98	814.06	814.06
	Total	220.84	221.29	285.64	286.58	981.79	998.68	1488.27	1506.55

Return on Equity

4.33 The Commission had, vide the suo motu notice dated 22.6.2016, provisionally estimated RoE at Rs 217.42 crore on the original Government equity of Rs 1553.00 crore @ 14% per annum. The equity so arrived is apportioned among SBU-G, SBU-T and SBU-D in the ratio of the 'opening GFA balances for SBU-G, SBU-T and opening GFA balance excluding consumer contribution for SBU-D'.

Objections of the stakeholders

4.34 KSEB Ltd has submitted that, the equity as per the Government notification G.O (P) No. 46/2013/PD dated 31st October 2013 was Rs 3499.00 crore. KSEB Ltd has further submitted that, Government of Kerala as per order G.O. (Ms) No. 17/2015/PD dated 13.05.2015, clarified that the enhancement of equity is a result of cash infusion in KSEB Ltd by the Government. Relevant portion of the Government order is extracted below:

(vii) As per the Balance sheet of KSEB Limited as on 1.11.2013 which forms part of the Kerala Electricity Second Transfer Scheme (Re-Vesting) 2015, issued as per G.O. read as eighth paper above, the equity of Government in KSEB Limited taking into consideration the assets and liabilities of KSEB as on 01.04.2012 is Rs. 3499 crore in the place of Rs.1553 crore at the time of vesting, as mentioned in the provisional Balance sheet as at 31.03.2008, incorporated in the Kerala Electricity First Transfer Scheme 2008, issued as per G.O. read as fifth paper above.

Taking into consideration that netting off of dues between KSEB Ltd and the Government forms an integral part of re-structuring of KSEB, along with cleaning up of KSEB Ltd's Balance sheet, a part of duty collected i.e, Rs.1946 crore stands converted into the increased portion of equity (3499-1553) so as to ensure that the increased equity is a result of cash infusion into KSEB Ltd by the Government, thereby enabling the Government to participate in increased return on equity in future years.

4.35 KSEB Ltd has also submitted as follows.

“kind attention of the Hon’ble Commission is also invited to Regulation 35(b) of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 wherein it has been specifically stated that the equity of Government of Kerala as per the Transfer Scheme published under Section 131 of the Act will be considered for computation of return on equity. Regulation 35 is reproduced below for ready reference.

35. Principles for adoption of Transfer Scheme under Section 131 of the Act.-

The Commission may, for the purpose of approval of aggregate revenue requirements and determination of tariff, adopt the changes in the balance sheet, due to the re-organisation of the erstwhile Kerala State Electricity Board as per the provisions of the Transfer Scheme published by the Kerala State Government under Section 131 of the Act, subject to the following principles,-

.....

(b) The equity of Government of Kerala as per the Transfer Scheme published under Section 131 of the Act will be considered for computation of return on equity.”

4.36 KSEB Ltd has requested the Commission to allow RoE @15.5% on the equity of Rs 3499.00 crore as per the Government notification No. G.O (P) No. 46/2013/PD dated 31st October 2013.

4.37 The HT&EHT Association has submitted that, the equity of KSEB Ltd is not Rs 1553.00 crore - as recommended by the consultant appointed by the Commission to study the changes on account of the transfer scheme of KSEB Ltd. The consultant engaged by the Commission has suggested that the Commission may allow RoE either on the equity capital of Rs 1553 crore approved by the Commission in the earlier years or at the reduced equity capital of Rs 283.91 crore. The HT&EHT Association has also quoted the relevant portion of the judgment of the Hon’ble APTEL dated 18-11-2015 in Appeal No. 247 of 2014, as extracted below.

“14.4 The Consultant engaged by the Commission has suggested that the Commission may allow RoE either on the equity capital

allowed earlier by the Commission or as the reduced equity capital of Rs. 283.91 crore (Rs. 1553 crore – Rs. 1269 crore).

14.5 The Commission as a matter of principle approves the equity specified for the second transfer scheme. The enhancement of equity (Rs. 1553 crore + 1946 crore = 3499 crore i.e. increase over equity base Rs. 3499 crore) has been considered by the Commission and accordingly computed the return on equity at 14% (as per the Regulation of the State Commission) against the Appellant claim of Rs. 15.5% on RoE.

14.6 We find controversy regarding the equity amount i.e. the amount specified by the Consultant and the amount submitted by the KSEB in the ARR. The Commission considered the amount proposed by the KSEB. Further, the Appellant is contesting that as per the website of the Ministry of Corporate Affairs, Govt of India, the equity of KSEB is only Rs. 5.00 lakhs.

14.7 We are of the view that since the consultant appointed by the State Commission has studied the whole system and recommended the equity value, hence, we direct the Commission to consider the equity amount specified by the Consultant and 14% rate of return on this amount has to be considered.

14.8 Accordingly, this issue is remanded back to the Commission to go through and compute accordingly instead of accepting the figures of KSEB.”

Analysis of the Commission

4.38 The Commission notified the Tariff Regulations, 2014 vide the notification 787/SEA/2011/KSERC dated 14th November-2014. The Tariff Regulations, 2014 is applicable in the State from the year 2015-16. The operation of the Tariff Regulations, 2014 is not stayed by Hon'ble High Court or Hon'ble Supreme Court. Hence the Commission has followed the provisions in the Tariff Regulations, 2014, for taking decisions in this suo motu proceedings.

4.39 The Regulation 35 of the Tariff Regulations, 2014 deals with the 'Principles for adoption of Transfer scheme under Section 131 of the Act', which is extracted below.

“35. Principles for adoption of Transfer Scheme under Section 131 of the Act.-The Commission may, for the purpose of approval of aggregate revenue requirements and determination of tariff, adopt the changes in the balance sheet, due to the re-organisation of the erstwhile Kerala State Electricity Board as per the provisions of the Transfer Scheme published by the Kerala State Government under Section 131 of the Act, subject to the following principles,-

(a) Increase in the value of assets consequent to the revaluation of assets shall not qualify for computation of depreciation or of return on net fixed assets;

(b) The equity of Government of Kerala as per the Transfer Scheme published under Section 131 of the Act will be considered for computation of return on equity.

(c) The reduction of the contribution from consumers, grants and such other subventions for creation of assets, made as a part of Transfer Scheme, shall not be reckoned while computing depreciation or return on net fixed assets;

(d) Only the payment of interest on the bonds issued to the Master Trust will be approved for computation of aggregate revenue requirement and the amount of repayment of such bonds shall not be reckoned for computation of aggregate revenue requirement.

(e) The Commission may take appropriate decision on the other issues relating to the Transfer Scheme and its implementation on a case to case basis.”

4.40 As extracted above, as per the clause (b) of the Regulation 35, the equity of Government of Kerala as per the Second Transfer Scheme published under section 131 of the Act has to be considered for the computation of return on equity.

4.41 As per the Government notification G.O (P) No. 46/2013/PD dated 31st October 2013 on Kerala Electricity Second Transfer Scheme (Re-vesting) 2013, the Government equity is Rs 3499.00 crore. Further, the Government vide the order G.O. (Ms) No. 17/2015/PD dated 13.05.2015 has clarified that the enhancement of equity is a result of cash infusion in KSEB Ltd by the Government. The relevant portion of the Government notification is extracted below.

“13. In the aforesaid circumstances, Government are pleased to order as follows in the matter:-

(vii)As per the Balance Sheet of KSEB Limited as on 1-11-2013 which forms part of the Kerala Electricity Second Transfer Scheme (re-vesting), 2015, issued as per G.O read as eighth paper above, the Equity Capital of Government in KSEB Limited, taking into the assets and liabilities of KSEB Ltd as on 1-4-2012 is Rs 3499.00 crore, in the place of Rs 1533.00 crore at the time of vesting, as mentioned in the provisional Balance Sheet as at 31-3-2008, incorporated in the Kerala Electricity First Transfer Scheme, 2008, issued as per G.O read as fifth paper above.

Taking into consideration that netting off of dues between KSEB Ltd and Government forms an integral part of re-structuring of KSEB, along with cleaning up of KSEB Ltd's Balance Sheet, a part of the duty collected, i.e., Rs 1946 crore stands converted into the increased

portion of equity (3499-1553) so as to ensure that the increased equity is a result of cash infusion to KSEB Ltd by Government, thereby enabling the Government to participate in the increased return on equity in future years.”

- 4.42 In accordance with regulation 35 of the Tariff Regulations, 2014, the Commission estimates RoE on the Government equity of Rs 3499.00 crore as per the Second Transfer Scheme dated 31st October-2013. The amount of Rs 5 lakhs mentioned as capital in the above case pertains to the initial capital with which KSEB Ltd was registered as a shell company, before the transfer of the assets of erstwhile KSEB. Subsequent to the same, the assets and liabilities were transferred to the Registered Company namely KSEB Ltd with an authorised capital of Rs.4999 crores and a paid up capital of Rs. 3499 crores. Further, Hon'ble APTEL has pronounced the judgment dated 18-11-2015 in the appeal petition filed by HT&EHT Association against the tariff order dated 14-08-2014 in petition No. OP No.9/2014, whereas the Tariff Regulations, 2014 notified by the Commission vide the notification dated 14th November-2014 is applicable for the period 2015-16 to 2017-18.
- 4.43 Further, as per the Regulation 29 of the Tariff Regulations, 2014, the RoE is 14% per annum. Accordingly, the RoE approved is Rs 489.86 crore (14% on the equity of Rs 3499.00 crore) for the financial years 2016-17 and 2017-18.
- 4.44 The RoE as approved above is apportioned among the SBU-G, SBU-T and SBU-D in the ratio of the 'opening GFA balance of SBU-G, SBU-T and opening GFA balance excluding consumer contribution for SBU-D'. The details are given below.

Table 4.8
RoE approved for the years 2016-17 and 2017-18

SBU	GFA as on 31-10-2013 (Rs. Cr) *	(%) of GFA	Return on equity(Rs. Cr)
SBU-G	3658.9	41.57	203.63
SBU-T	3909.6	44.42	217.59
SBU-D	1233.4	14.01	68.64
Total	8801.8	100.00	489.86

*GFA excluding asset created out of consumer contribution

CHAPTER-5

PROJECTIONS OF ENERGY SALES

5.1 The Commission has, vide the suo motu notice dated 22-6-2016, estimated the energy sales for the years 2016-17 and 2017-18, based on the past trends on growth of consumer base, increase in energy consumption etc up to the year 2013-14 and past orders of the Commission. The category wise details of the energy sale of different categories of consumers during the period from 2009-10 to 2013-14 and the projection for the years 2016-17 and 2017-18 as per this suo motu proceedings are detailed below.

Table 5.1
Category wise energy sales (In MU)

Category	2009-10	2010-11	2011-12	2012-13	2013-14	CAGR	2014-15	2015-16	2016-17	2017-18
LT Category										
Domestic	6559.0	6877.8	7705.9	8313.4	8739.5	6.4	9298.8	9880.0	10477.8	11106.4
Commercial	1793.0	1951.7	2141.2	2224.1	2229.3	7.0	2385.4	2540.4	2705.6	2881.4
Industrial	1064.0	1053.5	1097.0	1102.0	1096.6	1.7	1115.2	1134.2	1152.3	1170.7
Agricultural	257.0	231.6	286.2	306.1	310.2	5.0	325.8	342.0	358.8	376.4
Street Lights	303.0	265.7	294.3	313.2	319.1	5.0	335.0	351.8	369.0	387.1
Sub total LT	9976.0	10380.3	11524.6	12258.7	12694.7		13460.2	14248.4	15063.4	15922.1
HT category										
HT I Industrial	1450.0	1516.0	1595.7	1683.0	1770.7	3.0	1823.8	1878.5	1932.6	1980.9
HT II	117.0	101.7	115.8	125.5	131.9	2.0	134.5	137.2	139.8	142.5
HT IIB	0.1	0.1	0.1				0.0	0.0	0.0	0.0
HTIII -Agriculture	8.0	8.0	8.1	8.4	7.6	2.0	7.7	7.9	8.0	8.2
HT IV- Commercial	693.0	756.2	866.6	870.8	881.5	8.0	952.0	1028.2	1109.4	1197.1
EHT 66/110/220 KV	1149.0	1181.1	1243.1	1217.6	1243.9	2.5	1274.9	1306.8	1338.2	1370.3
Railway Traction	165.0	156.4	154.5	173.7	200.7	8.0	216.7	234.1	252.6	267.7
Bulk Supply	413.0	448.1	472.1	500.8	523.2	7.0	559.8	599.0	639.7	683.8
Sub total HT	3995.1	4167.6	4456.0	4579.6	4759.3		4969.5	5191.7	5420.3	5650.5
Total	13971.1	14547.9	15980.5	16838.2	17454.0		18429.7	19440.1	20483.8	21572.6

Objections and comments of the stakeholders

5.2 KSEB Ltd has, vide their submission dated 26-07-2016, submitted a revised forecast of energy sales for the years 2016-17 and 2017-18 as detailed below.

- (i) As against the energy sale projections by the Commission, the energy sale projected by KSEB Ltd for the year 2016-17 is 20625.70 MU and the same for the year 2017-18 is 21840.03 MU.
- (ii) KSEB Ltd has considered the CAGR from 2009-10 to 2015-16 for the estimation of energy sale projection for domestic, agricultural, industrial category and public lighting.

- (iii) Since commercial categories were re-categorised during the recent tariff revisions, only two year CAGR is taken for the projection of commercial category for the financial year 2016-17.
- (iv) In the case of HT&EHT category, six year CAGR (Compounded Annual Growth Rate) is considered for the estimation of HT Industrial and railway traction consumers.
- (v) KSEB Ltd has further submitted that, a provision of 10MU is considered for Kochi Metro Rail Corporation. KSEB Ltd has included the estimated consumption of about 20 MU for forthcoming Vizhinjam port also under the EHT 110 kV category. In the case of HT II and HT IV category, due to the re-categorisation of certain group of consumers from HT IV to HT II during the recent two tariff revisions, 6 year CAGR from 2009-10 to 2015-16 could not be considered for projection. It is also mentioned by the licensee that in the case of EHT categories, about 135.25 MU was wheeled through open access, during the previous year.

5.3 The category wise details of the energy sales projected by KSEB Ltd are detailed below.

Table 5.2
Forecast of category wise energy sales (In MU)

LT Category	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Domestic	6559.00	6877.83	7690.12	8299.20	8728.18	9360.59	9936.22	10648.42	11393.81
Commercial	1793.00	1951.74	2141.22	2224.06	2227.33	2415.48	2733.68	3028.51	3249.06
Industrial	1064.00	1053.45	1097.04	1101.96	1096.57	1096.93	1103.23	1109.91	1116.63
Agricultural	257.00	231.56	286.18	306.08	310.25	291.41	279.48	283.41	287.40
Street Lights	303.00	265.68	294.26	313.20	321.06	346.43	366.62	378.45	390.67
LT II	0	0.00	15.74	14.16	11.34	6.67	7.26	7.90	8.60
Advertisement & Hoardings						2.80	1.68	1.73	1.78
LT Total	9976.00	10380.26	11524.56	12258.66	12694.73	13520.31	14428.17	15458.34	16447.94
HT Category									
HT I	1450.00	1516.01	1595.68	1682.95	1770.67	1842.32	1852.13	1929.26	2009.59
HT II	117.09	101.71	115.76	125.45	131.88	551.97	678.03	730.07	766.5751
HTIII	8.00	8.00	8.11	8.35	7.56	6.87	6.82	6.85	7.05
HT IV	693.00	756.21	866.62	870.81	881.51	578.81	584.39	622.01	653.1056
HT V			0.00	0	0.00	8.17	9.56	11.18	11.74
HT Total	2268.09	2381.93	2586.17	2687.56	2791.62	2988.15	3130.93	3299.36	3448.06
EHT Category									
EHT-I	363.00	341.17	360.49	336.97	337.38	334.49	233.12	240.46	248.03
EHT-II	786.00	839.95	882.64	835.81	766.69	708.16	639.82	679.78	700.99
EHT-111			0.00	44.81	79.24	50.74	33.75	34.43	35.12
EHT Non industrial			0.00	0	60.55	65.05	68.38	71.87	75.54
Railway Traction	165.00	156.39	154.49	173.67	200.69	205.31	212.83	232.06	242.03
Bulk consumers /	413.00	448.10	472.10	500.76	523.15	554.06	578.08	609.39	642.30
HT & EHT Total	3995.09	4167.54	4455.89	4579.58	4759.32	4905.96	4896.90	5167.36	5392.09
Total	13971.09	14547.80	15980.45	16838.24	17454.05	18426.27	19325.07	20625.70	21840.03

- 5.4 The HT&EHT Association vide their submission have estimated the energy sale for the year 2016-17 at 20716.22 MU and the same for the year 2017-18 at 21950.80 MU. It was mentioned by the Association that the category-wise sales projected by KSEB Ltd for FY 2016-17 and FY 2017-18 is reasonable, subject to the reduction of sales to open access consumers by KSEB Ltd. The Association further requested that the Commission may verify the actual sales under open access during FY 2015-16, before finalizing the sales projections for FY 2016-17 and FY 2017-18.

Analysis of the Commission

- 5.5 The Commission has analyzed the figures of energy sales projected by the Commission in its suo motu notice, the projections of the KSEB Ltd and the submissions of the HT&EHT Association. It is noted that, while projecting the energy consumption, the Commission considered an overall increase of 5.36% over previous years based on the past trends and growth rates. The estimate of the KSEB Ltd and the HT&EHT Association is higher than that estimated by the Commission after adjusting the long term trends with more weight given to recent changes in consumption patterns. Further, as submitted by KSEB Ltd, the anticipated energy consumption by Kochi Metro Rail Corporation and Vizhinjam Port, the impact of re-categorisation in the Commercial sector during the recent tariff order etc is to be considered while projecting the energy requirement of the years 2016-17 and 2017-18. The Commission has noted that, KSEB Ltd has been taking various initiatives on Demand Side Management (DSM) and energy efficiency measures. Since the details of the same including the anticipated energy savings are not available with the Commission these have not been factored in the estimates of consumption.
- 5.6 KSEB Ltd has not filed the truing up of accounts of the previous year 2015-16 before the Commission. Nor has it filed the application for determination of tariff for the years 2015-16, 2016-17 and 2017-18 in accordance with the provisions of the Tariff Regulations, 2014. Hence, the Commission does not have updated details of the immediate past actuals for the years 2014-15 and 2015-16. Taking into consideration, the details of projected figures of energy sales now filed by the licensee before the Commission, the trend of consumption patterns and the response from the stakeholders on the figures submitted by the licensee, the Commission approves the energy sales of KSEB Ltd for the years 2016-17 and 2017-18 as detailed below.

Table 5.3
Energy sales approved for the years 2016-17 and 2017-18(In MU)

LT Category	2016-17	2017-18
Domestic	10648.42	11393.81
Commercial	3028.51	3249.06
Industrial	1109.91	1116.63
Agricultural	283.41	287.40
Street Lights	378.45	390.67
LT II	7.90	8.60
Advertisement & Hoardings	1.73	1.78
LT Total	15458.34	16447.94
HT Category		
HT I	1929.26	2009.59
HT II	730.07	766.58
HTIII	6.85	7.05
HT IV	622.01	653.11
HT V	11.18	11.74
HT Total	3299.36	3448.06
EHT Category		
EHT-I	240.46	248.03
EHT-II	679.78	700.99
EHT-III	34.43	35.12
EHT Non Industrial	71.87	75.54
Railway Traction	232.06	242.03
Bulk consumers/Licensees	609.39	642.30
EHT Total (including Railway traction and Bulk licensees)	1867.99	1944.01
Total	20625.70	21840.03

CHAPTER-6

TRANSMISSION LOSS OF SBU-T AND DISTRIBUTION LOSS OF SBU-D

- 6.1 The Commission has been directing KSEB Ltd to separate technical and commercial losses and to assess technical losses at different voltage levels. However, KSEB Ltd was reporting only the particulars of combined Transmission and Distribution (T&D) loss before the Commission and the Commission has been approving the combined T&D loss targets for KSEB Ltd till the year 2014-15.
- 6.2 As per the Tariff Regulations, 2014, KSEB Ltd has to file separately the aggregate revenue requirements of the SBU-G, SBU-T and SBU-D of the KSEB Ltd and calculate separately the loss reduction targets of SBU-T and SBU-D. However, KSEB Ltd has not filed any such details in the applications for the approval of ARR&ERC and the determination of tariff for the SBUs, for the years 2016-17 and 2017-18.
- 6.3 Since the details of the initiatives and efforts taken by the KSEB Ltd for the reduction of T&D loss and results thereon have not been properly filed before the Commission, the Commission, after appraising the trends of the actual T&D loss of KSEB Ltd for the period from 2010-11 to 2015-16, has estimated the loss reduction targets for the years 2016-17 and 2017-18. The details of the T&D losses during the period from 2010-11 to 2015-16 are given below.

Table 6.1
T&D loss reduction achieved by KSEB Ltd

Year	T&D loss (%)		Actual Reduction over previous year(%)
	Approved	Actual	
2010-11	16.00	16.09	
2011-12	15.31	15.65	0.44
2012-13	14.81	15.30	0.35
2013-14	14.73	14.96	0.34
2014-15	14.50	14.58	0.38

- 6.4 Considering the trend of the loss reduction targets achieved by the licensee during the past, the Commission anticipates a loss reduction of 0.30 percent for the year 2015-16 from the targeted loss level of 14.50%, approved by the Commission for the year 2014-15, and a further reduction of 0.30 percent for the year 2016-17 from that of 2015-16 and 0.25 percent for the year 2017-18 from the approved loss of 2016-17.

- 6.5 Accordingly the loss reduction targets proposed by the Commission for the years 2016-17 and 2017-18 are detailed below.

Table 6.2
T&D loss targets proposed in suo motu notice

Year	T&D loss (%)	Reduction over previous year(%)
2014-15	14.50	
2015-16	14.20	0.30
2016-17	13.90	0.30
2017-18	13.65	0.25

Objections of Stakeholders

- 6.6 KSEB Ltd has submitted that, as against the proposed T&D loss target of 14.20% for the year 2015-16, the actual T&D loss reported is 14.37%. Further, the actual loss reduction achieved during the year 2015-16 was 0.20% over the previous year actual loss of 14.57%. Hence, KSEB Ltd has requested before the Commission to fix the loss reduction target for the year 2015-16 at the level of T&D loss actually achieved, i.e., 14.37%. Further, KSEB Ltd has proposed a loss reduction target of 0.27% for the year 2016-17 and 0.25% for the year 2017-18. Accordingly the target of T&D loss level proposed by KSEB Ltd is 14.10% and 13.85% respectively for the years 2016-17 and 2017-18.
- 6.7 The HT&EHT Association has proposed a loss reduction target of 0.50% for the years 2015-16 and 2016-17 and loss target of 0.40% for the year 2017-18. Accordingly, they proposed the loss level for the year 2016-17 as 13.50% and the same for the year 2017-18 is 13.10%.

Analysis of the Commission

- 6.8 Over the years, the Commission has been taking a consistent stand that, the T&D loss is a controllable item. The details of the T&D loss proposed by KSEB Ltd, the T&D loss target approved by the Commission, the actual T&D loss reported by KSEB Ltd and the T&D loss approved for truing up for the periods from 2003-04 to 2013-14 are given below.

Table 6.3
Details of the loss reduction targets approved and the actuals achieved

Year	Loss Targets				Loss Reduction Targets			
	Proposed in the ARR	Approved by KSERC	Actual achieved by KSEB	Approved in True up	Proposed in the ARR	Loss Reduction Approved by KSERC	Actual achieved by KSEB	Loss reduction approved in Truing up
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
2003-04	26.60	26.60	27.45	26.60				
2004-05	24.77	24.50	24.95	24.50	2.33	3.00	2.50	2.95
2005-06	22.59	21.89	22.96	22.23	2.72	2.72	1.99	2.72
2006-07	21.58	20.45	21.47	20.46	1.76	2.50	1.50	2.50
2007-08	19.72	19.55	20.02	19.55	1.83	2.00	1.45	1.92
2008-09	18.49	17.92	18.83	18.39	1.63	1.63	1.32	1.63
2009-10	17.43	16.92	17.71	17.71	1.27	1.00	1.12	1.12
2010-11	16.78	16.00	16.09	16.09	0.92	0.92	1.62	1.62
2011-12	15.83	15.31	15.65	15.40	0.69	0.69	0.44	0.69
2012-13	15.32	14.81	15.30	15.15	0.25	0.50	0.35	0.50
2013-14	14.91	14.73	14.96		0.32	0.50	0.34	
2014-15	14.75	14.50	14.58		0.25	0.50	0.38	

6.9 As detailed above, the Commission has been approving the combined Transmission & Distribution losses (T&D losses) after duly appraising the combined T&D losses proposed by KSEB Ltd. The T&D loss reduction target proposed by KSEB Ltd, the same approved by the Commission and actual over the years since 2011-12 are detailed below.

Table 6.4
T&D loss incremental targets proposed by KSEB Ltd, approved by Commission and the actuals achieved

Year	T&D loss reduction targets		
	Proposed by KSEB Ltd(%)	Approved by the Commission(%)	Actuals achieved(%)
2011-12	0.69	0.69	0.44
2012-13	0.25	0.50	0.35
2013-14	0.32	0.50	0.39
2014-15	0.25	0.50	0.34
2015-16	0.22	-	0.20

6.10 Duly considering the actual loss reduction target achieved by the KSEB Ltd, the Commission fixes a reasonable combined T&D loss incremental reduction target of 0.30% for the years 2015-16 & 2016-17, and 0.25% for the year 2017-18, from the loss levels approved for the previous years. The approved loss level for the year 2014-15 is 14.50%. Accordingly, the combined loss

targets approved for the years 2015-16, 2016-17 and 2017-18 are 14.20%, 13.90% and 13.65% respectively.

- 6.11 Based on the energy sales approved vide the chapter-5, and the loss reduction targets approved as per paragraph 6.10 above, the Commission has estimated the energy requirements of KSEB Ltd at the State periphery for the years 2016-17 and 2017-18 are as follows.

Table 6.5
Energy requirements of KSEB Ltd for the years 2016-17 and 2017-18

Particulars	2016-17	2017-18
Energy sale approved (MU)	20625.70	21840.03
Loss level approved (%)	13.90	13.65
Energy input to KSEB Ltd system (MU)	23955.52	25292.45

- 6.12 As per the Tariff Regulations, 2014, the Commission has to approve the ARR of the SBU-T and SBU-D separately. The T&D loss levels approved as above include the transmission loss of SBU-T and the distribution loss of SBU-D. The methodology adopted by the Commission for segregating the transmission and distribution losses is detailed below.

Transmission loss

- 6.13 The transmission loss of SBU-T includes the losses in the transmission system of SBU-T of the KSEB Ltd at voltages including 33 kV level and above. The distribution loss of SBU-D of the KSEB Ltd includes the losses in the distribution system at 11 kV and below.

- 6.14 As per the Regulation-66 of the Tariff Regulations, 2014, the losses in the transmission system of SBU-T shall be borne by the users of the transmission system. Regulation 66 is extracted below.

“66. Transmission losses.-The energy losses in the transmission system, as determined by the state load despatch centre and approved by the Commission, shall be borne by the users of the transmission system in proportion to their usage of the transmission system”.

- 6.15 The Commission had, in the previous tariff orders pertaining to the years 2012-13 and 2013-14, directed KSEB Ltd to conduct studies on estimating the transmission losses in the transmission system and distribution losses in the distribution system. Duly considering the details submitted by KSEB Ltd and other technical factors, the Commission had, in the tariff order dated 14-08-2014 for the year 2014-15, estimated the ‘transmission loss’ in the transmission system of KSEB Ltd at 4.50%. The relevant portion of the order is quoted hereunder,-

" 5. The Commission has examined in detail, the proposal of KSEB Ltd. and suggested that the open access charges are to be reasonable and should promote open access. Based on the approved level of losses of 14.5% for 2014-15, reasonable level of segregation of losses at the voltage level has to be worked out. In view of the direction of the Hon'ble APTEL in its order dated 31.05.2013 in Appeal No 179/2013 to assess the voltage wise cost, the Commission had, in its letter no 59/CT/KSERC/2013 dated 18.06.2013 given direction to KSEB Ltd to conduct necessary studies on losses at different voltage levels. KSEB vide letter no KSEB/TRAC/ARR&ERC/2013-14/Voltage wise/1010 dated 07.01.2014 submitted a model for determining the cost of supply at different voltage levels. This model was published vide notice dated 30.01.2014 and a public hearing was conducted on 18.03.2014. In the public hearing the stakeholders expressed doubts on the accuracy of data used by KSEB Ltd for estimating cost at different voltages. Accordingly, the Commission had, during the public hearing itself, directed KSEB Ltd to furnish more data to substantiate their arguments. KSEB Ltd in its letter no KSEB/TRAC/ARR&ERC/2014-15/Voltage wise cost/ dated 12.08.2014 reported that the reasonable transmission loss is about 4.5 percent to 4.7 percent, that the overall loss in the HT system is about 5.5 percent and that the overall loss in the LT system is about 7.8 to 8 percent. KSEB Ltd also submitted the above figures of losses are based on system simulation studies conducted by it. In the absence of more reliable data on Commission is inclined to accept the transmission loss at 4.5 percent, loss at HT level at 5.5 percent and loss at LT level at 7.7% percent."

Considering the above observations, the Commission estimates the transmission loss in the transmission system of SBU-T at 4.50% for the years 2016-17 and 2017-18 since no additional information has been provided by the licensee

Distribution losses

6.16 The regulation-74 of the Tariff Regulations, 2014 which deals with distribution loss, is extracted below.

"74. Distribution losses. – (1) (a) The distribution business/licensee shall carry out proper studies for the estimation of distribution losses, in order to set a realistic base line of the estimates of losses at different voltage levels and to segregate commercial and technical losses:

(b) The distribution business/licensee shall submit separate details of loss at different voltages, while computing its total energy requirement.

2(a) The distribution business/licensee shall submit along with the application for approval of aggregate revenue requirement for the control period and determination of tariff for the first financial year of the control period, the information on total and voltage-wise distribution losses in the

previous financial year and current financial year and the basis on which such losses have been worked out.

(b) The distribution business/licensee shall also propose the loss reduction targets for each financial year of the control period, along with absolute loss levels:

(c) The distribution business/licensee shall substantiate, along with the application for approval of aggregate revenue requirement and determination of tariff, the proposed loss levels with necessary studies and their results.

(3) The Commission shall approve the target of distribution loss for the ensuing financial year as well as subsequent financial years of the control period based on the opening loss levels, filings of the distribution business/licensee, submissions and objections raised by stakeholders and findings of the Commission.

(4) Any variation between the actual level of distribution losses and the approved level of distribution losses shall be dealt with, as part of the truing up of the respective financial year, in the following manner:-

(a) If the actual distribution loss is higher than the approved level of distribution loss for any particular financial year of the control period, then the quantum of power purchase corresponding to the excess distribution loss for that financial year, shall be disallowed at the average cost of power purchase for the respective financial year;

(b) If the actual distribution loss is lower than the approved level of distribution loss for any particular financial year of the control period, then the savings in power purchase cost corresponding to the difference in distribution loss for that financial year at the average cost of power purchase for the respective financial year, shall be shared between the distribution business/licensee and the consumers in the ratio of 2:1."

6.17 However, KSEB Ltd has not submitted after 2014 any details on the loss studies initiated, to assess the loss level at each voltage level as stipulated in the regulations. In the absence of proper data on loss reduction, the Commission is constrained to estimate the distribution loss in the distribution system of SBU- D as detailed below.

6.18 As extracted in paragraph-6.16 above, while approving the ARR&ERC of KSEB Ltd for the year 2014-15, the Commission had approved the transmission loss in the transmission system of KSEB Ltd at 4.50% and losses in the distribution system up to HT level at 5.50%. Based on the above, the total losses in the distribution system of SBU-D and distribution loss associated with providing supply at LT level are assessed as follows.

Table 6.6
Transmission and distribution loss levels approved for the
years 2016-17 and 2017-18

Sl No	Particulars	2016-17	2017-18
1	Net energy input into the SBU-T of the KSEB L system (net internal generation + net power purchase at KSEB Ltd periphery) (in MU)	23955.52	25292.45
2	Transmission loss in percentage	4.50%	4.50%
3	Transmission loss in MU	1078	1138.16
4	EHT sales (MU)	1867.99	1944.01
5	HT& LT sale (MU)	18757.71	19896.02
6	Total energy sale (MU)	20625.7	21840.03
7	Net energy input to Distribution system for sale at HT & LT level (MU)= (1)-(3+4)	21009.53	22210.28
8	Distribution loss in MU = (7)-(5)	2251.82	2314.26
9	Total Distribution loss in percentage = (8)/(7)	10.72%	10.42%
10	HT Sale (MU)	3299.00	3448.06
11	Distribution loss for providing supply at HT level (%)	5.50%	5.50%
12	Distribution loss incurred for HT sale (MU)	192.01	200.68
13	Net energy available for LT supply (MU)= (7)-(10)-(12)	17518.52	18561.54
14	LT sale (MU)	15458.34	16447.94
15	Distribution loss associated with LT supply(MU) = (13)-(14)	2060.18	2113.60
16	Distribution loss in (%) for providing supply at LT Level= (15)/(13)	11.76%	11.39%
17	Combined Transmission and Distribution loss in MU = (3)+(12)+(15)	3330.19	3452.44
18	Combined T&D Loss in (%) = (17)/(1)	13.90%	13.65%

6.19 Based on the above facts, the Commission estimates the distribution loss for providing supply at HT level at 5.5%, loss at LT level at 11.76% for the year 2016-17 and 11.39% for the year 2016-17.

CHAPTER-7

AGGREGATE REVENUE REQUIREMENTS (ARR) OF STRATEGIC BUSINESS UNIT- GENERATION (SBU-G) OF KSEB LTD

- 7.1 The Second Transfer Scheme notified by the Government under Section 131 of the Act as per G.O(P) No. 46/2013/PD dated 31st October 2013, stipulates that the functions, business and sub-undertaking, forming part of generation as set out in Schedule A 2 shall denote SBU-G of the KSEB Ltd on and from the date of the transfer. Further, as per the sub-paragraph (ii) of the paragraph (o) to clause-2 of the Second Transfer Scheme, SBU-G means the generation unit of the KSEB Ltd to which the generation sub-undertakings have been transferred in accordance with the provisions of the Second Transfer Scheme.
- 7.2 As per the Regulation-11 of the Tariff Regulations, 2014 and the provisions of Second Transfer Scheme, KSEB Ltd has to file the application for approval of aggregate revenue requirements of the SBU-G separately before the Commission. However, KSEB Ltd has not filed any application for the approval of ARR of its SBU-G for the years 2016-17 and 2017-18 before the Commission. The procedure followed by the Commission for the determination of ARR of SBU-G in this suo motu proceedings is explained in the following paragraphs.

Existing Generation Capacity

(a) Hydel Capacity

- 7.3 The existing generation capacities owned and operated by KSEB Ltd as on 31.03.2016 are detailed below.

Table 7.1
Existing Generating Stations owned and operated by SBU-G of KSEB Ltd

Sl No	Name of the Station	No of units	Installed Capacity(MW)	Annual Designed Energy(MU)	Year of Commissioning	Year of RMU*
1	Pallivasal	6	37.50	284.00	1940 to 1951.	2001-02
2	Sengulam	4	51.20	182.00	1954-55.	2001-02
3	Neriamangalam	3	52.65	237.00	1961-63.	2004-06
4	Panniar	2	32.40	158.00	1963-64.	2001-03
5	Poringalkuthu	4	32.00	170.00	1957-60	
6	Sholayar	3	54.00	233.00	1966-68	
7	Sabarigiri	6	335.00	1338.00	1966-67.	2005-09
8	Kutiadi	3	75.00	268.00	1972	
9	Idukki	6	780.00	2398.00	1976,1986	
10	Idamalayar	2	75.00	380.00	1987	
11	Kallada	2	15.00	65.00	1994	
12	Peppra	1	3.00	11.50	1996	

Sl No	Name of the Station	No of units	Installed Capacity(MW)	Annual Designed Energy(MU)	Year of Commissioning	Year of RMU*
13	Lower Periyar	3	180.00	493.00	1997	
14	Mattupetty	1	2.00	6.40	1998	
15	Poringalkuthu LB	1	16.00	74.00	1998	
16	Kakkad	2	50.00	262.00	1999	
17	KutiadiExtensin	1	50.00	75.00	2001	
18	Malampuzha	1	2.50	5.60	2001	
19	Chempukadavu Stage-1	3	2.70	6.59	2003	
20	Chempukadavu Stage-II	3	3.75	9.03	2003	
21	Urumi Stage-1	3	3.75	9.72	2004	
22	Urumi Stage-2	3	2.40	6.28	2004	
23	Malankara	3	10.50	65.00	2005	
24	Lower Meenmutty	3	3.50	7.63	2006	
25	NeriamangalamExtn	1	25.00	58.27	2008	
26	Kutiadi tail race	3	3.75	17.01	2008-09	
27	KutiadiAddlextn	2	100.00	223.00	2010	
28	Poozhithodu	3	4.80	10.97	2011	
29	Ranniperunadu	2	4.00	16.73	2012	
30	Peechi	1	1.25	1.25	2013	
31	Vilangad	3	7.50	22.63	2014	
32	Chimmini	1	2.50	6.70	2015	
33	Adianpara	3	3.50	9.01	2015	
34	Barapole	3	15.00	36.00	2016	
	Total		2037.15	7146.32		

* RMU = Renovation Modernisation and Uprating

(b) Thermal generating stations

7.4 In addition to the hydel stations as detailed above, KSEB Ltd owns and operates two Low Sulphur Heavy Stock (LSHS) based thermal stations namely, Brahmapuram Diesel Power Plant (BDPP) and Kozhikode Diesel Power Plant (KDPP), the details of which are given below.

Table 7.2
Thermal generating stations of KSEB Ltd

Station	Units	Capacity (MW)
BDPP	3*21.32	63.96
KDPP	6*16	96.00
Total		159.96

Note: Two units of 21.32 MW each at BDPP and two units of 16 MW each at KDPP are not functioning.

Estimation of energy availability from Hydel stations

7.5 In the suo motu notice dated 22-6-2016, the Commission had estimated the energy availability from hydel stations owned and operated by KSEB Ltd at 7000 MU expecting a normal monsoon.

Objections of stakeholders on the proposals in the notice dated 22.06.2016

- 7.6 KSEB Ltd had, vide the submission dated 26.07.2016, communicated that the hydel energy expected under normal monsoon is 7094.20 MU and the net hydel availability after accounting auxiliary consumption @ 0.5% of the gross generation is 7058.73 MU. However, the KSEB Ltd has, vide the additional submission dated 8th September 2016, communicated that South-West monsoon received during the year 2016 is about 25% less than the normal. Accordingly KSEB Ltd submitted that, the hydel availability during the year 2016-17 would be less by 1409 MU and estimated the net hydel availability at 5684MU.
- 7.7 The HT&EHT Association had submitted that, the actual hydel-energy availability was 7947 MU in FY 2013-14 and 7423 MU in FY 2014-15 and as per the report of the Indian Meteorological Department (IMD), the monsoon in 2016 would be above normal and suggested to fix the hydel availability during the years 2016-17 and 2017-18 at 7300 MU. It was further mentioned that the auxiliary consumption has been specified in the Tariff Regulations, 2014 for each hydro station separately, and average auxiliary consumption of 0.5% cannot be considered.

Analysis and decision of the Commission

- 7.8 The Commission has examined the comments of KSEB Ltd, the HT&EHT Association and of the other stakeholders. It is a fact that, the rainfall received during the year 2016-17 is much less than the normal rainfall. Accordingly, the inflow received during the period from June-2016 to December-2016 is less by about 3220 MU when compared to the normal inflow. The details are given below. Based on the data available from meteorological sources with regard to rainfall of the current year, it is noticed that at present, the cumulative rainfall deficiency for Kerala would be about 50%, making the state as the most rain deficient region of Peninsular India.

Table-7.3
Reduction in inflow received on account of failure of monsoon

Month	Inflow received (MU)	Inflow expected (MU)	Short fall in flow(MU)	Short fall in (%)
Jun-16	577.60	808.10	230.50	28.52
Jul-16	1060.00	1728.00	668.00	38.66
Aug-16	685.30	1270.20	584.90	46.05
Sep-16	370.00	1019.89	649.89	63.72
Oct-16	243.00	758.00	515.00	67.94
Nov-16	144.55	557.24	412.69	74.06
Dec-16	75.90	237.30	161.40	68.02
Total	3156.35	6378.73	3222.38	50.52

- 7.9 The reservoir storage as on 30th December-2016 is 1930 MU. With the present trend in reduction in inflow, the average hydel generation possible for the remaining months of the year till 31st May-2015 is only about 11MU/day.
- 7.10 The actual gross hydel generation from April-2016 to December-2016 is about 3448 MU as detailed below.

Table 7.4
Gross Hydel Generation from April to December-2016

Month	Gross Hydel Generation (MU)
Apr-16	569.14
May-16	389.59
Jun-16	337.09
Jul-16	436.55
Aug-16	442.60
Sep-16	432.90
Oct-16	362.77
Nov-16	247.77
Dec-16	230.00
Total	3448.41

- 7.11 Considering the actual hydel generation from April to December-2016 and the expected hydel generation @11 MU/day for the remaining months of the water year till May-2017, the Commission has revised the hydel generation target for the year 2016-17 at 4400 MU. Considering the reduced target of hydel generation @11 MU/day for the months of April and May of the year 2017-18, and expecting normal monsoon for the remaining months of the year, the revised gross hydel generation target for 2017-18 is about 6500 MU. After accounting for the auxiliary consumption, and the norms of operation fixed for the existing hydro-electric generating stations as provided for in the Regulation 46 of the Tariff Regulations, 2014, the net hydel energy availability approved for the years 2016-17 and 2017-18 are detailed below.

Table 7.5
Station wise details of the energy approved for the years
2016-17 and 2017-18

Sl no	Name of the Station	2016-17				2017-18		
		Targeted generation (Gross)	Aux. consumption as per Tariff Regulations, 2014		Net Hydel generation	Targeted generation	Aux. consumption as per Tariff Regulations, 2014	Net Hydel generation
		(MU)	(%)	(MU)	(MU)	(MU)	(MU)	(MU)
1	Pallivasal	226.52	1.00%	2.27	224.26	258	2.58	255.73
2	Sengulam	145.17	0.15%	0.22	144.95	166	0.25	165.29
3	Neriamangalam	189.03	0.18%	0.34	188.69	216	0.39	215.18
4	Panniar	126.02	0.53%	0.67	125.35	144	0.76	142.95
5	Poringalkuthu	135.59	0.44%	0.60	135.00	155	0.68	153.94
6	Sholayar	185.84	0.18%	0.33	185.51	212	0.38	211.55
7	Sabirigiri	1067.21	0.22%	2.35	1064.86	1217	2.68	1214.31
8	Kutiadi	213.76	0.24%	0.51	213.25	244	0.59	243.18
9	Idukki	1912.68	0.53%	10.14	1902.54	2181	11.56	2169.56
10	Idamalayar	303.09	0.10%	0.30	302.79	346	0.35	345.29
11	Kallada	51.84	1.00%	0.52	51.33	59	0.59	58.53
12	Peppra	9.17	1.00%	0.09	9.08	10	0.10	10.36
13	Lower Periyar	393.22	0.13%	0.51	392.71	448	0.58	447.83
14	Mattupetty	5.10	1.00%	0.05	5.05	6	0.06	5.76
15	Poringalkuthu LB	59.02	0.44%	0.26	58.76	67	0.30	67.01
16	Kakkad	208.97	0.71%	1.48	207.49	238	1.69	236.61
17	KutiadiExtensin	59.82	0.24%	0.14	59.68	68	0.16	68.05
18	Malampuzha	4.47	1.00%	0.04	4.42	5	0.05	5.04
19	Chempukadavu Stage-1	5.26	1.00%	0.05	5.20	6	0.06	5.93
20	Chempukadavu Stage-II	7.20	1.00%	0.07	7.13	8	0.08	8.13
21	Urumi Stage-1	7.75	1.00%	0.08	7.68	9	0.09	8.75
22	Urumi Stage-2	5.01	1.00%	0.05	4.96	6	0.06	5.65
23	Malankara	51.84	1.00%	0.52	51.33	59	0.59	58.53
24	Lower Meenmutty	6.09	1.00%	0.06	6.02	7	0.07	6.87
25	NeriamangalamExtn	46.48	0.18%	0.08	46.39	53	0.10	52.90
26	Kutiadi tail race	13.57	1.00%	0.14	13.43	15	0.15	15.32
27	KutiadiAddlextn	177.87	0.24%	0.43	177.44	203	0.49	202.34
28	Poozhithodu	8.75	1.00%	0.09	8.66	10	0.10	9.88
29	Ranniperunadu	13.34	1.00%	0.13	13.21	15	0.15	15.06
30	Peechi	1.00	1.00%	0.01	0.99	1	0.01	1.13
31	Vilangad	18.05	1.00%	0.18	17.87	21	0.21	20.38
32	Chimmini	5.34	1.00%	0.05	5.29	6	0.06	6.03
33	Adianpara	7.19	1.00%	0.07	7.11	8	0.08	8.11
34	Barapole	28.71	1.00%	0.29	28.43	33	0.33	32.42
	Total	4400.00	0.00%	23.13	4376.87	6500	26.38	6473.62

Operation and Maintenance Expense for Generation business

7.12 The Commission had, vide the suo motu notice dated 22-6-2016 estimated the O&M expenses for the existing generating stations of KSEB Ltd as per regulation 44, read with the Annexure-VII of the Tariff Regulations, 2014, which is extracted below.

Table 7.6

O&M norms for existing generating stations of generation business of KSEB Ltd

Particulars	Financial Years (Rs. crore)		
	2015-16	2016-17	2017-18
Employee expenses	45.01	47.65	50.43
Repairs and maintenance expenses	18.73	19.83	20.99
Administrative and general expenses	4.34	4.59	4.86
Total	68.08	72.07	76.28

Objections of the stakeholders:

7.13 KSEB Ltd has submitted that, as per the sub regulation (2) of regulation-44, over and above the O&M cost of existing generation assets, KSEB Ltd is eligible to get O&M cost for the generation capacity Commissioned since the year 2011-12. The details of the O&M cost claimed by KSEB Ltd for the recently Commissioned hydel projects are detailed below.

Table 7.7

Details of newly Commissioned projects

Name of the project	Date of Commissioning	Capacity MW	Designed energy MU	Project cost (Rs. Cr)	Additional O&M cost (Rs. Cr)	
					2016-17	2017-18
Poozhithode	25.06.2011	4.8	10.97	32.75	0.87	0.92
Ranniperinad	16.02.2012	4	16.73	35.82	0.95	1.01
Peechi	07.01.2013	1.25	3.21	9.84	0.25	0.26
Vilangad	26.07.2014	7.5	22.63	75.83	1.70	1.80
Chimmony	22.05.2015	2.5	6.70	14.58	0.31	0.33
Adyanpara	03.09.2015	3.5	9.01	34.38	0.73	0.77
Barapole	29.02.2016	15.0	36.00	127.50	2.70	2.86
Total		21	51.71	176.46	7.50	7.94

Analysis and Decision of the Commission

7.14 Sub regulation (2) of regulation 44 of the Tariff regulations, 2014, specifies :
" In the case of new generating stations, the generating company shall be allowed to recover during the first control period, the operation and maintenance expenses as specified hereunder, -
a) the operation and maintenance expenses in the first year of operation shall be two percent of the original project cost (excluding cost of rehabilitation and resettlement works); and

b) the operation and maintenance expenses for each subsequent financial year of the first control period shall be determined by escalating at the rate of 5.85 percent of the operation and maintenance expenses for the first year as determined above."

7.15 Tariff Regulations, 2014, was notified in the official Gazette on 14-11-2014. Hence the hydel capacity Commissioned after 14-11-2014 are only eligible for additional O&M cost. However, Vilangad which was Commissioned on 26-07-2014 is also considered since this generating station was not included while determining the normative values. As per the details submitted by the KSEB Ltd, Chimmony SHP (2.5 MW), Adyanpara SHP (3.5 MW) and Barapole SHP(15 MW) were Commissioned after notifying the Tariff Regulations, 2014. These projects were included in the "details of the ongoing projects" in the ARR order of the licensee approved by the Commission for the year 2014-15. Thus taking into consideration the relevant provisions of the Tariff Regulations of 2014, the O&M costs of these new hydel generating stations have been estimated after considering the normative capital cost for small hydro projects approved by the Central Commission for the year 2015-16 . Accordingly, the O&M costs for newly Commissioned hydel projects are arrived at as given below,-

Table 7.8
O&M cost approved for new hydel stations Commissioned after
notifying the Tariff regulations, 2014

Name of the project	Date of Commissioning	Capacity MW	Designed energy MU	Normative Capital cost for allowing O&M cost(Rs. Cr)/ MW	Additional O&M cost(Rs. Cr)	
					2016-17	2017-18
Vilangad	26-07-2014	7.5	22.53	5.92	0.94	0.99
Chimmony	22.05.2015	2.5	6.70	6.46	0.34	0.36
Adyanpara	03.09.2015	3.5	9.01	6.46	0.48	0.51
Barapole	29.02.2016	15	36.00	5.92	1.88	1.99
Total		21	51.71		3.64	3.85

7.16 Thus the total O&M costs approved for SBU-G for the years 2016-17 and 2017-18 are detailed below.

Table 7.9
O&M cost approved for the years 2016-17 & 2017-18

Particulars	O&M cost (Rs. Cr)	
	2016-17	2017-18
O&M cost for existing stations	72.07	76.28
O&M cost for new stations Commissioned after notifying the Tariff Regulations, 2014	3.64	3.85
Total	75.71	80.13

Interest & Finance charges

- 7.17 The details of the interest and finance charges proposed for KSEB Ltd, as per the suo motu notice dated 22.6.2016, the objections and suggestions of the stakeholders, the analysis of the Commission and the methodology adopted by the Commission for apportioning the same among SBU-G, SBU-T and SBU-D have been detailed in paragraphs 4.11 to 4.32.
- 7.18 The summary of the interest and finance charges approved for SBU-G for the years 2016-17 and 2017-18 is given below.

Table-7.10
Interest and finance charges approved for SBU-G for 2016-17 & 2017-18

SI No	Particulars	I&F charges (Rs. Cr)	
		2016-17	2017-18
1	Interest on outstanding capital liabilities	171.62	171.62
2	Interest on GPF	6.76	7.21
3	Other interest	0.52	0.52
4	Interest on bonds issued to Master Trust	41.94	41.94
	Total	220.84	221.29

Depreciation

- 7.19 The details of the depreciation proposed for KSEB Ltd as per the suo motu notice dated 22-6-2016, the objections and comments of the stakeholders including KSEB Ltd, the analysis and decision of the Commission, the methodology adopted by the Commission for apportioning the same among SBU-G, SBU-T and SBU-D are detailed in paragraphs 4.6 to 4.10.
- 7.20 The summary of the depreciation approved for the years 2016-17 and 2017-18 for SBU-G is detailed below.

Table 7.11
Depreciation approved for the years 2016-17 and 2017-18

Particulars	Depreciation(Rs. Cr)	
	2016-17	2017-18
SBU-G	172.43	172.43

Return on Equity

- 7.21 The return on equity proposed vide the suo motu notice dated 22-6-2016, the objections and comments of the stakeholders including KSEB Ltd, the analysis and decision of the Commission, apportioning of the approved RoE among SBU-G, SBU-T and SBU-D of KSEB Ltd are detailed in paragraph 4.33 to 4.44.

7.22 The summary of the RoE approved for the years 2016-17 and 2017-18 for SBU-G is given below.

Table 7.12
Return on Equity approved for SBU-G for the years 2016-17 and 2017-18

Particulars	Return on Equity(Rs. Cr)	
	2016-17	2017-18
SBU-G	203.63	203.63

Summary of the aggregate revenue requirements of SBU-G for the years 2016-17 & 2017-18

7.23 The summary of the aggregate revenue requirement of SBU-G of KSEB Ltd for the years 2016-17 and 2017-18 is detailed below.

Table 7.13
Summary of the ARR of SBU-G

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Interest & Finance charges	220.84	221.29
Depreciation	172.43	172.43
O&M expenses	75.71	80.13
RoE	203.63	203.63
Total ARR	672.61	677.48

CHAPTER-8

AGGREGATE REVENUE REQUIREMENTS (ARR) OF STRATEGIC BUSINESS UNIT- TRANSMISSION (SBU-T) OF KSEB LTD

Introduction

- 8.1 The Second Transfer Scheme notified by the Government under Section 131 of the Act as per G.O(P) No. 46/2013/PD dated 31st October 2013, stipulates that the functions, business and sub-undertaking, forming part of transmission as set out in Schedule 'A1' shall denote SBU-T of the KSEB Ltd on and from the date of the transfer. Further as per the sub-paragraph (ii) to paragraph-5 of the said notification, the functions, business and sub-undertaking, forming part of Transmission as set out in 'Schedule 'A1' shall denote SBU-T of the Kerala State Electricity Board Limited on and from the date of the transfer.
- 8.2 As per the Schedule 'A1, Part-I, of the Second Transfer Scheme, transmission assets mean, all the assets and liabilities belonging to the KSEB Ltd, concerning the transmission of electricity including but not limited to the following:
- 'All the existing transmission substations and lines as well as those under construction having the capacity to carry electricity at voltages of 33kV and above, (notwithstanding the same are presently charged at voltages below 66kV) of various capacities with all associated and related equipment, including step-up, step-down transformers, circuit breakers, metering arrangements and other protective devices with power line communication system, allied control rooms, load dispatch centre, lands, buildings, roads and other auxiliary assets spread over within and outside the territory of the State including such assets under construction and assets acquired, transferred or rights of which were vested with the Board by transfer, sale, lease or otherwise, but excluding such constructions or installations lawfully owned and operated by others.'*
- 8.3 As per the Regulation-11 of the Tariff Regulations, 2014, KSEB Ltd has to file before the Commission, the application for approval of aggregate revenue requirements of the SBU-T separately. However, KSEB Ltd has not filed any application for approval of aggregate revenue requirements (ARR) of its SBU-T. In the absence of the same, the Commission has suo motu initiated the determination of the aggregate revenue requirements (ARR) of the KSEB Ltd, including the ARR of SBU-T. This chapter briefly explains the procedure followed by the Commission for determining the aggregate revenue requirements of SBU-T of KSEB Ltd.

- 8.4 As per the regulation-59 of the Tariff Regulations, 2014, the components of aggregate revenue requirements of SBU-T shall comprise of the following items of expenditure,-
- (i) Operation and maintenance expenses;
 - (ii) Interest and finance charges;
 - (iii) Depreciation;
 - (iv) Interest on working capital;
 - (v) Contribution to contingency reserves; and
 - (vi) Return on equity.

Operation and Maintenance Expenses

- 8.5 The Commission vide the suo motu notice dated 22-06-2016 has estimated the O&M cost of SBU-T as follows.

“

- (i) The O&M costs for the SBU transmission is specified in Annexure-VIII to Tariff Regulations, 2014, which is extracted below.

Particulars	Financial Years		
	2015-16	2016-17	2017-18
O&M expenses per bay (Rs. lakh)	5.23	5.54	5.86
O&M expenses per ckt km (Rs. lakh)	0.58	0.61	0.65

Explanation: The O&M expenses for any year of the control period shall be allowed by multiplying the O&M norms for that year with the actual number of bays and transmission line length in circuit kilometers (ckt km) for the previous year, i.e., the O&M expenses for FY 2015-16 shall be allowed by multiplying the O&M norms for FY 2015-16 with the actual number of bays and transmission line length in ckt km for FY 2014-15.

- (ii) The details of the number of bays and line length of transmission system of KSEB Ltd as per the suo motu notice dated 22-6-2016 is extracted below.

Table-8.1
Number of bays and line length of SBU- T of KSEB Ltd

Year	Bays (Nos)	Line (Ckt-km)
2010-11	1994	9047
2011-12	2016	9048
2012-13	2028	9107
2013-14	2056	9139
2014-15	2085	9267
2015-16	2114	9396
2016-17	2144	9528
2017-18	2174	9661

- (iii) The O&M cost of Transmission estimated based on the provisional details on number of bays and line length of transmission system of

KSEB Ltd and the details are given below.

Table-8.2
O&M cost of SBU-T

Particulars	2016-17	2017-18
O&M expenses (Rs.Cr)	176.89	190.18

Objections of the stakeholders

8.6 KSEB Ltd has, vide the additional submission dated 08.09.2016, submitted as under:

'As per the KSERC (Terms & Conditions for Determination of Tariff) Regulations, 2014, Hon'ble Commission has considered the systems having voltage from 400 KV to 66 KV under "Transmission" and systems having voltage 33 KV and below are categorized under "Distribution". Hence the O&M norms arrived by Hon'ble Commission takes into account only bays and substations up to 66 KV only, failed to capture O&M of bays of 33 KV substations. Since O&M norms of Distribution do not capture the O&M cost of 33 KV bays, the same remain unaccounted.

It is submitted that as per the schedule A1 of the second Transfer Scheme notified by Government of Kerala on 31.10.2013, all the existing transmission substations and lines as well as those under construction having the capacity to carry electricity of voltages 33 KV and above are included under transmission. Hence it is requested that while considering the assets of transmission SBU, 33 KV substations may also be included. The details of actual number of bays and lines as on 31.03.2016 including 33 KV bays are tabulated in the table below.

Number of bays and line length of SBU-T

Year	Number of Bays		Line length excluding 33 KV lines (in ckt km)	
	As per notice	As per KSEB	As per notice	As per KSEB
2015-16	2114	3471	9396	9377.03
2016-17	2144	3707	9528	9757.03
2017-18	2174	4025	9661	10167.03

- 8.7 KSEB Ltd has also submitted the voltage wise details of bays and lines as given below.

Table 8.3
Voltage wise details of bays and lines as per submissions of KSEB Ltd

Financial year	Voltage (kV)	No. of Bays	Line length (Ckt-km)
2014-15	400	6	
	220	210	2801.2
	110	1350	4299.67
	66	840	2202.81
	33	972	1761.57
As on 31-3-2015	Total	3378	11065.25
2015-16	400	7	
	220	214	2801.883
	110	1396	4366.34
	66	849	2208.81
	33	1005	1828.36
As on 31-3-2016	Total	3471	11205.39
2016-17	400	7	
	220	240	2951.883
	110	1510	4586.34
	66	860	2218.81
	33	1090	1978.36
As on 31-3-2017	Total	3707	11735.39
2017-18	400	10	
	220	275	3101.883
	110	1660	4836.34
	66	875	2228.81
	33	1205	2178.36
As on 31-3-2018	Total	4025	12345.39

- 8.8 The HT&EHT Association has pointed out an error in computing the O&M cost of SBU-T. As per the Association, the O&M Expenses for FY 2016-17 have to be computed by multiplying the O&M norms for 2016-17 with the actual number of bays and transmission line length of the previous year, ie, FY 2015-16 which was seen not followed by the Commission while computing the same.

Analysis of the Commission

- 8.9 The Commission has examined the objections of the KSEB Ltd and the HT&EHT Association.
- 8.10 Regulation-60 of the Tariff Regulations, 2014, states as under,-
60. Operation and maintenance expenses.—*The transmission business/licensee shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-VIII to these Regulations for each financial year of the control period: Provided that the transmission business of KSEB Limited shall be allowed to recover the annual pension contribution to the Master Trust,*

based on actuarial valuation, in respect of the personnel allocated to the transmission business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses.

Explanation :

(i) For the purpose of deriving normative O&M expenses, 'bay' shall mean a set of accessories that are required to connect an electrical equipment at 66 kV and above voltages such as transmission line, bus section breakers, potential transformers, power transformers, capacitors and transfer breaker and the feeders emanating from the bus at sub-station of the transmission business/licensee.

(ii) For the purpose of deriving normative O&M expenses, 'ckt km' means the length in circuit kilometres, of the transmission lines at voltages of and above 66 kV.

Further Annexure VIII to the Tariff regulations, 2014 specifies the O&M norms for the Transmission business of KSEB Ltd, which has been given in para 8.5.

- 8.11 As per the Tariff Regulations, 2014, the number of bays and length of transmission lines used for computing the O&M expenses is the 'number of bays' and 'length of transmission lines in ckt-km' including the transmission system at voltages of and above 66 kV. Hence, though the Government notification No. G.O (P) No. 46/2013 PD dated 31st October, 2013 prescribed that the SBU-T includes the transmission system of and above 33 kV, the provisions of Tariff Regulations, 2014, do not include the number of bays and transmission lines of 33 kV system. Further as per the technical specifications and the standard procedures in power sector, 33 kV lines and sub-stations do not form part of transmission system. The Commission has therefore followed the provisions in the Tariff Regulations, 2014, for determining the O&M cost of SBU-T.
- 8.12 The Tariff Regulations, 2014, has fixed different bases for arriving at the norms for different functions to calculate the O&M expenses and these norms have been decided based on the standard practices followed in the industry. Thus for determining the O&M expenses of SBU-T, the major factors taken into consideration are number of bays and circuit kilometers of transmission lines, while for SBU-D, the factors selected are number of consumers, number of distribution transformers, length of HT line, unit of sales and value of GFA. The Regulations have envisaged only voltages of and above 66 kV to form part of transmission system and hence only such parameters can be adopted as has been laid down in the Tariff Regulations, 2014, to calculate the allowable O&M expenses.

8.13 From the details submitted by KSEB Ltd, the number of bays and transmission lines in ckt-km for the transmission system of and above 66 kV system are detailed below.

Table 8.4
Voltage wise details of bays and lines approved for estimating O&M expenses

Financial year	Voltage (kV)	No. of Bays	Line length (Ckt-km)
2014-15	400	6	
	220	210	2801.2
	110	1350	4299.67
	66	840	2202.81
As on 31-3-2015	Total	2406	9303.68
2015-16	400	7	
	220	214	2801.883
	110	1396	4366.34
	66	849	2208.81
As on 31-3-2016	Total	2466	9377.033
2016-17	400	7	
	220	240	2951.883
	110	1510	4586.34
	66	860	2218.81
As on 31-3-2017	Total	2617	9757.033
2017-18	400	10	
	220	275	3101.883
	110	1660	4836.34
	66	875	2228.81
As on 31-3-2018	Total	2820	10167.03

8.14 Accordingly, the O&M cost approved for the SBU-T of the KSEB Ltd is as detailed below.

Table 8.5
O&M cost for SBU-T approved for the years 2016-17 and 2017-18

	2016-17	2017-18
O&M Norms- Transmission		
O&M expenses per bay (Rs. Lakh)	5.54	5.86
O&M expense per ckt.km (Rs. Lakh)	0.61	0.65
Number of Bays (previous year)	2466	2617
Line length (Ckt.km) (previous year)	9377	9757
Total O&M expenses (Rs.Cr)	193.82	216.78

The Commission clarify that, in the process of truing up, the O&M cost for the actual number of bays and line length of the SBU-T of KSEB only be approved.

Interest and finance charges

- 8.15 The details of the interest and finance charges proposed for KSEB Ltd, as per the suo motu notice dated 22-6-2016, the objections and submissions of the stakeholders, the analysis and decision of the Commission and the methodology adopted by the Commission for apportioning the same to SBU-G, SBU-T and SBU-D have been explained in paragraphs 4.11 to 4.32.
- 8.16 The summary of the interest and finance charges provisionally estimated for SBU-T of KSEB Ltd for the years 2016-17 and 2017-18 is given below.

Table-8.6
Interest and finance charges approved for SBU-T for 2016-17 & 2017-18

Sl No	Particulars	2016-17	2017-18
		(Rs. Cr)	(Rs. Cr)
1	Interest on outstanding capital liabilities	183.39	183.39
2	Interest on GPF	14.04	14.98
3	Other interest	1.07	1.07
4	Interest on bonds issued to Master Trust	87.14	87.14
	Total	285.64	286.58

Depreciation

- 8.17 The details of the depreciation proposed for KSEB Ltd as per the suo motu notice dated 22-6-2016, the objections and submissions of the stakeholders including KSEB Ltd, the analysis of the Commission, the methodology adopted by the Commission for apportioning the same among SBU-G, SBU-T and SBU-D have been explained in paragraphs 4.6 to 4.10.
- 8.18 The summary of the depreciation approved for the years 2016-17 and 2017-18 for SBU-T is detailed below.

Table 8.7
Depreciation approved for SBU-T for the years 2016-17 and 2017-18

Particulars	Depreciation	
	2016-17	2017-18
Amount approved (Rs. Cr)	184.25	184.25

Return on Equity

- 8.19 The return on equity proposed vide the suo motu notice dated 22-6-2016, the objections and submissions of the stakeholders including KSEB Ltd, the analysis of the Commission apportioning the approved RoE among SBU-G, SBU-T and SBU-D of KSEB Ltd have been explained in paragraphs 4.33 to 4.44.

8.20 The summary of the RoE approved for the years 2016-17 and 2017-18 for SBU-T is given below.

Table 8.8
Return on equity approved for SBU-T of KSEB Ltd
for the years 2016-17 and 2017-18

Particulars	Return on equity	
	2016-17	2017-18
Amount approved (Rs. Cr)	217.59	217.59

Summary of the aggregate revenue requirements of SBU-T for the years 2016-17 & 2017-18

8.21 The summary of the aggregate revenue requirement of SBU-T for the years 2016-17 and 2017-18 is detailed below.

Table 8.9
Summary of the ARR of SBU-T

Particulars	2016-17	2017-18
Interest & Finance charges(Rs. Cr)	285.64	286.58
Depreciation(Rs. Cr)	184.25	184.25
O&M expenses(Rs. Cr)	193.82	216.78
RoE(Rs. Cr)	217.59	217.59
Total ARR(Rs. Cr)	881.30	905.20

Sharing of the transmission ARR of the SBU-T

8.22 As per the Regulation-65 of the Tariff Regulations, 2014, the ARR of the SBU-T of the KSEB Ltd, as approved by the Commission shall be shared by all long term users and medium term users of the transmission system on monthly basis in the ratio of their respective contracted transmission capacities to the total contracted transmission capacities.

8.23 However, at present the SBU-D of the KSEB Ltd is, the only long term and medium term user of the transmission system of SBU-T of KSEB Ltd. Hence the entire ARR of the SBU-T has been included in the ARR of the SBU-D of KSEB Ltd.

8.24 The open access availed by some HT&EHT consumers from power exchanges are on short-term basis. The transmission charges, wheeling charges and cross subsidy surcharges for the open access consumers on short-term basis would be approved by the Commission separately along with the approval of retail tariff.

Sharing of Transmission loss

- 8.25 As detailed earlier, the transmission losses approved for the years 2016-17 and 2017-18 are @ 4.50% of the total energy input to the transmission system of KSEB Ltd.
- 8.26 As per the Regulation-66 of the Tariff Regulations, 2014, the losses in the SBU-T shall be borne by the users of the transmission system of SBU-T of KSEB Ltd, which is extracted below.
- “66. Transmission losses.-The energy losses in the transmission system, as determined by the state load despatch centre and approved by the Commission, shall be borne by the users of the transmission system in proportion to their usage of the transmission system”.***
- 8.27 Hence, all the users of the transmission system of SBU-T of the KSEB Ltd including the open access consumers shall bear the transmission losses at 4.50% for the years 2016-17 and 2017-18.

CHAPTER-9
AGGREGATE REVENUE REQUIREMENTS OF THE
STRATEGIC BUSINESS UNIT- DISTRIBUTION (SBU-D) OF KSEB LTD

Introduction

9.1 The Second Transfer Scheme notified by the Government under Section 131 of the Act as per GO (P) No. 46/2013/PD dated 31.10.2013 stipulates that the functions, business and sub-undertakings forming part of distribution of electricity as set-out in Schedule A3, shall denote SBU-D of KSEB Ltd, on and from the date of transfer. The aggregate revenue requirements of SBU-D of KSEB Ltd including the cost of power purchase for the years 2016-17 and 2017-18 are discussed below.

Energy sales

9.2 The total energy sale approved for the year 2016-17 is 20625.7 MU and the same approved for the year 2017-18 is 21840.03 MU. The overall T&D loss level approved is 13.90% and 13.65% respectively for the years 2016-17 and 2017-18. Based on the approved energy sales and approved loss levels, the energy inputs estimated are 23955.52 MU and 25292.45 MU respectively for the years 2016-17 and 2017-18.

9.3 The total energy requirements of the State are being met by the KSEB Ltd from the hydel stations owned and operated by SBU-G, power purchase from Central Generating Stations (CGS), power purchases from the IPPs in the State, the traders and from the energy exchanges. The details of generation and purchase are discussed in the subsequent paragraphs.

Internal Generation

9.4 As discussed earlier, the net hydel energy availabilities from the hydel stations owned and operated by the SBU-G of the KSEB Ltd have been assessed at 4376.87 MU and 6473.62 MU respectively for the years 2016-17 and 2017-18.

9.5 Though KSEB Ltd owns and operates two LSHS based thermal stations, namely, BDPP and KDPP, considering the prohibitive cost of the fuel for generation and availability of power from other sources at cheaper rates, the Commission does not propose to approve scheduling of electricity from these stations for the years 2016-17 and 2017-18.

Cost of Power Purchase

(a) Central Generating Stations (CGS)

9.6 Since the licensee has not filed any application for approval of the ARR for the years 2015-16, 2016-17 and 2017-18 including the details such as the present allocation of power from CGS and the tariff approved by the Central Commission for the electricity from CGS, the Commission had, in the notice dated 22.06.2016, estimated based on the available information, the energy availability from CGS as follows.

- (i) Total capacity allocation from the CGS to the Kerala State is about 1470 MW.
- (ii) The average daily energy availability from CGS at the State periphery is about 30 MU/day.
- (iii) The annual energy availability from CGS is estimated at 11050 MU each for the years 2016-17 and 2017-18.
- (iv) The average cost of purchase of power from CGS at the State periphery is about Rs 3.38 per unit for the year 2015-16.
- (v) The cost of purchase of power from CGS for the year 2016-17 is estimated at Rs 3.44 per unit and the same for the year 2017-18 is estimated at Rs 3.50 per unit at an annual escalation of 2% based on the observed historical average escalation of previous years.
- (vi) Accordingly, the cost of power purchased from CGS for the year 2016-17 is estimated at Rs 3801.20 crore and the same for the year 2017-18 is estimated at Rs 3867.50 crore.

(b) Availability of energy from IPPs / Traders

9.7 The availability of energy and cost of power purchase from IPPs / traders for the years 2016-17 and 2017-18 are estimated based on the approval granted by the Commission. The details are given below.

Table 9.1
Estimated cost of purchase of power from generators and
traders for 2016-17 and 2017-18

Particulars	Capacity contracted (MW)	Daily Energy availability (MU/day)	2016-17			2017-18		
			Quantity (MU)	Rate (Rs/ kWh)	Amount (Rs. Cr)	Quantity (MU)	Rate (Rs/ kWh)	Amount (Rs. Cr)
PTC ¹	300	5.94	325.91	5.43	176.97			
MTOA ²	397	5.72	1806.41	4.5	812.89			
Maithon-1	150	2.97	975.05	3.73	363.7	1083.39	3.73	404.11
Maithon-2	122	2.41	673.9	3.73	251.36	881.16	3.73	328.67
DVC	100	1.98	722.26	4.11	296.85	722.26	4.11	296.85
Jindal	165	3.27	992.57	3.6	357.32			
DBFOO	315	6.23		3.83	0	2275.13	3.83	871.37
Short term	200	4.08	126.48	3.08	38.96	224.22	3.08	69.06
DBFOO	550	10.88		4.29	0	1628.39	4.29	698.58
Total			5622.58		2298.04	6814.56		2668.64

¹ Contract with PTC for procuring 300MW RTC power expire on 31-5-2016.

² The case 1 contracts with PTC for 100 MW and with NVVN for 297 MW will expire on 28.02.2017.

(c) Renewable Energy availability from IPPs

- 9.8 As per the details available with the Commission, the total annual energy availabilities from renewable sources are given below:-

Table-9.2
Energy availability from Renewable IPPs

Particulars	Capacity (MW)	Energy (MU)	Avg. tariff (Rs.)
Wind- Ramakalmedu & Agali	33.68	65.00	3.14
Ullunkal	7.00	19.44	2.44
Iruttukanam Stage-I	3.00	18.00	2.70
Iruttukanam Stage-II	1.50	6.00	2.70
Karikkayam HEP	10.50	28.00	4.16
Meenvallom	2.00	5.56	4.88
Kallar of Idukki District Panchayat	0.05	0.13	5.47
Mankulam of Grama Panchayat	0.11	0.29	4.88
Total	57.84	142.42	

12 MW solar project of Cochin International Airport Ltd (CIAL) has been Commissioned as a captive project. It is informed that the 200 MW solar project of KSEB Ltd would be Commissioned during 2017-18. Large numbers of solar roof top photo voltaic systems are also expected to be Commissioned during this period. The availability of energy from such projects has not been included in the calculation.

(d) Energy procurement from liquid fuel stations BDPP, KDPP, RGCCPP Kayamkulam and BSES Kerala Power Ltd (BKPL)

- 9.9 Since the entire electricity requirement of the State can be met through the energy available from Hydel, CGS, and power purchase from IPPs, renewable energy generators, traders and power exchanges, the Commission does not approve any procurement of energy from liquid fuel stations including BDPP, KDPP, RGCCPP and BKPL during the financial years 2016-17 and 2017-18, in view of the prohibitive cost of liquid fuel based electricity.
- 9.10 The PPA with BKPL expired on 31-10-2015 and it has not been renewed by the KSEB Ltd. The Commission has, as per the order dated 26.10.2016 in Petition OP No. 34 of 2015, declined the request of M/s BKPL to extend the PPA. Hence, there is no fixed charge commitment for BKPL for the years 2016-17 and 2017-18. The Commission is of the considered view that, with the energy available from generators and traders outside the State at competitive rates, there is no necessity to continue the PPA with RGCCPP Kayamkulam. Hence, the Commission has not approved any fixed charge commitments for RGCCPP Kayamkulam during the years 2016-17 and 2017-18.

(e) Inter-state transmission charges payable to PGCIL

9.11 The average point of connection (POC) transmission charges payable to PGCIL for transmitting power from various CGS and also from generators (other than the sources of power contracted on DBFOO basis) is about Rs 0.37 per unit. The annual inter-state transmission charges payable to PGCIL is estimated at about Rs 555.23 crore for the year 2016-17 and the same for the year 2017-18 is estimated at about Rs 516.56 crore.

(f) Summary of the cost of Generation and Purchase of Power

9.12 The details of the cost of generation and purchase of power for the years 2016-17 and 2017-18 as per the published suo motu notice issued by the Commission are given below.

Table-9.3
Cost of generation and purchase of power for the years 2016-17 and 2017-18 estimated in the suo motu notice issued by the Commission

Sl No	Particulars	2015-16			2016-17			2017-18		
		Quantity	Amount	Avg. Rate	Quantity	Amount	Avg. Rate	Quantity	Amount	Avg. Rate
		(MU)	(Rs. Cr)	(Rs/kWh)	(MU)	(Rs. Cr)	(Rs/kWh)	(MU)	(Rs. Cr)	(Rs/kWh)
1	Hydel	6640.0			7000.00			7000.00		
2	BDPP+KDPP	152.9	127.4	8.34						
3	CGS	11042.0	3735.3	3.4	11050.00	3801.20	3.44	11050.00	3867.50	3.50
4	RGCCPP	138.9	316.7	22.81				0.00		
5	BSES		42.0							
5	IPP- wind and SHPs	142.4	45.3	3.18	142.00	45.87	3.23	142.00	45.87	3.23
6	UI	688.5	135.6	1.97						
7	IEX+ PXIL	650.3	274.0	4.21						
8	Traders	3225.1	1393.8	4.32	5622.58	2298.04	4.09	6814.56	2668.64	3.92
9	Transmission charges ¹		530.6			555.23			516.56	
	Total	22680.0	6600.8		23814.58	6700.33		25006.56	7098.57	

¹ Inter-state transmission charges payable to PGCIL

Objections of the stakeholders

9.13 KSEB Ltd has, vide the submission dated 26-07-2016 and the additional submission dated 8-09-2016, submitted the details of the energy availability from CGS, cost of energy from CGS, power purchase through traders, IPPs, the transmission charges payable etc for the years 2016-17 and 2017-18.

9.14 The energy availability from CGS estimated by KSEB Ltd for the year 2016-17 is detailed below.

Table- 9.4
Energy availability from CGS estimated by KSEB Ltd for the year 2016-17

Sl No	Name of the Station	Installed Capacity MW)	Capacity Allocation	Allocated Capacity to KSEB (MW)	Aux Consumption (%)	PLF (%)	Energy availability for the year 2016-17 (MU)	PGCIL losses (MU)	Net Energy availability at KSEB periphery (MU)
1	TALCHER - Stage II	2000	21.36%	427.20	5.75%	85%	2998.03	123.74	2874.29
2	NLC- Exp- Stage-1	420	16.38%	68.80	9.50%	80%	436.32	13.19	423.13
3	NLC-II- Stage-1	630	10.05%	63.32	10.00%	75%	374.38	11.31	363.07
4	NLC-II- Stage-2	840	10.77%	90.47	10.00%	75%	534.94	16.17	518.77
5	RSPTS Stage I & II	2100	11.73%	246.33	6.68%	85%	1711.65	56.01	1655.64
6	RSTPS Stage III	500	12.27%	61.35	5.75%	85%	430.55	14.09	416.46
7	MAPS	440	5.25%	23.10	10.00%	69%	125.66	3.17	122.49
8	KAIGA Stg I	440	8.71%	38.32	10.00%	75%	226.61	7.79	218.82
9	KAIGA Stg II	440	8.05%	35.42	10.00%	75%	209.44	7.20	202.24
10	SimhadriExp	1000	9.08%	90.80	5.25%	85%	640.60	23.10	617.50
11	Kudamkulam	1000	13.30%	133.00	10.00%	69%	1047.14	37.76	1009.38
12	NLC - II Exp	500	14.00%	70.00	10.00%	80%	413.91	12.51	401.40
13	Vallur JV with	1500	3.37%	50.55	6.50%	85%	351.93	10.00	341.93
14	NTPL(Tuticorin JV)	1000	7.25%	72.50	5.25%	85%	511.49	18.63	492.86
15	Kudgi Unit I	800	5.00%	40.00	7.50%	69%	19.27	0.60	18.67
16	Bhavini	500	0.086	43.00	7.50%	69%	59.28	1.84	57.44
	Total			1554.153			10091.20	357.10	9734.10

9.15 The energy availability from CGS estimated by KSEB Ltd for the year 2017-18 is detailed below.

Table 9.5
Energy availability from CGS estimated by KSEB Ltd for the year 2017-18

Sl No	Name of the Station	Installed Capacity MW)	Capacity Allocation	Allocated Capacity to KSEB (MW)	Aux Consumption (%)	PLF (%)	Energy availability for the year 2016- 17 (MU)	PGCIL losses (MU)	Net Energy availability at KSEB periphery (MU)
1	TALCHER - Stage II	2000	21.36%	427.20	5.75%	85%	2998.03	123.74	2874.29
2	NLC- Exp- Stage-1	420	16.38%	68.80	9.50%	80%	436.32	13.19	423.13
3	NLC-II- Stage-1	630	10.05%	63.32	10.00%	75%	374.38	11.31	363.07
4	NLC-II- Stage-2	840	10.77%	90.47	10.00%	75%	534.94	16.17	518.77
5	RSPTS Stage I & II	2100	11.73%	246.33	6.68%	85%	1711.65	56.01	1655.64
6	RSTPS Stage III	500	12.27%	61.35	5.75%	85%	430.55	14.09	416.46
7	MAPS	440	5.25%	23.10	10.00%	69%	125.66	3.17	122.49
8	KAIGA Stg I	440	8.71%	38.32	10.00%	75%	226.61	7.79	218.82
9	KAIGA Stg II	440	8.05%	35.42	10.00%	75%	209.44	7.20	202.24
10	SimhadriExp	1000	9.08%	90.80	5.25%	85%	640.60	23.10	617.50
11	Kudamkulam	1000	13.30%	133.00	10.00%	69%	1572.86	56.71	1516.15
12	NLC - II Exp	500	14.00%	70.00	10.00%	80%	413.91	12.51	401.40
13	Vallur JV with	1500	3.37%	50.55	6.50%	85%	351.93	10.00	341.93
14	NTPL(Tuticorin JV)	1000	7.25%	72.50	5.25%	85%	511.49	18.63	492.86
15	Kudgi Unit I	800	5.00%	40.00	7.50%	69%	226.88	7.05	219.83
16	Kudgi Unit II	800	5.00%	40.00	7.50%	69%	226.88	7.05	219.83
17	Kudgi Unit III	800	5.00%	40.00	7.50%	69%	113.44	3.52	109.92
18	Bhavini	500	0.086	43.00	7.50%	69%	240.42	7.47	232.95
19	NLC New	500	3.24%	16.20	10.00%	85.00%	54.40	1.64	52.76
	Total			1650.35			11400.39	400.35	11000.05

9.16 The fixed cost and variable cost claimed by KSEB Ltd for procuring power from CGS for the years 2016-17 and 2017-18 are detailed below.

Table 9.6
Fixed cost and variable cost claimed by KSEB Ltd for the year 2016-17

No.	Name of CGS	Energy schedule at gen. bus	External loss	Net Energy input into KSEB system	Fixed Cost	Variable cost	Total cost
		(MU)	(MU)	(MU)	(Rs. Cr)	(Rs.Cr)	(Rs.Cr)
1	TALCHER - Stage II	2998.03	123.74	2874.29	229.66	443.04	672.70
2	NLC- Exp- Stage-1	436.32	13.19	423.13	58.00	99.57	157.57
3	NLC-II- Stage-1	374.38	11.31	363.07	23.19	90.48	113.67
4	NLC-II- Stage-2	534.94	16.17	518.77	33.83	129.25	163.08
5	RSPTS Stage I & II	1711.65	56.01	1655.64	99.78	449.73	549.51
6	RSTPS Stage III	430.55	14.09	416.46	39.42	115.90	155.32
7	MAPS	125.66	3.17	122.49	26.79		26.79
8	KAIGA Stg I	226.61	7.79	218.82	70.94		70.94
9	KAIGA Stg II	209.44	7.20	202.24	65.57		65.57
10	SimhadriExp	640.60	23.10	617.50	102.96	174.95	277.91
11	Kudamkulam	1047.14	37.76	1009.38	420.21		420.21
12	NLC - II Exp	413.91	12.51	401.40	87.80	95.00	182.80
13	Vallur JV with	351.93	10.00	341.93	59.40	72.88	132.28
14	NTPL(Tuticorin JV)	511.49	18.63	492.86	76.10	107.07	183.17
15	Kudgi Unit I	19.27	0.60	18.67	2.84	5.19	8.03
16	Bhavini	59.28	1.84	57.44	23.79		23.79
	Total	10091.20	357.10	9734.10	1420.26	1783.06	3203.32

Table 9.7
Fixed cost and variable cost claimed by KSEB Ltd for the year 2017-18

No.	Name of CGS	Energy schedule at gen. bus	External loss	Net Energy input into KSEB system	Fixed Cost	Variable cost	Total cost
		(MU)	(MU)	(MU)	(Rs. Cr)	(Rs.Cr)	(Rs.Cr)
1	TALCHER - Stage II	2998.03	123.74	2874.29	229.66	443.04	672.70
2	NLC- Exp- Stage-1	436.32	13.19	423.13	58.00	99.57	157.58
3	NLC-II- Stage-1	374.38	11.31	363.07	23.19	90.48	113.66
4	NLC-II- Stage-2	534.94	16.17	518.77	33.83	129.25	163.08
5	RSPTS Stage I & II	1711.65	56.01	1655.64	99.78	449.73	549.51
6	RSTPS Stage III	430.55	14.09	416.46	39.42	115.90	155.32
7	MAPS	125.66	3.17	122.49	26.79	0.00	26.79
8	KAIGA Stg I	226.61	7.79	218.82	70.94	0.00	70.94
9	KAIGA Stg II	209.44	7.20	202.24	65.57	0.00	65.57
10	SimhadriExp	640.60	23.10	617.50	102.96	174.95	277.91
11	Kudamkulam	1572.86	56.71	1516.15	631.17	0.00	631.17
12	NLC - II Exp	413.91	12.51	401.40	87.80	95.00	182.80
13	Vallur JV with	351.93	10.00	341.93	59.40	72.88	132.28
14	NTPL(Tuticorin JV)	511.49	18.63	492.86	76.10	107.07	183.17
15	Kudgi Unit I	226.88	7.05	219.84	34.03	61.07	95.11
16	Bhavini	226.88	7.05	219.84	91.05	0.00	91.05
17	Kudgi Unit II	113.44	3.52	109.92	34.03	30.54	64.57
18	Kudgi Unit III	240.42	7.47	232.95	17.02	64.72	81.73
19	NLC New	54.40	1.64	52.75	28.55	12.49	41.04
	Total	11400.39	400.34	11000.05	1809.28	1946.69	3755.97

9.17 Regarding the schedule of power from RGCCPP at Kayamkulam, KSEB Ltd submitted as follows,-

“Hon’ble Commission may kindly note that this plant is constructed as a dedicated station to the state of Kerala. A PPA exists between M/s NTPC and KSEB LTD regarding purchase of power from the plant, which envisages payment of fixed charges along with the generation cost. During the past several power starved years, this plant catered dearly to the power requirement of the state. Same is the case during the past severe summer of April/May 2016. KSEB LTD is reserving this plant as a stand-by one to be operated during extreme emergencies like failure to obtain power from external sources due to corridor constraints etc.

Further, 180 MW power from Thalcher station is pooled along with RGCCPP. Cost of power from Thalcher station owned by NTPC is nearly Rs.2.23 per unit. When energy from Kayamkulam is pooled with energy from Thalcher, average cost works out to about Rs.4.52 per unit, which is not substantially higher. Hence KSEB LTD is retaining the plant by paying fixed cost and schedules the same at extreme emergencies.

It may also be noted that the Hon’ble Commission, as per order on ARR & ERC for the years 2013-14 and 2014-15 had duly considered all these facts and was pleased to allow scheduling and payment of charges to RGCCPP for these years. Approval was granted in 2013-14 to schedule the plant for 831 MU at a fixed cost of Rs.233 crore and variable cost of Rs.944 crore. For the year 2014-15, approval was given for 218 MU at a fixed cost of Rs.237.22 crore and variable cost of Rs.280.74 crore”.

9.18 The details of the power purchase through traders estimated by KSEB Ltd for the year 2016-17 are given below.

Table 9.8
Power purchase through traders/ generators estimated by
KSEB Ltd for the year 2016-17

Source	Capacity (MW)		Date of commencement	Quantity (MU)		Fixed charges Rscore	Energy charges (Rs/kWh)	Total amount Rs crore
	Contracted	Open access received		Ex-bus	KSEB end			
Maithon Power Ltd	150	140.25	Dec-15	1044.30	1010.18	165.52	2.00	374.38
Maithon Power Ltd	150	122 MW / 150 MW*	Jun-16	817.10	790.40	112.19	2.00	275.60
DVC Meja	100	94.75	Apr-16	705.51	683.99	116.20	2.30	278.47
DVC RTPS	50	46.75	Apr-16	309.58	300.14	58.10	2.30	129.30
Jindal	200	165	Jun-16	1084.97	1026.49	285.39	1.15	405.17
Jhabua	115	109 from Dec	Dec-16	269.67	257.48	61.90	1.76	107.48
PTC Simhapuri (upto May 2016)	300	300	01.06.2015 to 31.05.2016	390.42	380.74		5.18	202.24
PTC BALCO (through Case I bidding) (upto Feb 2017)	100	100	March 2014- Feb 2017	683.40	661.07		3.39	231.67
NVVN (through Case I bidding) (upto Feb 2017)	300	297	March 2014- Feb 2017	2085.16	2017.03		4.36	909.13
Short term contract through PTC for the month of May 2016	100		May-16	30.05	29.30		3.08	9.25
Short term contract with M/s PTC Ltd for the month of March 2017	200	200	Mar-17	149.32	146.02		3.41 (at KSEB bus)	49.73
Total power purchase through traders				7569.48	7302.84			2972.44

*122MW from June 2016 and 150 MW from December 2016 .

9.19 The details of the power purchases through traders as claimed by KSEB Ltd for the year 2017-18 are given below.

Table 9.9
Power purchase through traders/ generators estimated
by KSEB Ltd for the year 2017-18

Source	Contracted capacity in MW	Date of commencement	Quantity at ex-bus(MU)	Quantity at KSEB end(MU)	Fixed charges in Rs crore	Energy charges (Rs/unit)	Total amount in Rs crore
Maithon Power Ltd	150	Dec-15	1044.30	1010.18	165.52	2.00	374.38
Maithon Power Ltd	150	Apr-16	1044.30	1010.18	165.52	2.00	374.38
DVC Mejia	100	Jun-16	705.51	683.99	116.20	2.30	278.47
DVC RTPS	50	Apr-16	339.91	329.54	63.38	2.30	141.56
Power contracted through DBFOO							
Jindal (DBFOO)	200	Jun-16	1346.41	1273.84	354.16	1.15	502.80
Jhabua	115	Dec-16	772.80	737.86	177.39	1.76	308.01
Balco	100	Oct-17	335.08	321.17	104.38	1.04	137.78
Jhabua Bid II	100	Oct-17	335.08	319.93	95.58	1.32	138.06
Jindal Power Ltd. Bid II	150	Oct-17	502.62	475.53	165.50	0.86	207.00
Jindal India Thermal Power Ltd.	100	Oct-17	335.08	323.30	114.45	0.75	138.70
East Coast Energy Private Ltd.	100	Oct-17	335.08	324.35	101.85	1.15	139.15
Sub Total			7096.17	6809.87	1623.92		2740.29
Short term purchase from PTC Ltd for April-June 2017	200	Mar-17	371.28	363.04		3.41(at KSEB bus)	123.65
Total power purchase through traders			7467.45	7172.91	1623.92		2863.94

9.20 The particulars of the cost of generation and purchase of power claimed by KSEB Ltd for the years 2016-17 and 2017-18 are given below.

Table 9-10
Summary of generation and purchase of power
for the years 2016-17 and 2017-18 as claimed by KSEB Ltd

Sl No	Particulars	2016-17		2017-18	
		Quantity in MU at KSEB end	Amount in Rs crore	Quantity in MU at KSEB end	Amount in Rs crore
	Generation				
1	Hydel	5684.59		7058.73	
2	Thermal				
	BDPP	9.79	6.65		
	KDPP	63.25	45.80		
3	Wind	7.07		7.07	
4	Solar	15.78		35.37	
	Sub Total Generation	5780.49	52.44	7101.17	
	Power Purchase				
5	Central Generating Stations	9734.10	3203.32	11000.05	3755.97
6	Wind and other IPPS	138.12	44.75	138.12	44.75
7	Traders				
	LTA				
	Maithon I	1010.18	374.38	1010.18	374.38
	Maithon II	790.40	275.60	1010.18	374.38
	DVC Mejia	683.99	278.47	683.99	278.47

Sl No	Particulars	2016-17		2017-18	
		Quantity in MU at KSEB end	Amount in Rs crore	Quantity in MU at KSEB end	Amount in Rs crore
	DVC RTPS	300.14	129.30	329.54	141.56
	Power Purchase through DBFOO	1283.97	512.66	3775.98	1571.50
	Subtotal	4068.68	1570.41	6809.87	2740.29
	Traders MTOA				
	PTC Balco	661.07	231.67		
	NVVN	2017.03	909.13		
	Simhapuri	380.74	202.24		
	Sub total	3058.84	1343.04		
	Additional provision included for increase in variable cost expected due to increase in coal price and clean environment cess for power purchased through DBFOO basis @ 30 paise per unit		7.77		75.46
	Purchase of 200 MW Power through M/s PTC Ltd for the month of march 2017 on short term basis	146.02	49.73	363.04	123.65
	Purchase of 100 MW Power contracted through M/s PTC Ltd for the month of May 2016	29.30	9.25		
	Power Purchase from exchanges and through DSM	1060.61	488.44		
	Solar purchase from Kasargod solar park	37.35	21.36	207.5	118.69
	Power Purchase from RGCCPP	15.23	309.29		302.56
	Power Purchase from BSES	0	31.90		18.71
	Sub Total Power Purchase	18288.25	7079.28	18518.59	7180.08
	Renewable Energy Certificate Purchase		15.00		
	Transmission charges				
	CGS		359.97		410.20
	Traders		104.74		111.98
	RGCCPP		8.22		8.22
	Transmission charges under the transmission system associated with "North East-Northern/Western Interconnector project		18.09		18.09
	Sub total transmission charges		491.02		548.48
	Total Generation and Power Purchase	24068.74	7637.74	25619.75	7728.57

9.21 The HT&EHT Association has submitted that, only the purchase of power under Section-63 of the Electricity Act, 2003, as approved by the Commission, should be considered while estimating the quantum of power purchase, and the cost thereon. Shortfall, if any, should be considered as power purchase from the power exchanges, at prevailing rates.

Analysis of the Commission

9.22 As discussed earlier, the failure of south-west monsoon will result in a reduction in energy availability from hydel stations during the year 2016-17. Expecting a normal monsoon, the Commission vide the suo motu notice dated 22-6-2016 had estimated the hydel availability at 7000 MU. However, as per the revised estimate, the net hydel energy availability (after auxiliary consumption) for the year 2016-17 is estimated at 4376.87 MU only, i.e., 2600 MU less than the original estimate. This shortfall in hydel availability has to be met by procuring power from traders and short term market.

9.23 As discussed earlier, the Commission estimates the net hydel energy availability for the year 2016-17 at 4376.87 MU and for the year 2017-18 at 6473.62MU. The Commission has closely examined the source wise details of power availability from CGS as estimated by KSEB Ltd for the years 2016-17 and 2017-18 and its cost. The Commission estimates the energy availability from CGS for the year 2016-17 at 9734.10MU at a total cost of Rs 3203.32 crore at a weighted average rate of Rs 3.29/unit. The Commission does also estimate the energy availability from CGS for the year 2017-18 at 11000.05 MU at a total cost of Rs 3755.97 crore at a weighted average rate of Rs 3.41/unit.

Cost of power purchase through traders/ IPPs

9.24 The Commission has examined the details of the power purchase through IPPs for the years 2016-17 and 2017-18, which are given in Table 9.8 and Table 9.9 above. The source of power purchase considered by KSEB Ltd includes the 865 MW contracted by it for 25 years under two tenders on DBFOO basis. However, the Commission has, vide the order dated 30-08-2016 in petition OP No.13/2015 initially approved only 300 MW out of 865 MW contracted, i.e. 200 MW from M/s Jindal Power Ltd at the lowest rate of Rs 3.60 per unit in tender I and 100 MW from M/s Bharat Aluminium Ltd at the lowest rate of Rs 4.29 per unit in tender II. The approval of the balance quantum 565MW out of 865MW, was not granted by the Commission for want of clarification from Government of India and Government of Kerala on certain issues, which were discussed in detail in the order dated 30-08-2016. Subsequently, the State Government vide the order GO(Rt) No. 238/2016/PD dated 02-12-2016, permitted KSEB Ltd to purchase 115MW power from M/s Jhabua Power Ltd with effect from 01-12-2016 and communicated a copy of the Government Order to the Commission for further action. The Commission thereupon, vide the order dated 22-12-2016 in petition No. 1893/DD(T)/Jhabua/ 2016/ KSERC in OP No. 13/2016 approved provisionally the purchase of 115MW of power by KSEB Ltd from M/s Jhabua Power Ltd at the rate of Rs 4.15/kWh as per the power purchase agreement dated 31-12-2014, subject to the clearance from Government of India and subject to the final decision of the Hon'ble High Court in Writ Petition No. WP(C) 33100/2014.

9.25 Hence, while approving the energy availability from traders/ IPPs for the years 2016-17 and 2017-18, the Commission has considered only the power available from the 415MW as per the PPAs approved by the Commission out of the total of 865 MW contracted by KSEB Ltd on DBFOO basis.

9.26 The energy availability from the approved sources including traders/ generators, for the year 2016-17 is detailed below.

Table 9.11
Power purchase from approved sources for the year 2016-17

Source	Capacity in MW		Date of commencement of supply	Quantity (MU)		Fixed charges in crore	Total amount in crore
	Contracted	Open access received		Ex-bus	KSEB L periphery		
Maithon Power Ltd	150	122 MW from June 2016 and 150 MW from Dec 16	Jun-16	817.10	790.40	112.19	275.60
DVC Mejia	100	94.75	Apr-16	705.51	683.99	116.20	278.47
DVC RTPS	50	46.75	Apr-16	309.58	300.14	58.10	129.30
Jindal (DBFOO)	200	165 MW from June and 200 MW from Dec-2016	Jun-16	1084.97	1026.49	281.26	369.54
Jindal (DBFOO)	115	From December 2016 onwards	Dec-16	269.67	257.48	61.90	106.85
PTC Simhapuri (upto May 2016)	300	300	01.06.2015 to 31.05.2016	390.42	380.74		202.24
PTC BALCO (through Case I bidding) (upto Feb 2017)	100	100	March 2014-Feb 2017	683.40	661.07		231.67
NVVN (through Case I bidding) (upto Feb 2017)	300	297	March 2014-Feb 2017	2085.16	2017.03		909.13
Short term contract through PTC for the month of May 2016	100		16-May	30.05	29.30		9.25
Short term contract with M/s PTC Ltd for the month of March 2017	200	200	17-Mar	149.32	146.02		49.73
Total power purchase through traders				7569.48	7302.84		2936.16

9.27 The energy availability from approved sources for the year 2017-18 is detailed below.

Table-9.12
Energy availability from approved sources for the year 2017-18

Source	Contracted capacity in MW	Date of commencement	Quantity (MU)		Charges (Rs crore)	
			Ex-bus	KSEB L end	Fixed	Total
Maithon Power Ltd	150	Dec-16	1044.3	1010.18	165.52	374.38
Maithon Power Ltd	150	Apr-16	1044.3	1010.18	165.52	374.38
DVC Mejia	100	Jun-16	705.51	683.99	116.2	278.47
DVC RTPS	50	Apr-16	339.91	329.54	63.38	141.56
Power contracted through DBFOO						
Jindal (DBFOO)	200	Jun-16	1346.41	1273.84	349.03	458.5824
Jhabua (115 MW)	115	Dec-16	777.8	737.86	177.39	306.2119
Balco	100	Oct-16	335.08	321.17	104.38	137.7819
Sub Total			5593.31	5366.76	1141.42	2071.366
Short term contract with M/s PTC Ltd for the month of April-June 2017	200	Mar-16	371.28	363.04		123.65
Total power purchase through traders			5964.59	5729.8	1141.42	2195.016

Discussion and decision on the issues relating to RGCCPP, Kayamkulam

9.28 Vide the suo motu notice dated 22-6-2016, the Commission had proposed not to schedule power from RGCCPP Kayamkulam plant for the following reasons,-

- (i) Prohibitive cost of Naphtha,
- (ii) Availability of power at cheaper rates from the market,
- (iii) Merit order dispatch system,
- (iv) Absence of commitment to supply cheaper power so that the bundled rate of power would be within the limit for scheduling as per the merit order dispatch.
- (v) Absence of approval from the Commission for the impugned purchase of power.

It is noticed that the fixed cost of the plant is seen to have been increased from about Rs.221 crore per annum to Rs.301.16 crore per annum, in spite of the fact that fixed cost to the tune of Rs.3850 crore has already been realized by NTPC from KSEB Ltd over the previous contract periods . It is seen that the entire loan has been repaid and depreciation to the tune of Rs.929 crore has already been realized. In the past, when the power purchase agreements were executed with RGCCPP, equivalent quantity of cheaper power from other NTPC stations was made available to KSEB Ltd, with a view to mitigating the adverse impact of meeting a huge amount towards the fixed cost of the plant. As per the impugned agreement with RGCCPP no such arrangement is seen incorporated. There is absolutely no benefit to KSEB Ltd or the consumers of the State in executing a PPA with RGCCPP of NTPC, only for payment of a very huge amount to the tune of Rs.300 core per annum to the said plant. Therefore the Commission has not included any cost towards the purchase of power from RGCCPP, Kayamkulam for the years 2016-17 and 2017-18. However, the KSEB Ltd vide the letter dated 26-7-2016 and vide the additional submission dated 08 -09-2016 has submitted that,

- (i) RGCCPP plant is being retained as a stand by unit for utilizing the plant during contingencies.
- (ii) The Central Government has allocated 180 MW comparatively cheaper power from NTPC's Talcher-II power station. The pooled average cost of generation from Talcher-II and RGCCPP Kayamkulam is about Rs 4.52 per unit.
- (iii) The Commission has considered the power scheduled from RGCCPP Kayamkulam station while approving the ARR&ERC for the years 2013-14 and 2014-15.
- (iv) As per the first proviso to clause (d) of the sub regulation (2) of Regulation-18 of the Tariff Regulations, 2014, being a Central Generating Station and its tariff being approved by CERC, approval for PPA is not required for RGCCPP Kayamkulam.

9.29 The Commission has examined in detail, the submissions of the KSEB Ltd, regarding continuance of PPA with RGCCPP, Kayamkulam in view of the relevant statutory and regulatory provisions. The Commission has, vide letter No 1007/F&T/Suo motu tariff revision 2016-17/ KSERC dated 04-11-2016, intimated KSEB Ltd, the legal positions and the views of the Commission in this regard. The relevant portions of the said letter are quoted hereunder, -

- “
- 1) *It is noticed from the letter No. KSEB/TRAC/ARR&ERC16-17/ Suo motu/299 dated 26-7-2016 that, KSEB Ltd has extended the Power Purchase Agreement (PPA) with NTPC's Rajiv Gandhi Combined Cycle Power Project (RGCCPP), at Kayamkulam, for a period of 12 years from 01-03-2013. In this regard it is informed that, KSEB Ltd has not obtained approval from the Commission for the said PPA, on the ground that, RGCCPP is a dedicated station to the State of Kerala. A PPA existed between M/s NTPC and KSEB Ltd regarding purchase of power from the said plant, which provided for the payment of fixed charges along with cost of fuel for generation. KSEB Ltd has stated that it is reserving the plant as a standby generation capacity to be operated during extreme emergencies. The Central Government has allocated 180 MW comparatively cheaper power from NTPC's Talcher-II power station to pool with RGCCPP Kayamkulam. The average cost of generation from Talcher-II power station at the State periphery is about Rs 2.34 per unit. The pooled average cost of generation from Talcher-II and RGCCPP Kayamkulam is about Rs 4.52 per unit. KSEB Ltd has further submitted that the approval of PPA by the Commission is not necessary in the case of power purchase from RGCCPP, Kayamkulam in view of the proviso to clause (d) of sub-regulation (2) of regulation 18 of the Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as Tariff Regulations, 2014).*
 - 2) *In this regard it is pointed out that, -*
 - (i) *The determination of tariff under Sections 62 and 64 as per the regulations issued under Section 61 of the Electricity Act, 2003, and the adoption of the tariff discovered in a tender process as per the guidelines issued by the Government of India under Section 63 of the Act, are different and independent from the approval of PPA under Section 86 of the Act read with regulation 78 of the Tariff Regulations, 2014.*

statutory and regulatory provisions. The legal positions relating to the determination of tariff and the approval of PPA are explained below.

- (i) Tariff has to be either determined as per Section 62 and Section 64 or adopted under Section 63 of the Act. CERC can determine tariff of generating companies and transmission licensees coming under its jurisdiction. In this regard, it should be specifically noted that, in exercise of its powers under Section 62 and Section 64 of the Act, the SERCs do also have powers to determine the tariff of generating companies and transmission licensees coming under their exclusive jurisdictions. There is no distribution licensee under the CERC and therefore the CERC has no function or power to determine distribution tariff or to approve PPA executed by a distribution licensee. Approval of PPA for the purchase of power by the distribution licensee can be done only by the SERCs in exercise of their power under clauses (a) and (b) of sub-section (1) of Section 86 of the Act, which are quoted hereunder:-

"86. State Commission.- (1) The State Commission shall discharge the following functions, namely: -

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

Providing that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State"

- (ii) Regulation 18, is a regulation in Chapter IV –'Procedure for Determination of Tariff' and it specifically deals with determination of generation tariff. The said regulation is quoted hereunder:-

"18. Determination of generation tariff. – (1) The Commission shall determine the tariff for supply of electricity by the generating business/company to the distribution business/licensee, in accordance with the terms and conditions contained in chapter VI of these Regulations.

(2) In the case of existing generating stations,-

(a) where the Commission has, at any time prior to the date of coming into effect of these Regulations, approved a power purchase agreement or arrangement between a generating business/company and a distribution business/licensee or has adopted the tariff contained therein for supply of electricity from an existing generating unit/station, the tariff for supply of electricity by

the generating business/company to the distribution business/licensee shall be in accordance with such arrangement for such period as approved or adopted by the Commission or the tariff mentioned in such power purchase agreement, as the case may be;
(b)where, as on the date of coming into effect of these Regulations, the power purchase agreement or arrangement between a generating business/company and a distribution business/licensee for supply of electricity from an existing generating station has not been approved by the Commission or the tariff contained therein has not been adopted by the Commission under Section 63 of the Act or where there is no power purchase agreement or arrangement, the supply of electricity by such generating business/company to such distribution business/licensee after the date of coming into effect of these Regulations, shall be in accordance with the power purchase agreement or arrangement to be approved by the Commission:

(c)an application for approval of such power purchase agreement or arrangement shall be made by the distribution business/licensee to the Commission within a period of three months from the date of notification of these Regulations:

(d)Provided that such approval shall not be required in the case of purchase of power based on central allocation of generation capacity of central generating stations to the State or in the case of purchase of power from generating stations/units at tariffs approved by the Central Electricity Regulatory Commission though not under central allocation of generation capacity to the State or in the case of purchase of power from generating stations/units at tariffs approved by other State Electricity Regulatory Commissions.

(3)In the case of new generating stations the tariff for the supply of electricity by a generating business/company to the distribution business/licensee from a new generating unit/station shall be in accordance with the power purchase agreement or arrangement approved by the Commission.

(4) In the case of the generating stations owned by the licensee, -

(a)where the distribution business/licensee also undertakes the business of generation of electricity, the transfer price at which electricity is supplied by the generation business of the distribution licensee to its retail supply business shall be determined by the Commission:

(b)the distribution business/licensee shall maintain separate accounts and records for the generation business and shall maintain an allocation statement so as to enable the Commission to clearly identify the direct and indirect costs relating to such business and capital employed in such business:

Provided that the application for approval of aggregate revenue requirement and truing up shall be with reference to figures approved by the Commission for the previous financial year.

(c)the distribution business/licensee shall submit, along with the separate application for determination of tariff for retail supply of

electricity, the information required under chapter VI of these Regulations relating to its generation business, if any.”.

It can be seen that sub-regulation (1) of regulation 18 empowers the Commission to determine the tariff for supply of electricity by a generating company. Sub-regulation (2) specifies how the tariff of existing generating stations should be determined. As per clause (a) of sub-regulation (2), the tariff for supply of electricity by a generating company to distribution licensee as per the PPA approved by the Commission shall be the one as per the said PPA for such period as approved by the Commission. As per clause (b), if such PPA has not been approved by the Commission or a tariff has not been adopted by the Commission under Section 63 of Electricity Act, 2003, the supply of electricity by such generating company to the distribution licensee after the date of coming into force of these regulations, shall be as per the PPA to be approved by the Commission. Clause (c) specifies that application for approval of tariff as per clause (b) shall be submitted within 3 months from the date of notification of the Tariff Regulations, 2014. As per clause (d) the power supply for which approval of tariff has been sought for from the Commission, as per clause (c) shall be allowed to continue till a decision is taken by the Commission on the application submitted under clause (c). The proviso to clause (d) stipulates that such approval as stipulated in clause (d) is not required if tariff is approved by CERC or by any other SERC. The whole regulation is regarding determination of tariff under Section 62 and Section 64 by the Commission. Further proviso to clause (d) of sub-regulation (2) of regulation 18 is applicable only to clause (d). It does not deal with approval of power purchase which has to be done by the State Commission in exercise of the powers conferred under Section 86 of the Act. Thus it can be seen that Regulation-18 of the Tariff Regulation, 2014, specifies the methods for determination of tariff in the case of new generating stations and in the case of existing generating stations which supply electricity to the distribution licensees. The existing generating stations are further subdivided into (1) those which are supplying electricity in accordance with a PPA approved by the Commission and (2) those which are supplying electricity without a PPA approved by the Commission. The provisions in regulation 18 give the step-wise procedures for determination of generation tariff in such cases. KSEB Ltd has submitted that the approval of PPA by the Commission is not necessary in the case of power purchase from RGCCPP, Kayamkulam in view of the proviso to clause (d) of sub-regulation (2) of regulation 18 of the Tariff Regulations, 2014. In this regard it is pointed out that there is absolutely no provision in regulation 18 of the Tariff Regulations, 2014 which obviates the necessity for the approval by the Commission, of the PPA entered into by a distribution licensee.

- 6) *Sub-section (4) of Section 86 of the Act stipulates as follows,-*

In discharge of its functions the State Commission shall be guided by the National Electricity Policy, National Electricity Plan and tariff policy published under section 3.

Further, attention is drawn to sub-clause (c) under clause 5.11 of the National Tariff Policy-2016, wherein it has been stipulated that, 'Benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers'.

Tariff Policy, 2006, does also contain similar provision. Clause (5) of regulation 19 of the Tariff Regulations, 2006 does also stipulate that benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers. Therefore while determining tariff under Section 62 and 64 of the Act and while approving PPA entered into by the distribution licensees, the Commission has to implement the above statutory and policy directives.

- 7) *Approval of PPA by the Commission has to be done in accordance with Regulation 78 of the Tariff Regulations, 2014 which is quoted hereunder.*

"78. Approval of power purchase agreement/arrangement. –(1)
Every agreement or arrangement for procurement of power by the distribution business/licensee from the generating business/company or licensee or from other source of supply entered into after the date of coming into effect of these Regulations shall come into effect only with the approval of the Commission:

Provided that the approval of the Commission shall be required in accordance with this regulation in respect of any agreement or arrangement for power procurement by the distribution business/licensee from the generating business/company or licensee or from any other source of supply on a standby basis:

Provided further that the approval of the Commission shall also be required in accordance with this regulation for any change to an existing agreement or arrangement for power procurement, whether or not such existing agreement or arrangement was approved by the Commission.

(2) The Commission shall examine an application for approval of power purchase agreement/arrangement having regard to the approved power procurement plan of the distribution business/licensee and the following factors:-

(a) requirement of power under the approved power procurement plan;

(b) adherence to a transparent process of bidding in accordance with guidelines issued by the Central Government under Section 63 of the Act;

(c) adherence to the terms and conditions for determination of tariff specified under chapter VI of these Regulations where the process specified in clause (b) above has not been adopted;

(d) availability (or expected availability) of capacity in the intra-State transmission system for evacuation and supply of power procured under the agreement/arrangement; and

(e) need to promote co-generation and generation of electricity from renewable sources of energy.

(3) Where the terms and conditions specified under chapter VI of these Regulations are proposed to be adopted, the approval of the power purchase agreement/arrangement between the generating business/company and the distribution business/licensee for supply of electricity from a new generating station may comprise of the following two steps, at the discretion of the applicant:-

(a) approval of a provisional tariff, on the basis of an application made to the Commission at any time prior to the application made under clause (b) below; and

(b) approval of the final tariff, on the basis of an application made not later than three months from the cut-off date."

- 8) In this regard , attention is also invited to condition 20 in Part III in the Conditions of Licence in the KSERC (Conditions of Licence for Existing Distribution Licensees) Regulations, 2006, which is quoted hereunder,-

"20. Power Procurement Procedure.-(1) The Licensee shall prepare and submit to the Commission its power purchase plan consisting of plans for own generation and power purchase consistent with load forecast. The licensee while preparing the plan shall;

i. state planning margin or margins adopted by the licensee for the purpose of preparing the power purchase plan and set out the methodology and calculations used in arriving at such margin or margins;

ii. refer to data and assumptions for demand forecasts (including insofar as relevant to those relating to diversity of demand, own generation, arrangement for trading, demand of all consumers including open access consumers, load management, if any);

(2) The Licensee shall not purchase electrical power and/or energy without an authorization granted by the Commission except for emergent short duration purchases for less than 1 month.

(3) The Licensee shall in all circumstances purchase electrical power and/or energy in an economical and efficient manner under a transparent procurement process as approved by the Commission and following the guidelines issued by the Commission from time to time relating to preparation of load forecasts, power procurement plan and power procurement procedure. However purchase of power from Non Conventional energy sources shall be made within the percentage fixed by the Commission from time to time.

(4) An authorization required under this condition shall be granted when the Licensee has demonstrated to the Commission's satisfaction that:

- (a) electrical power and/or energy is necessary to meet the Licensee's service obligations and is consistent with the approved load forecast and power purchase plan;
- (b) the Licensee has examined the economic, technical, system and environmental aspects of commercially viable alternatives to the proposals for purchasing electrical power and/or energy (including arrangements for reducing the level of demand) and such examination has been carried out in a manner approved by the Commission;
- (c) The Commission may within 90 days grant authorization or may reject the application of the Licensee recording its reasons in writing. If the Commission does not grant or reject the application in writing within 90 days, then such permission shall be deemed to have been granted.

(5) In all circumstances the Licensee shall purchase electrical power and/or energy in a manner

- (a) which is in compliance with the State Grid Code;
- (b) the details of contracts entered into for power/energy purchases are furnished to the Commission within one month from the conclusion of such contracts."

9) From the statutory and regulatory provisions explained above one can conclude that the determination of tariff for electricity from a generating company and the approval of PPA for a distribution licensee are totally different functions with different objectives. The approval of PPA is absolutely necessary for safeguarding the interest of consumers and to ensure transparency which is envisaged in the Preamble of the Act and stipulated in sub-section (3) of Section 86 of the Act.

10) From the information available with the Commission, KSEB Ltd has already paid the following amounts to RGCCPP, Kayamkulam of NTPC Ltd.

Details of amount paid by KSEB Ltd to RGCCPP, Kayamkulam

Year	Energy scheduled (MU)	Fixed Cost paid by KSEB (Rs. Cr)	Variable cost (Rs.Cr)	Other claims (Rs. Cr)	Total Rs.Cr	Remarks
1998-99	243.17	62.12	57.87	8.73	128.72	
1999-00	1171.69	129.89	377.16	25.61	532.66	
2000-01	1904.38	225.46	571.93	36.06	833.45	
2001-02	1280.13	218.16	344.62	28.55	591.33	
2002-03	1857.53	209.44	500.01	28.34	737.79	
2003-04	1034.75	196.33	273.22	35.38	504.93	
2004-05	54.25	104.27	17.21	36.06	157.54	
2005-06	0	103.98	0	36.09	140.07	Amount paid are 50% of the FC claimed by NTPC and the balance
2006-07	0	102.93	0		102.93	
2007-08	453.28	106.48	346.2		452.68	

Year	Energy scheduled	Fixed Cost paid by KSEB	Variable cost	Other claims	Total	Remarks
	(MU)	(Rs. Cr)	(Rs.Cr)	(Rs. Cr)	Rs.Cr	
2008-09	949.49	93.89	637.34		731.23	50% of the FC shared by TNEB
2009-10	1153.90	129.56	748.57	5.693	883.82	
2010-11	1008.23	132.11	776.86	3.395	912.37	
2011-12	486.36	220.78	351.86	13.504	586.14	
2012-13	1517.59	215.77	1724.68		1940.45	
2013-14	947.15	221.12	1148.6		1369.72	
2014-15	798.81	284.74	976.14		1260.88	
2015-16	138.90	288.93	105.57		394.50	
Total	14999.61	3045.96	8957.84	257.412	12261.21	

During the 7 years from 2004-05 to 2010-11, the capacity of RGCCPP Kayamkulam and the fixed charge thereon, were shared by KSEB and TNEB equally. During the said period TNEB has paid 50% of the fixed charges as indicated below:-

Year	Fixed Cost paid by TNEB(Rs. Cr)	Remarks
2004-05	104.27	Amount paid are 50% of the FC claimed by NTPC and the balance 50% of the FC shared by TNEB
2005-06	103.98	
2006-07	102.93	
2007-08	106.48	
2008-09	93.89	
2009-10	129.56	
2010-11	132.11	
Total	773.22	

11) The breakup of the fixed cost claimed by NTPC for RGCCPP Kayamkulam is detailed below.

Breakup of the components of fixed cost claimed by NTPC for RGCCPP- Kayamkulam

Year	Interest on loan	Interest on working capital	Depreciation	Return on equity	Operation & Maintenance exp	Total
	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)
1998-99	21.72	6.21		22.48	11.71	62.12
1999-00	30.92	15.13	34.61	32.33	16.90	129.89
2000-01	46.34	19.72	77.63	52.98	28.79	225.46
2001-02	38.96	28.49	65.64	54.01	31.06	218.16
2002-03	28.53	28.34	65.64	54.01	32.92	209.44
2003-04	13.57	28.22	65.64	54.01	34.89	196.33
2004-05	32.78	27.80	70.19	49.73	28.05	208.54
2005-06	27.94	27.89	73.24	49.73	29.16	207.96
2006-07	22.95	27.96	74.88	49.73	30.35	205.86
2007-08	19.56	28.35	82.00	51.52	31.54	212.96
2008-09	17.60	27.98	56.61	52.80	32.79	187.77

Year	Interest on loan	Interest on working capital	Depreciation	Return on equity	Operation & Maintenance exp	Total
	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)
2009-10	8.99	48.12	61.77	87.02	53.22	259.12
2010-11	5.16	48.24	61.94	86.04	56.27	257.65
2011-12	2.88	48.51	62.06	85.06	59.47	257.98
2012-13	0.95	47.69	19.18	85.06	62.89	215.77
2013-14	0.32	47.97	19.27	87.08	66.49	221.12
2014-15	0.00	139.86	19.32	72.77	52.80	284.74
2015-16	0.00	140.33	19.36	73.14	56.11	288.93
Total	319.16	786.79	928.97	1099.47	715.41	3849.80

12) *The facts explained above can be summarised as follows:-*

- (i) *The impugned PPA with respect to the purchase of power from RGCCPP has been extended for 12 years from 01.03.2013 at an increased annual fixed cost.*
- (ii) *During the 15 years from 1998-99 to 2012-13 KSEB Ltd has paid to NTPC Ltd, an amount of Rs. 3045.96 crore towards fixed charges of RGCCPP.*
- (iii) *During the 7 years from 2004-05 to 2010-11 TNEB has paid to NTPC Ltd, an amount of Rs. 773.22 crore towards fixed charges of RGCCPP.*
- (iv) *The total amount of fixed cost realized by NTPC Ltd during the period of 15 years from 1998-99 to 2012-13 is Rs.3849.80 crore.*
- (v) *Out of the total amount of Rs.3849.80 crore realized by NTPC Ltd as fixed charge of RGCCPP, Rs.319.16 crore is towards interest on capital liabilities.*
- (vi) *Out of the total amount of Rs.3849.80 crore realized by NTPC Ltd as fixed charge of RGCCPP, Rs.928.97 crore is towards depreciation.*
- (vii) *Out of the total amount of Rs.3849.80 crore realized by NTPC Ltd as fixed charge of RGCCPP, Rs.1099.47 crore is towards Return on Equity.*
- (viii) *The total energy availed from RGCCPP during the last 18 years is only 14999.91 MU which works out to an average PLF of 26%*

Thus it can be seen that NTPC has claimed and KSEB has paid depreciation at an accelerated average rate of Rs.62.80 crore per annum for 13 years. The principal and interest of the capital liabilities relating to the plant were fully repaid. In view of the sub-clause (c) in clause 5.11 of the Tariff Policy, 2016 and similar provisions in the Tariff Policy, 2006, the fixed charge of the RGCCPP should have come down considerably. On the contrary, to add fuel to fire, the fixed cost claimed by NTPC is seen to

have been increased from Rs 221.12 crore per annum during the year 2013-14 to Rs 284.74 crore during the year 2014-15.

- 13) During the year 2014-15 and 2015-16 the amounts claimed towards the interest on working capital are Rs.139.86 crore and Rs.140.33 crore respectively. The main element of interest on working capital is the interest incurred on cost of fuel which has to be kept as a reserve. During the last 18 years from 1998-99 to 2015-16, the plant has generated only 14999.91 MU of electricity, at an average plant load factor of 26%. This is because the fuel naphtha has been prohibitively costly. Therefore KSEB used to schedule power from RGCCPP only sparingly whenever there is an absolutely unavoidable emergency. For this purpose RGCCPP has been actually keeping only a relatively small quantum of naphtha. When KSEB Ltd and its consumers are reeling under financial stresses and strains, there is absolutely no justification in paying interest on working capital on a notional quantity of fuel as per the general norms fixed by CERC for thermal plants. Since naphtha is prohibitively costly power is seldom scheduled from RGCCPP and hence the fuel stock also has been considerably reduced. In view of the fact that NTPC had invested huge amounts for the construction of RGCCPP exclusively for Kerala State, KSEB Ltd has fully complied with its contractual obligation by paying a very huge amount of Rs.3045.96 crore as fixed cost, without actually availing commensurate benefit there from. Therefore the Commission is of the view that the claim of NTPC for an enhanced fixed charge, even after the period of accelerated depreciation of the plant and after fully repaying the capital liabilities, is not in tune with the Tariff Policy and the Tariff Regulations.
- 14) The Commission is of the view that if NTPC has claimed interest on working capital without actually incurring it, it would amount to undue enrichment and hence an unethical business practice, especially in view of the fact that KSEB Ltd has paid Rs.1099.47 crore towards return on equity, only to meet the contractual obligation, without availing commensurate benefit there from. Further the Hon'ble APTEL in its judgment dated 18.02.2014 in Appeal No. 27/2013 has held that the action of Punjab State Electricity Regulatory Commission in not having allowed Income Tax on RoE to the Punjab State Transmission Corporation Ltd, is perfectly just and legal on the ground that the Punjab State Transmission Corporation Ltd, being a loss making company, had not actually paid Income Tax. From the above decision of the Hon'ble APTEL it can easily be seen that the generating company or licensee cannot claim the benefit of any expense, unless it has actually incurred such expense.

- 15) *It is true that, KSEB Ltd is getting special allocation of cheaper power to the tune of 180MW from Talcher-II power station of NTPC @Rs 2.37 per unit. Even after such allocation of cheaper power, the average rate of bundled power would works out to Rs 4.60/unit, which will not come under the merit order since the average rate of power derived through competitive bidding route is around Rs 4.00 per unit.*
- 16) *In respect of the special allocation of cheaper power, the Commission would like to invite the attention of KSEB Ltd as well as of the Government that Government of India as well as NTPC were fully considerate and sympathetic towards the energy problems and financial problems of KSEB due to the prohibitive cost of naphtha. It was with their co-operation, the strategy for sharing 50% of the capacity with TNEB was implemented. Government of India and NTPC had graciously granted a special allocation of 180 MW of cheaper power to KSEB and to TNEB to mitigate their financial burden. When TNEB withdrew from this arrangement from 2011-12, KSEB had started taking the full burden of the fixed charge of RGCCPP. As a natural consequence the 180 MW of cheaper power which was allotted TNEB, had been re-allocated to KSEB. When the PPA was renewed for a period of 12 years from 01.03.2013, KSEB Ltd is not seen to have insisted on and obtained 360 MW of cheaper power from other Thermal Power Stations of NTPC. The Commission is of the view that even now, NTPC Ltd which is the largest generating company with the Maharatna stature and the Government of India would be magnanimous to extend such co-operation if the issues are presented properly before them.*
- 17) *In this regard the Commission would also like to point out that there is another naphtha based 159 MW plant owned by BSES Kerala Power Ltd, which was installed exclusively for Kerala, based on the tenders invited by Government of Kerala. After the period of PPA, KSEB Ltd has rightly declined to extend the PPA, though M/s BKPL has offered to reduce the fixed charge of the plant to Rs.37.74 crore per annum. It may please be seen that the fixed charges now being claimed by NTPC Ltd and being paid by KSEB Ltd are many fold higher than the fixed charge offered by BKPL. The only factor which would justify continuance of PPA with RGCCPP is allocation of 360 MW of cheaper power.*
- 18) *It was in view of the legal provisions, facts and circumstance explained above, the Commission is constrained to exclude the fixed cost of the RGCCPP Kayamkulam of NTPC from the ARR of KSEB Ltd, for the purpose of tariff determination. The Commission would strongly advise KSEB Ltd to present the above facts with all*

supporting details to NTPC Ltd and to Government of India so that a viable solution can be worked out by minimizing the fixed cost of RGCCPP and by allotting additional cheaper power to mitigate the problems faced by KSEB Ltd and its consumers. If no tangible results come out of the discussions with NTPC Ltd and Government of India, the matter has to be submitted before the Hon'ble CERC and the Hon'ble APTEL for favourable orders. Such actions are absolutely necessary to safeguard the interests of the consumers and of KSEB Ltd. The Commission would like to kept updated the result of the action taken by KSEB Ltd in this regard."

- 9.30 The Commission has, after careful consideration of all the relevant facts before it, communicated its view that the grounds raised by KSEB Ltd as stated in paragraph 9.28, are not valid and sufficient to justify continuance of PPA with RGCCPP for the following reasons,-
- (i) In view of the fact that the total generating capacity of the country has exceeded 3 lakh MW as against the total peak demand of only about 1.6 lakh MW and that power is available at cheaper rates in the open market, there is no justifiable reason to maintain the RGCCPP as a stand by unit.
 - (ii) Sufficient cheaper power is not seen allotted on a firm basis so that the rate of bundled power would be within the limits for scheduling under merit order dispatch system.
 - (iii) The market conditions relating to availability and rate of power have changed from those prevalent during 2013-14 and 2014-15 and therefore the decisions taken by the Commission while approving the tariff for 2013-14 and 2014-15 cannot be cited to the disadvantage of the licensee and its consumers.
 - (iv) The legal positions relating to the tariff determination by CERC and the approval of PPA by SERC have been explained in the letter of the Commission dated 04-11-2016.

In letter No. KSEB/TRAC/Power purchase/2016-17 dated 23-1-2017, the CMD of KSEB Ltd has submitted the following facts for the consideration and appropriate orders of the Commission.

“

1. *KSEB has entered into a Power Purchase Agreement with M/s.NTPC on 6-1-1995 for purchase of entire power from the Rajiv Gandhi Combined Cycle Power Project (RGCCPP), at Kayamkulam, owned and operated by NTPC with an installed capacity of 359.58 MW. The plant is envisaged as a dedicated station to Kerala.*
2. *The term of the agreement was initially for 5 years from the date of commercial operation (CoD). The PPA with M/s.NTPC was extended as per mutual agreement between both the parties till*

28-2-2013. Subsequently, KSEB entered into a supplementary PPA with M/s.NTPC on 15-2-2013, for extending the validity of the PPA for a further period of 12 years from 1-3-2013.

3. *Considering the high variable cost of the plant, MoP has allocated 180MW cheaper power from NTPC's Talcher –II power station to pool with RGCCPP, Kayamkulam. The average cost of generation from Talcher –II power station at the State periphery is about Rs.2.34 per unit. The pooled cost of power from Talcher-II and RGCCPP, Kayamkulam is about Rs.4.52 per unit.*
4. *KSEB LTD is reserving RGCCPP plant as a stand-by one to be operated during extreme emergencies like failure to obtain power from external sources due to corridor constraints etc. KSEB LTD is retaining the plant by paying fixed cost and schedule the same at extreme emergencies. It is also submitted that Hon'ble Commission, as per order on ARR & ERC for the years 2013-14 and 2014-15 had duly considered all these facts and was pleased to allow scheduling and payment of charges to RGCCPP for these years.*
5. *Being a Central Generating Station, the Annual Fixed Cost of RGCCPP, Kayamkulam is being approved by Hon'ble CERC as per the tariff norms issued by Hon'ble CERC. NTPC in the tariff petition filed for the period 2014-19 had raised a huge increase in Annual Fixed Cost for the tariff period 2014-19. The huge increase in AFC claimed for the tariff period 2014-19 compared to previous tariff period was mainly attributed due to increase in working capital, claimed as per the tariff norms issued by Hon'ble CERC vide the CERC (Terms and Conditions of Tariff)Regulations, 2014.*
6. *As per the tariff norms issued by Hon'ble CERC for the tariff period 2014-19 , the working capital is computed based on the price of fuel for the 3 months prior to the start of the tariff period 2014-19, i.e. the price of fuel for the months January 2014, February 2014 and March 2014 are considered for computation of working capital for the entire tariff period 2014-19.*
7. *In the case of RGCCPP plant, about 45% of the Annual Fixed Cost is constituted by the 'Interest on Working Capital' component of AFC. This excessive increase in working capital is attributed due to the excessive price of Naphtha that prevailed during the months of January2014, February 2014 and March 2014, which was of the order of Rs.70,948/MT.*
8. *KSEB LTD had duly appraised Hon'ble CERC its concerns on the claim of high working capital for a rarely scheduled plant like RGCCPP, pointing out the subsequent drastic reduction in naphtha price. KSEB LTD had also prayed before Hon'ble CERC for fixing*

the AFC of the plant taking into due consideration the concerns and submissions made by KSEB LTD in this matter.

9. *However, the concerns raised by KSEB LTD were not taken into consideration by Hon'ble CERC while issuing the order dated 27-10-2016. As per the order of CERC, there is an excessive increase in Annual Fixed Cost (AFC) commitments for the tariff period from 1st April-2014 to 31st March 2019. The annual fixed cost approved by CERC for the tariff period 2014-19 as per the order is tabulated below.*

2014-15	2015-	2016-17	2017-18	2018-19
(Rs.Cr.)	(Rs.Cr.)	(Rs.Cr.)	(Rs.Cr.)	(Rs.Cr.)
284.74	288.93	292.51	296.69	301.17

The average annual Fixed Cost of RGCCPP plant for the tariff period 2014-19 comes to around Rs.292.81 Crore.

10. *It is submitted that since the tariff order issued by Hon'ble CERC for RGCCPP is in line with the regulations issued by Hon'ble CERC for determining the tariff of Central Generating Stations for the tariff period 2014-19, there is no scope for challenging the same before higher judicial forums.*
11. *As rightly observed by Hon'ble Commission in the suo motu tariff revision notices, the age of the RGCCPP plant is nearing its useful life and depreciation claims are almost over. Further, the principal and interest of the capital liabilities relating to the plant were fully repaid. In view of the fact that the interest and principal repayment obligations of the plant are over and the asset is almost fully depreciated, the fixed charge of the RGCCPP should have come down considerably and the benefit of reduced tariff of the plant shall be available for the beneficiaries and consumers. However, on the contrary, the AFC of the RGCCPP is found to have increased for the tariff period 2014-19.*
12. *However, since there exist a PPA, valid till 2025 with NTPC, for procuring power from the project, KSEB LTD is bound by this PPA to pay charges towards NTPC as per the tariff orders of Hon'ble CERC. This PPA executed cannot be withdrawn unilaterally by KSEB LTD. Further, NTPC has every right to claim higher AFC as per the orders of CERC and draw the amount from the account of KSEB LTD through the Letter of Credit which is in operation as per the payment security mechanism approved by RBI, Government of Kerala and KSEB LTD.*

13. *Under these circumstances, disallowance of fixed cost of RGCCPP, Kayamkulam in the ARR of KSEB LTD will result in huge financial crisis for KSEB LTD as KSEB LTD is bound by the PPA terms to pay the amount approved by CERC to NTPC and NTPC is empowered to draw the amount by operationalizing the LC.*
14. *Considering all the above facts and circumstances, and also the provisions under sub-clause (c) under clause 5.11 of the National Tariff Policy-2016 , that the benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers, it is humbly requested that, Hon'ble Commission may kindly approve the appropriate quantum of annual fixed charges of RGCCPP, Kayamkulam that can be allowed to be recovered from the consumers through tariff while approving the ARR of KSEB LTD for the years 2016-17 and 2017-18.*
15. *It is additionally submitted that in compliance with the direction of Hon'ble Commission vide the letter dated 4-11-2016, efforts are taken by KSEB LTD to arrive at a mutually agreed lower AFC for the plant through discussions with officials of NTPC. KSEB LTD has already requested Government of Kerala vide letter dated 21-11-2016, to approach Ministry of Power for allocation of additional power from Talcher-II station or other cheaper stations of NTPC for pooling with power from RGCCPP, Kayamkulam to keep the bundled price of RGCCPP power low.*

It is earnestly appealed that Hon'ble Commission may kindly consider the facts and submissions made above and an appropriate decision may kindly be taken in the matter.”

- 9.31 In this regard it has to be specifically noted that the normative rates fixed by the Hon'ble CERC are only the upper ceiling and the NTPC and KSEB Ltd are free to negotiate and re-fix the fixed cost at the lowest possible level considering the financial problems faced by KSEB Ltd and the consequent adverse impacts on the consumers of the State. Regulation 47 of CERC (Terms and Conditions of Tariff) Regulations, 2014, is quoted hereunder,-

“47. Norms to be ceiling norms: Norms specified in these regulations are the ceiling norms and shall not preclude the generating company or the transmission licensee, as the case may be, and the beneficiaries and the long-term transmission customers /DICs from agreeing to the improved norms and in case the improved norms are agreed to, such improved norms shall be applicable for determination of tariff.”

Further regulation 48 of the said CERC regulations does also provide for deviations from norms. The Commission anticipates that NTPC Ltd, being a

Maharatna Company in central public sector, would easily appreciate the above facts and workout a symbiotic solution which would foster the interests of the consumers, the KSEB Ltd and the NTPC Ltd. The Commission has duly considered all the above facts. However, considering the interests of the consumers in the State, the Commission is not inclined to approve any fixed cost commitment for RGCCPP Kayamkulam in the ARR for the years 2016-17 and 2017-18, until documentary evidences are produced to substantiate that sufficient cheaper power has been allotted till the expiry of the renewed PPA so that the rate of bundled power is within the limit for scheduling under merit order dispatch system.

- 9.32 The validity of the PPA entered into between M/s BSES Kerala Power Ltd (BKPL) and KSEB Ltd expired on 31st October-2015. KSEB Ltd vide their submission dated has made a provision of Rs.31.90 crore and Rs.18.71 crore respectively as fixed cost commitments for the years 2016-17 and 2017-18. The Commission, in the estimation of availability of power vide the suo motu proceedings, has not included any power from BKPL. Further the Commission has, as per its order dated 26-10-2016 in OP No 34 of 2015, declined the request of M/s BKPL to extend the validity of the PPA. Therefore the Commission does not propose to approve any fixed cost commitment for BKPL as claimed by KSEB Ltd. Further, in the present context, there is no requirement to schedule naphtha based power at prohibitive rates from BKPL for meeting the energy requirement of the State.
- 9.33 The Commission vide the suo motu notice dated 22-6-2016 has estimated the energy availability from wind and small hydro and other IPPs as 142.00 MU at a total cost of Rs 45.87 crore @ Rs 3.24 per unit for the years 2016-17 and 2017-18. Vide the comments on the suo motu proceedings dated 26-7-2016, KSEB Ltd has re-estimated the energy availability from wind and small hydro and other IPPs as 138.12 MU at the cost of Rs 44.75 crore @ Rs 3.24 per unit for the years 2016-17 and 2017-18. However, for the purpose of ARR, the Commission approves the energy availability from wind, small hydro and other IPPs as 142.00 MU at a total cost of Rs 45.87 crore @Rs 3.24 per unit for the years 2016-17 and 2017-18.

Power purchase from short-term market

- 9.34 Based on the analysis of the power purchase and its cost from the approved sources by the Commission viz-a-viz the projected demand, it is noticed that there will be a shortfall in energy availability for the years 2016-17 and 2017-18, as detailed below.

Table 9.13

Summary of the energy demand and availability for the years 2016-17 and 2017-18

SINo	Particulars	2016-17	2017-18
		Quantity	Quantity
		(MU)	(MU)
1	Energy demand (MU)	23955.52	25292.45
2	Energy availability (MU)		
	(i) Hydel	4376.87	6473.62
	(ii) BDPP+KDPP		
	(iii) CGS	9734.10	11000.05
	(iv) RGCCPP		
	(v) BSES		
	(vi) IPP- wind and SHPs	142.00	142.00
	(vii) Traders / IPPs	7302.84	5729.80
	Sub total	21555.81	23345.47
3	Short fall to be met from short-term market	2399.71	1946.98
4	Total availability	23955.52	25292.45

- 9.35 As detailed above, after duly considering the energy availability from hydel, CGS, traders/ generators approved by the Commission, there will be an energy shortfall of about 2399.71 MU for the year 2016-17 and 1946.98 MU for the year 2017-18. This shortfall has to be met by procuring power from short-term market.
- 9.36 As per the report on short-term power market in India 2015-16 published by CERC, the average rate of power transacted through traders for the year 2015-16 is Rs 4.11 per unit. The Commission has also considered the rate at which KSEB Ltd has purchased power from short term market in the recent past. Considering the reduction in hydel generation on account of failure of monsoon and consequent likely increase in power purchase, the Commission adopts Rs 4.00 per unit as the average power purchase rate of bi-lateral short term market. Accordingly, Commission approves an amount of Rs.959.88 crore for the year 2016-17 and Rs.778.79 crore for the year 2017-18 for purchasing power through bi-lateral contracts.

Transmission charges

- 9.37 As per the details submitted by the KSEB Ltd, the average transmission charges claimed by KSEB Ltd for transmitting power from CGS is about Rs.0.36 per unit, based on the power purchase for the year 2015-16. However, from the available information with the Commission it is seen that there has been some reduction in actual transmission charges being paid by the licensee. Hence, for the approval of the ARR for the years 2016-17 and 2017-18, the Commission adopts the transmission charges at Rs.0.33 per

unit. Accordingly the transmission charges approved for the years 2016-17 and 2017-18 are detailed below.

Table 9.14
Inter-state transmission charges approved for the years 2016-17 & 2017-18

Sl No	Particulars	2016-17		2017-18	
		Quantity (MU)	Transmission charges (Rs.Cr)	Quantity (MU)	Transmission charges (Rs.Cr)
1	Central Generating stations	9734.10	321.23	11000.05	363.00
2	Traders (excluding DBFOO)	6276.35	207.12	4134.79	136.45
3	Short term power purchase	2399.71	79.19	1946.98	64.25
	Total transmission charges		607.54		563.70

9.38 The summary of the cost of generation and power purchase approved for the years 2016-17 and 2017-18 is detailed below.

Table 9.15
Summary of the cost of generation and power purchase for the years 2016-17 and 2017-18

Sl No	Particulars	2016-17			2017-18		
		Quantity	Amount	Avg. Rate	Quantity	Amount	Avg. Rate
		(MU)	(Rs. Cr)	(Rs/ kWh)	(MU)	(Rs. Cr)	(Rs/ kWh)
1	Own Generating stations of SBU-G	4376.87	672.61		6473.62	677.48	
2	CGS	9734.10	3203.32	3.29	11000.05	3755.97	3.41
3	IPP- wind and SHPs	142.00	45.87	3.23	142.00	45.87	3.23
4	Traders	7302.84	2936.16	4.02	5729.80	2195.02	3.83
5	Short-term market	2399.71	959.88	4.00	1946.98	778.79	4.00
6	Inter State Transmission charges ¹		607.54			563.70	
7	Intra-State transmission charges ²		881.30			905.20	
	Total	23955.52	9306.67	3.88	25292.45	8922.02	3.53

¹ Inter-state transmission charges payable to PGCIL

² Intra-state transmission charges is the ARR of the SBU-T

Operation and maintenance cost for SBU- Distribution

Estimate as per the suo motu proceedings

9.39 The Commission vide the suo motu proceedings dated 22-6-2016 had estimated the O&M cost of SBU-D as per the provisions in the Tariff Regulations, 2014. The O&M norms for distribution business of KSEB Ltd are specified under Annexure-IX to Tariff Regulations, 2014, which are extracted below

O&M norms for distribution business of KSEB Limited

O&M expenses	FY 2015-16	FY 2016-17	FY 2017-18
Employee expenses			
Rs. lakh / '000 consumers	2.40	2.54	2.69
Rs. lakh / distribution transformer	0.33	0.35	0.37
Rs lakh per km of HT line	0.40	0.42	0.44
Rs / Unit of sales	0.10	0.11	0.11
A&G expenses			
Rs. lakh / '000 consumers	0.21	0.22	0.23
Rs. lakh / distribution transformer	0.03	0.03	0.03
Rs lakh per km of HT line	0.03	0.04	0.04
Rs / Unit of sales	0.01	0.01	0.01
R&M expenses			
% of opening GFA	3%	3%	3%

Explanation : The O&M expenses for any year of the control period shall be allowed by multiplying the O&M norms for that year with the actual number of consumers, distribution transformers, km of HT line and sales for the previous year, i.e., the O&M expenses for FY 2015-16 shall be allowed by multiplying the O&M norms for FY 2015-16 with actual number of consumers, distribution transformers, km of HT line and sale for FY 2014-15.

9.40 The growth of the distribution parameters pertaining to the estimation of normative employee cost and A&G expenses is detailed below.

Table-9.16

Growth of distribution parameters related to the estimation of normative employee cost and A&G expenses (as per the notice of suo motu determination)

Year	No.of consumers	Distribution transformers	HT Line length	Sales	Remarks
	(Nos)	(Nos)	(km)	(MU)	
2008-09	9363461	46359	41283	12414	Actuals
2009-10	9743476	52149	44682	13971	
2010-11	10127946	57954	48342	14548	
2011-12	10457637	62329	51328	15981	
2012-13	10806890	64972	52907	16838	
2013-14	11192890	68172	56641	17454	
CAGR	3.63%	8.02%	6.53%	7.05%	
2014-15	11542890	70172	60340	18426	Projection
2015-16	11892890	72172	64280	19440	
2016-17	12242890	74372	68477	20484	
2017-18	12592890	76572	72949	21571	
CAGR from 2014-15	2.94%	2.95%	6.53%	5.39%	

- 9.41 Based on the above, the normative employee costs as per the provisions of Tariff Regulations 2014, estimated for the years 2016-17 and 2017-18 are detailed below.

Table-9.17
Normative employee cost for the years 2016-17 and 2017-18
(as per the notice of suo motu determination)

Particulars	2016-17 (Rs.Cr)	2017-18 (Rs.Cr)
Component based on number of consumer	310.97	338.75
Component based on distribution	260.30	283.32
Component based on HT line	287.60	320.98
Component based on energy sale	225.32	237.28
Total	1084.20	1180.32

- 9.42 The A&G expenses estimated based on the O&M parameters as per Table-9-16 above for the years 2016-17 and 2017-18 are detailed below.

Table-9.18
Normative A&G expenses for the years 2016-17 and 2017-18
(as per the notice of suo motu determination)

Particulars	2016-17 (Rs.Cr)	2017-18 (Rs.Cr)
Component based on number of consumer	26.93	28.96
Component based on distribution	22.31	22.97
Component based on HT line	27.39	29.18
Component based on energy sale	20.48	21.57
Total	97.12	102.69

- 9.43 The normative R&M cost as per the Tariff Regulations, 2014 is @3% of the GFA book values at the beginning of the year concerned. Since KSEB Ltd has not submitted the GFA at the beginning of the years 2016-17 and 2017-18, the Commission has estimated the GFA for SBU-D based on the following details, for the purpose of determining R&M expenses as per the Tariff Regulations, 2014.

Table-9.19
Estimation of GFA at the beginning of the years 2016-17 and 2017-18
(as per the notice of suo motu determination)

Particulars	Amount (Rs.Cr)	Remarks
GFA of distribution SBU as on 31-10-2013	5403.00	
Additions		
2013-14 (42% of 519) from 01-11-2013 to 31-03-2014	217.98	Total GFA addition- Rs 519 cr
GFA as on 31-03-2014	5620.98	
GFA addition 2014-15 (42% Rs.1128 Cr)	473.76	Total GFA addition- Rs 1128 cr
GFA as on 31-03-2015	6094.74	
GFA addition during the year 2015-16 (42% of Rs 1000.00 cr)	420.00	Assuming GFA addition during the year 2015-16 as Rs 1000 cr
GFA as on 31-03-2016	6514.74	Assuming GFA addition as Rs 1000 cr
GFA addition during the year 2016-17 (42% of Rs 1000.00 cr)	420.00	Assuming GFA addition during the year 2016-17 as Rs 1000 cr
GFA as on 31-03-2017	6934.74	

9.44 Based on the GFA estimated for the years 2016-17 and 2017-18 as above, the R&M costs estimated for the years 2016-17 and 2017-18 are detailed below.

Table-9.20
Normative R&M cost for the years 2016-17 & 2017-18
(as per the notice of suo motu determination)

	2016-17	2017-18
GFA (distribution SBU) at the beginning of the year (Rs. Cr)	6514.74	6934.74
R&M expense- norm	3% of opening GFA	
R&M expense (Rs.Cr)	195.44	208.04

9.45 Summary of the O&M expenses estimated for SBU-D of KSEB Ltd as per the notice of suo motu tariff determination is given below.

Table-9.21
Summary of the O&M cost estimated for SBU-Distribution of KSEB Ltd
(as per the notice of suo motu determination)

Total O&M expense - Distribution SBU	2016-17	2017-18
Employee cost (Rs.Cr)	1084.20	1180.32
A&G expense (Rs. Cr)	97.12	102.69
R&M expense (Rs. Cr)	195.44	208.04
Total (Rs. Cr)	1376.76	1491.04

Objections of stakeholders

9.46 Though the KSEB Ltd has commented that, the O&M cost estimated by the Commission vide the suo motu proceedings is inadequate, KSEB Ltd has not provided any comments on the O&M parameters adopted by the Commission as detailed in Table 9-16 above. The HT&EHT Association has pointed out an arithmetical error in the computation of O&M expenses.

Analysis of the Commission

9.47 The Commission has duly considered the submission of the KSEB Ltd and HT&EHT Association. The Commission proposes to allow the O&M cost strictly as per the provisions in the Tariff Regulations, 2014. In the absence of the details on the O&M parameters from the licensee, the Commission has estimated the O&M expenses based on the normative parameter values as detailed in Table-9.16 above. However, there is an increase in the sale of energy over the same provided in the Table 9-16 and increase in the number of transformers which has been updated based on the submission of the licensee. As pointed out by the HT&EHT Association, the arithmetical error in the computation of the O&M cost has also been corrected. The details are given below.

Table 9.22.
SBU-D- Parameters adopted for assessment O&M expenditure

Year	No.of consumers	No. of dist. transformers	HT Line (km)	Sales (MU)
2014-15	11542890	71199	60340	18426
2015-16	11892890	72460	64280	19325
2016-17	12242890	74660	68477	20625
2017-18	12592890	76860	72949	21840
CAGR from 2014-15 to 2017-18	2.94%	2.58%	6.53%	5.83%

Table 9.23
SBU-D. Employee cost approved for the years 2016-17 & 2017-18

Particulars	2016-17 (Rs crore)	2017-18 (Rs crore)
Component based on number of consumer	302.08	329.33
Component based on distribution transformer	253.61	276.24
Component based on HT line	269.98	301.30
Component based on energy sale	212.58	226.88
Total	1038.24	1133.75

Table 9.24
SBU-D. A&G cost approved for the years 2016-17 & 2017-18

Particulars	2016-17 (Rs crore)	2017-18 (Rs crore)
Component based on number of consumer	26.16	28.16
Component based on distribution transformer	21.74	22.40
Component based on HT line	25.71	27.39
Component based on energy sale	19.33	20.63
Total	92.94	98.57

Table 9.25
SBU-D. R&M cost approved for the years 2016-17 & 2017-18

Particulars	2016-17	2017-18
GFA of the Distribution SBU as at the beginning of the year (Rs. Cr)	6514.74	6934.74
R&M expense- norm	3% of opening GFA	
R&M expense (Rs.Cr)	195.44	208.04

- 9.48 The summary of the O&M costs approved for the SBU-D of KSEB Ltd for the years 2016-17 and 2017-18 is detailed below.

Table 9.26
SBU-D. Summary of the O&M cost approved for SBU-D of KSEB Ltd

Total O&M expense – distribution	2016-17	2017-18
Employee cost (Rs.Cr)*	1038.24	1133.75
A&G expense (Rs. Cr)	92.94	98.57
R&M expense (Rs. Cr)	195.44	208.04
Total (Rs. Cr)	1326.62	1440.36

* The amounts approved towards employee cost are exclusive of the amounts approved for payment to the Master Trust for disbursement of pension.

The Commission reaffirm that, the O&M cost for actual distribution parameters such as number of consumers, distribution transformers, HT Lines and energy sale only be approved while truing up the accounts for the years 2016-17 and 2017-18.

Interest and finance charges

- 9.49 The details of the interest and finance charges proposed for KSEB Ltd as per the suo motu proceedings dated 22-6-2016, the objections and suggestions of the stakeholders, the analysis of the Commission and the methodology adopted by the Commission for apportioning the same to SBU-G, SBU-T and SBU-D are detailed in paragraphs 4.11 to 4.32.
- 9.50 The summary of the interest and finance charges approved for SBU-D for the years 2016-17 and 2018-19 is detailed below.

Table 9.27
Interest & finance charges approved for the years 2016-17 and 2017-18

Sl No	Particulars	SBU-D	
		2016-17 (Rs. Cr)	2017-18 (Rs. Cr)
1	Interest on outstanding capital liabilities	57.84	57.84
2	Interest on security deposit	120.12	129.64
3	Interest on GPF	110.44	117.81
4	Other interest	8.41	8.41
5	Interest on bonds issued to Master Trust	684.98	684.98
	Total	981.79	998.68

Depreciation

- 9.51 The details of the depreciation proposed for KSEB Ltd as per the suo motu proceedings dated 22-6-2016, the objections and comments of the stakeholders including KSEB Ltd, the analysis of the Commission, the methodology adopted by the Commission for apportioning the same among SBU-G, SBU-T and SBU-D are detailed in paragraphs 4.6 to 4.10
- 9.52 The summary of the depreciation provisionally estimated for the years 2016-17 and 2017-18 for SBU-D is detailed below.

Table 9.28
Depreciation approved for the years 2016-17 and 2017-18

SBU's	Depreciation
	(Rs. Cr)
SBU-D	58.12

Return on Equity

- 9.53 The return on equity proposed vide the suo motu proceedings dated 22-6-2015, the objections and comments of the stakeholders including KSEB Ltd, the analysis of the Commission, apportioning of the approved RoE among SBU-G, SBU-T and SBU-D of KSEB Ltd are detailed in paragraphs 4.33 to 4.44
- 9.54 The summary of the RoE approved for the SBU-D for the years 2016-17 and 2017-18 is given below.

Table 9.29
Return on equity approved for SBU-D of KSEB Ltd
for the years 2016-17 and 2017-18

Particulars	Return on equity
	(Rs. Cr)
SBU-D	68.64

Summary of the ARR of the SBU-D of KSEB Ltd

- 9.55 As per the Regulation-77 (i) of the Tariff Regulations, 2014, the cost of own generation also form part of the ARR of the SBU-D. Accordingly, as detailed under chapter-7 of this order, the ARR of SBU-G amounting to Rs.672.61 crore and Rs.677.48 crore respectively for the years 2016-17 and 2017-18 are included in the ARR of SBU-D for the respective years.
- 9.56 Further as discussed in paragraphs 8.21 to 8.27 of this order, at present the SBU-D of the KSEB Ltd is, the only long term and medium term user of the transmission system of SBU-T of KSEB Ltd. Hence the entire ARR of the SBU-T are included in the ARR of the SBU-D of the KSEB Ltd for the respective years for the purpose of tariff determination. The ARR of the SBU-T estimated for the year 2016-17 is Rs.881.30 crore and the same for the year 2017-18 is Rs.905.20 crore.
- 9.57 Based on the above decisions, the summary of the ARR for SBU-D approved for the years 2016-17 & 2017-18 is given below.

Table 9.30
Summary of the ARR of SBU-D approved for the years 2016-17 & 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Cost of own power Generation (ARR of SBU-G)	672.61	677.48
Intra-state transmission charges (ARR of SBU-T)	881.30	905.20
Power Purchase	7752.76	7339.34
Interest & Finance charges	981.79	998.68
Depreciation	58.12	58.12
O&M expenses	1326.62	1440.36
RoE	68.64	68.64
Total ARR	11741.84	11487.82

CHAPTER-10 TARIFF AND NON-TARIFF REVENUE

Introduction

10.1 The Commission had, vide the order dated 14-08-2014, revised the retail tariff of all categories of consumers in the State. The Bulk Supply Tariffs (BST) applicable to small licensees were also revised vide the order dated 25-09-2014. The revenue from sale of power, estimated for the years 2016-17 and 2017-18 are based on the prevailing tariff rates.

Revenue from Tariff

10.2 The revenue from tariff estimated by the Commission vide the suo motu proceedings dated 22-6-2016 is given below.

Table 10.1
Revenue at existing tariff estimated by the Commission
(vide the notice issued by the Commission as per the suo motu notice dated
22-6-2016)

Category	2016-17		2017-18	
	Energy sale(MU)	Revenue at existing tariff(Rs.Cr)	Energy sale(MU)	Revenue at existing tariff(Rs.Cr)
LT Category				
Domestic	10477.77	3939.64	11106.44	4176.02
Commercial	2705.57	2245.63	2881.44	2391.59
Industrial	1152.31	686.77	1170.74	697.76
Agricultural	358.80	85.75	376.38	89.95
Street Lights	369.00	138.38	387.08	145.16
Sub total LT	15063.45	7096.17	15922.08	7500.49
HT category				
HT I. Industrial	1932.61	1178.89	1980.93	1208.37
HTII. Non-Ind -Non-Comml	139.81	132.82	142.47	135.35
HTIII -Agriculture	8.01	3.85	8.17	3.92
HT IV- Commercial	1109.43	998.49	1197.08	1089.34
EHT 66/110/220 KV	1338.18	756.07	1370.30	774.22
Railway Traction	252.58	145.23	267.73	153.95
Bulk Supply	639.68	379.33	683.82	395.25
Sub total HT& EHT	5420.32	3594.69	5650.50	3760.39
Total	20483.77	10690.87	21572.57	11260.88

Objections of the stakeholders

- 10.3 KSEB Ltd has, vide the submission dated 26-07-2016 submitted the revised energy sale forecast and revenue from sale for the years 2016-17 and 2017-18. The details are given below.

Table 10.2
Revenue from sale of power approved by KSEB Ltd

Category	2016-17		2017-18	
	Consumption MU	Revenue Rs crore	Consumption MU	Revenue Rs crore
LT - I - Domestic	10648.42	4003.80	11393.81	4284.07
LT - VI and LT VII	3030.24	2513.67	3250.84	2696.72
LT- IV -Industrial	1109.91	661.50	1116.63	665.50
LT-V-Agricultural	283.41	67.73	287.40	68.69
LT-Street Lights	378.45	141.92	390.67	146.51
LT II-Colony	7.90	6.13	8.60	6.67
LT Total	15458.34	7394.76	16447.94	7868.16
HT I-Industry	1929.26	1176.84	2009.59	1225.85
HT II-General	730.07	693.57	766.58	728.25
HTIII-Agriculture	6.85	3.29	7.05	3.39
HT IV-Commercial	622.01	559.81	653.11	587.80
HT V-Domestic	11.18	86.44	11.74	90.77
HT Total	3299.36	2519.96	3448.06	2636.05
EHT-I,II&III	1026.55	580.00	1059.70	598.73
Railway Traction	232.06	133.43	242.03	139.17
Bulk Licensees/	609.39	350.39	642.30	369.31
HT & EHT Total	5167.36	3583.78	5392.09	3743.25
Total	20625.70	10978.54	21840.03	11611.42

- 10.4 The HT&EHT Association has suggested to adopt the energy sale forecast and energy from sale of power estimated by KSEB Ltd for the years 2016-17 and 2017-18.

Analysis of the Commission

- 10.5 The Commission has examined the energy sale forecast and the revenue from sale of power as submitted by KSEB Ltd. As detailed in Chapter-5 of this order, since KSEB Ltd has not submitted necessary details of the impact of tariff revision as ordered by the Commission during the years 2013-14 and 2014-15, the Commission provisionally adopts the category wise energy sale estimated by KSEB Ltd for the years 2016-17 and 2017-18.
- 10.6 The Commission has also examined the revenue from sale of power estimated by KSEB Ltd vide the submission dated 26-07-2016. It is seen that, there is an arithmetical error in the revenue estimated for HT-V category. However, KSEB Ltd has, vide the additional submission dated 8-09-2016,

corrected the mistake. The revenue from sale of power estimated for the years 2016-17 and 2017-18 is detailed below.

Table 10.3
Revenue from sale of power estimated for the years 2016-17 & 2017-18

Category	2016-17			2017-18		
	Consumption MU	Revenue Rs crore	Avg rate (Rs/ kWh)	Consumption MU	Revenue Rs crore	Avg rate (Rs/ kWh)
LT-I-Domestic	10648.42	4003.80	3.76	11393.81	4284.07	3.76
LT-VI and VII	3030.24	2513.67	8.30	3250.84	2696.72	8.30
LT-IV-Industrial	1109.91	661.50	5.96	1116.63	665.50	5.96
LT-V-Agricultural	283.41	67.73	2.39	287.40	68.69	2.39
LT-Street Lights	378.45	141.92	3.75	390.67	146.51	3.75
LT II-Colony	7.90	6.13	7.76	8.60	6.67	7.76
LT Total	15458.33	7394.75	4.78	16447.95	7868.16	4.78
HT I-Industrial	1929.26	1176.84	6.10	2009.59	1225.85	6.10
HT II-General	730.07	693.57	9.50	766.58	728.25	9.50
HTIII-Agriculture	6.85	3.29	4.80	7.05	3.39	4.81
HT IV-Commercial	622.01	559.81	9.00	653.11	587.80	9.00
HT V-Domestic	11.18	8.64	7.73	11.74	9.08	7.73
HT Total	3299.37	2442.15	7.40	3448.07	2554.37	7.41
EHT-I,II&III	1026.55	580.00	5.65	1059.70	598.73	5.65
Railway Traction	232.06	133.43	5.75	242.03	139.17	5.75
Bulk Licensees/ consumers	609.39	350.39	5.75	642.30	369.31	5.75
HT & EHT Total	5167.37	3505.97	6.78	5392.10	3661.58	6.79
Total	20625.70	10900.72	5.29	21840.05	11529.74	5.28

Non-tariff Income

10.7 Vide the notice dated 22.06.2016 in the suo motu proceedings, the Commission has estimated the non-tariff income as detailed below.

Table 10.4
Non-tariff income estimated by the Commission

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Meter rent	93	95
Testing fee, penalty etc, meter box	70	72
Interest from banks	60	60
Rebate	98	100
Income from sale of scrap	40	42
Miscellaneous receipt	70	70
Total	431	439

- 10.8 The KSEB Ltd or the HT&EHT Association or any other stakeholder had not raised any objections on the non-tariff income estimated by the Commission vide the suo motu proceedings dated 22-6-2016.
- 10.9 The Commission had, vide the order dated 14-8-2014 in OP No. 9 of 2014, directed KSEB Ltd that, '*KSEB Ltd shall explore and implement schemes and programs for utilization of unutilized or underutilized skills of the technical cadre for revenue earning consultancy or contracts outside*'. However, it seems that, KSEB Ltd has not so far implemented such schemes. The Commission is of the view that, if such schemes are implemented, there would be at least an additional revenue of about Rs.10 crore under non-tariff income. Accordingly, the non-tariff incomes approved for the years 2016-17 and 2017-18 are as detailed below.

Table 10.5
Non-tariff income approved for the years 2016-17 & 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Meter rent	93	95
Testing fee, penalty etc, meter box etc	70	72
Interest from banks	60	60
Rebate	98	100
Income from sale of scrap	40	42
Miscellaneous receipt	70	70
Additional income by utilisation of unutilised/ under utilised skills of technical cadre for consultancy works	10	10
Total	441	449

Total expected revenue from charges

- 10.10 The total revenues from the tariff and the non-tariff incomes approved for the years 2016-17 and 2017-18 are summarized below.

Table 10.6
Revenue from existing tariff and non-tariff income approved
for the years 2016-17 and 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Tariff Income	10900.72	11529.74
Non-tariff income	441.00	449.00
Total	11341.72	11978.74

CHAPTER-11

SUMMARY OF THE ARR & ERC OF SBU-D OF KSEB LTD FOR THE YEARS 2016-17 AND 2017-18

- 11.1 The details of the ARR approved for the SBU-G of the KSEB Ltd for the years 2016-17 and 2017-18 are discussed in detail in chapter-7 of this order. Its summary is given below.

Table 11.1
Summary of the ARR of SBU-G

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Interest & Finance charges	220.84	221.29
Depreciation	172.43	172.43
O&M expenses	75.71	80.13
RoE	203.63	203.63
Total ARR	672.61	677.48

The ARR of the SBU-G is the cost of its generation of power which is fully transferred to the SBU-D for distribution and therefore the ARR of SBU-G shall be added to the ARR of the SBU-D of KSEB Ltd.

- 11.2 The details of the ARR of the SBU-T of KSEB Ltd, approved for the years 2016-17 and 2017-18 are discussed in detail in chapter-8 of this order. Its summary is given below.

Table 11.2
Summary of the ARR of SBU-T

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Interest & Finance charges	285.64	286.58
Depreciation	184.25	184.25
O&M expenses	193.82	216.78
RoE	217.59	217.59
Total ARR	881.30	905.20

At present the SBU-D of the KSEB Ltd is the only long term and medium term user of the transmission system of SBU-T of KSEB Ltd. Hence the entire ARR of the SBU-T is added to the ARR of the SBU-D of KSEB Ltd.

- 11.3 The details of the ARR of the SBU-D of KSEB Ltd for the years 2016-17 and 2017-18 are discussed in chapter-9 of this order. Its summary is given below.

Table 11.3
Summary of the ARR of SBU-D approved for the years 2016-17 & 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Cost of own power Generation (ARR of SBU-G)	672.61	677.48
Transmission charges (ARR of SBU-T)	881.30	905.20
Power Purchase	7752.76	7339.34
Interest & Finance charges	981.79	998.68
Depreciation	58.12	58.12
O&M expenses	1326.62	1440.36
RoE	68.64	68.64
Total ARR	11741.84	11487.82

11.4 The summary of the total expected revenue from charges for the years 2016-17 and 2017-18 is detailed below.

Table 11.4
Revenue from existing tariff and non-tariff income approved for the years 2016-17 and 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Tariff Income	10900.72	11529.74
Non-tariff income	441.00	449.00
Total	11331.72	11968.74

11.5 The overall summary of the ARR&ERC of SBU-D of KSEB Ltd after incorporation of the ARR of SBU-G and SBU-T for the years 2016-17 and 2017-18 is given below.

Table 11.5
Summary of the ARR &ERC approved for SBU (D) of KSEB Ltd for the years 2016-17 and 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Cost of own power Generation (ARR of SBU-G)	672.61	677.48
Transmission charges (ARR of SBU-T)	881.30	905.20
Power Purchase	7752.76	7339.34
Interest & Finance charges	981.79	998.68
Depreciation	58.12	58.12
O&M expenses	1326.62	1440.36
RoE	68.64	68.64
Total ARR	11741.84	11487.82
Non Tariff income	441.00	449.00
Net ARR	11300.84	11038.82
Revenue from Tariff	10900.72	11529.74
Revenue surplus	(400.12)	490.92

CHAPTER -12

IMPORTANT ISSUES RAISED BY THE STAKEHOLDERS ON THE DETERMINATION OF TARIFF IN THE SUO MOTU PROCEEDINGS AND DECISION OF THE COMMISSION

12.1 The Commission has initiated the suo motu proceedings for determination of tariff as per notice dated 22.06.2016. A public hearing was conducted on the said notice on 27.07.2016. After considering the views of the stakeholders received in the public hearing and in writing, the Commission provisionally decided to revise the tariff. The Commission invited objections, suggestions and remarks of all the stakeholders, on the proposal dated 01.12.2016 to revise tariff, after publishing it in the newspapers on 05.12.2016 and in the website of the Commission. Seven public hearings were conducted in various parts of the States. The Commission received large number of objections, suggestions and remarks in the public hearings and in writing. The important issues raised by the stakeholders and the decisions of the Commission thereon are summarized below.

(a) Request of the agricultural consumers for concessional tariff for pumping water for irrigation.

12.2 All India Kissan Sabha, Cardamon Grower's association, Coffee Growers and other similar consumer groups have requested to make available to them the electricity used for pumping water for irrigating cardamom, coffee etc under LT-V(A) agriculture category instead of the prevailing tariff of LT-IV (A) industrial tariff. The Commission had also received representation to the effect that industrial tariff was being applied even to coconut plantations where inter cropping with nutmeg, pepper, cocoa etc. The Commission had, after considering the acute labour, climatic and financial problems faced by the cultivators of agricultural crops, provisionally decided that the electricity used for pumping water for irrigation and de-watering may be categorized under LT-V(A) agriculture tariff, irrespective of whether the irrigation or de-watering is for cash crop or for food crop or for mixed crops. No licensee has objected to this proposal.

Decision of the Commission

12.3 The Commission has, after discussion, decided to implement the said proposal since the purpose of pumping water is the same irrespective of the agricultural crops.

(b) Tariff for drinking water supply schemes such as Jalanidhi and Jaladhara

- 12.4 Dr. V. K. Baby, Special Secretary to Government, Local Self Government Department, Government of Kerala has, vide the D.O letter dated 11-1-2017 requested to re-classify the drinking water supply schemes such as Jalanidhi and Jaladhara under LT-I Domestic tariff, as was being done in the past. Smt. Tinku Biswal, Executive Director, Jalanidhi, Thiruvananthapuram has, vide the letter dated 3-1-2017, also made similar request to include the community water supply schemes under LT-1 domestic tariff.
- 12.5 Considering the representations from the above authorities and from various beneficiary consumer groups, the Commission had proposed as follows:

“There are several drinking water supply schemes such as

- (i) Water supply schemes under Jalanidhi, Jaladhara, Sujaladhara projects.*
- (ii) Water supply schemes under the societies and beneficiary committees.*
- (iii) Water supply schemes for the members of Scheduled Caste and Scheduled Tribe.*
- (iv) Water supply schemes for lakshamveedu settlements taken over and managed by local self-government institutions.*
- (v) Water supply schemes established using Local Area Development Funds of MLAs and MPs.*
- (vi) Water supply schemes established using funds of local self-government institutions.*
- (vii) Water supply schemes under peoples participatory schemes and*
- (viii) Water supply schemes under the Rajeev Gandhi Drinking Water Schemes managed by beneficiary groups.*

Presently all the above schemes are categorized under LT-VI(E). There are several requests to re-categorise the said drinking water supply schemes and bring them under LT- I domestic tariff. The consumers in domestic category are also allowed to use electricity under LT- I domestic tariff for pumping of water for their drinking purposes. The Commission is of the view that the beneficiaries of the above mentioned water supply schemes are also eligible for such benefits. Therefore it is proposed to include such water supply schemes in LT- I domestic tariff, with the following system of billing. The total monthly consumption of electricity of such water supply schemes will be divided by the number of beneficiary households and the average consumption per households will be billed under LT – I domestic tariff. The bill amount will then be multiplied by the number of beneficiary households.”

Decision of the Commission

- 12.6 The above proposal of the Commission was generally welcomed. No licensee has also submitted any objection. The Commission therefore decides to implement the above proposal.

(c) The tariff applicable to the victims of Endosulfan in Kasaragod.

- 12.7 Various social workers had brought to the notice of the Commission the plight of Endosulfan victims in Kasaragod Taluk and Hosdurg Taluk in Kasaragod District. It is also informed that there are about 6000 Endosulfan victims mainly in the following Panchayats.

Kasaragod Taluk

Enmakaje Panchayat
Kumbadaje Panchayat
Badiyaduka Panchayat
Bellur Panchayat
Muliyar Panchayat
Karadukka Panchayat

Hosdurg Taluk

Ajanoor Panchayat
Pullur-Perya Panchayat
Panathadi Panchayat
Kayyur-Cheemeni Panchayat

The Commission is aware of the acute problems faced by the families of endosulfan victims as revealed from visual and print media. Therefore the Commission is of the view that, electricity should be made available to the poor families of endosulfan victims at concessional rates. As per the tariff order dated 14.08.2014, electricity up to 40 units per month is supplied at a tariff of Rs. 1.50 / unit, to the consumers belonging to BPL category with connected of and below 1000 Watts. This concession in tariff can be availed by any consumer in the family of endosulfan victims also, provided he / she satisfies the eligibility conditions for such concession. At present, if the consumption of such consumers exceeds 40 units, they are included in the normal domestic category and are billed at the rates specified for each slab. The Commission decides that, if any consumer is an endosulfan victim or any of the members of his / her family is an endosulfan victim, such consumers will be supplied electricity at a rate of Rs. 1.50 / unit, subject to a maximum of 150 units per month, irrespective of the of connected load. The consumer who is eligible for this concession granted to endosulfan victims has to submit to the licensee, a certificate from the revenue authorities or from the local self-government authority to prove his / her eligibility for this tariff concession. If

the consumption of the consumer, who is eligible for the above concession exceeds 150 units per month, the consumption in excess of 150 units will be charged at the rates specified for the slabs 151-200 units or 201-250 units as the case may be. This concession will not be available for the consumers with monthly consumption above 250 units.

(d) Request of domestic consumers to reduce tariff and other charges

12.8 The issues raised by domestic consumers during various public hearings are summarized below.

- (i) Domestic tariff should be reduced
- (ii) Fixed charges should be withdrawn or reduced.
- (iii) The proposed increases in fixed charges and energy charges will unduly burden the domestic consumers at lower consumption slabs especially up to the consumption of 100 units.
- (iv) Extravagant use of electricity should be discouraged by imposing cess and by charging higher rates.
- (v) LED light should be popularized and promoted
- (vi) Non-telescopic tariff should be discontinued.
- (vii) Bills issued by the licensee do not contain necessary and sufficient details
- (viii) Meter rent should be withdrawn or reduced.
- (ix) Cheaper hydel power should be distributed exclusively to domestic consumers.
- (x) Free connection should be given to differently abled persons.
- (xi) The selection of beneficiaries under schemes like RGGVY / DDUGJY should be left to the representatives of people.

Decision of the Commission

12.9 The Commission has examined the anxieties and demands expressed by the domestic consumers. As per the provisions of Section 62 of the Act, the tariff should progressively reflect the cost of supply of electricity. The Commission is of the view that cross subsidy within the domestic category can be permitted within the limits given in the Tariff Policy and that proper price signals should be provided for reduction in wasteful and extravagant consumption. This view has been supported by few stakeholders. It was in view of the above facts, the Commission introduced non-telescopic system for the high end consumers with consumption above 250 units per month in the domestic category. Further, limiting the increase in tariff only to higher end consumers, will increase the intra-category cross subsidy which is not in accordance with the statutory provisions and Policy guidelines. Commission has proposed only unavoidable minimum tariff increase, with a view to

realizing a portion of the present revenue gap so that it can be bridged in next few years. However, Commission has noted that the increase in fixed charges and energy charges would result in a higher percentage of increase in the case of consumers with consumption up to 100 units. Therefore the Commission has decided to minimize the increase in energy charges for consumption up to 100 units. Thus the proposed increase of Re.0.30 per unit in energy charges for consumption up to 50 units in domestic category has been reduced to Re.0.10 per unit and the proposed increase of Re.0.30 per unit in energy charges for consumption from 51 units to 100 units in domestic category has been reduced to Re.0.20 per unit.

- 12.10 The issues relating to meter rent had been addressed by the Commission in the previous tariff order and had rationalized the meter rent based on the cost of meters and their financing and maintenance cost. Section 55 of the Act permits the licensee to realize meter rent and security for the cost of meter if the meter is provided by the licensee. As per the provisions of Electricity Act 2003 and as well as the Supply Code, 2014, the Consumer has the option to purchase the meter and if so, no meter rent will be charged. On the other hand, if the licensee is providing the meter, the licensee is eligible to realize from the consumer, the meter rent as determined by the Commission. The Commission determines the meter rent in accordance with the standard procedures, taking into consideration the cost of meter and the cost for financing and maintenance. No consumer has pointed out any mistake in such calculation. However the Commission would keep in mind the anxieties and concerns expressed by the consumers while the meter rent is revised.
- 12.11 There are representations before the Commission for providing free electricity connection for differently abled persons. As per Section 46 licensee is entitled to recover the expenditure incurred by it for providing connection to a consumer. As a part of 100% electrification, the Government of India and the Government of Kerala have launched various schemes such as RGGVY / DDUGJY to provide electric connection to poor consumers free of cost or at concessional rates. KSEB Ltd and other licensees are implementing such programmes. The eligible consumers, including differently abled persons, have to avail such facilities in accordance with their eligibility. The modus of selection of beneficiaries of such programmes should be in accordance with the procedures prescribed by Government of India / Government of Kerala for such programmes.
- 12.12 There is a demand to discourage extravagant use of electricity by imposing cess and by charging higher rates. The Commission has considered this factor while determining the tariff structure of domestic consumers. However, the Commission does not propose to introduce any cess in addition to tariff, for high end consumers.

12.13 The Commission has already issued directives to the licensees to encourage renewable energy and to improve energy efficiency measures including use of LED bulbs. The Commission has also directed the licensees to provide to the consumers in their bill, all the details as specified in chapter VII of the Supply Code. The licensees have informed the Commission that though the bills generated from the personal digital assistance (PDA) is short and brief, the consumers will be provided the facility to view the full details and download them from the website of the licensee. Further, the licensee will also provide detailed bills, on request from the consumers.

(e) Proposal to increase the 'fixed charge' of LT-IV(A) industrial consumers having connected load less than or equal to 10kW.

12.14 In the draft proposal on determination of tariff, the Commission has proposed to increase the fixed charge of LT-IV(A) industrial consumers having connected load less than or equal to 10kW, from the existing rate of Rs 100/consumer / month to the rate of Rs 25/kW/month. Many small industrial consumers and their associations such as KSSIA, Flour & Oil Millers Association and Rice and Flour Mill Owners Association have requested to withdraw the said proposal on the ground that the increase would badly affect the small scale and cottage industrial units. It was also brought to the notice of the Commission that, such increase would very badly affect the small grinding units, flour mills and such other units run by self-employed women.

Decision of the Commission

12.15 The Commission after detailed discussion decided to withdraw the proposal to increase the fixed charges and to retain the existing rate of fixed charges for the LT –IV (A) Industrial consumers having connected load less than or equal to 10 kW, as determined in the tariff order dated 14.08.2014.

(f) Tariff applicable to Libraries and Reading rooms other than those of educational institutions.

12.16 The Secretary, Kerala State Library Council, Thiruvananthapuram and various rural libraries have represented before the Commission that, the present non-telescopic tariff applicable to the libraries under the Kerala State Library Council is excessively high and requested to provide electricity to them at concessional rates, in view of the poor financial resources of such libraries and the services they render mainly to the rural population. The Commission has considered the request in detail. The libraries and reading rooms other than those of educational institutions are presently categorized under LT-VI General (E) Tariff. The consumer groups included in this category are sports

and arts clubs with connected load not exceeding 2000 Watts, sailing and or swimming clubs with connected load not exceeding 2000 Watts, gymnasium with connected load not exceeding 2000 Watts, libraries and reading rooms other than those of educational institutions, press clubs, offices of political parties approved by Election Commission of India, e-toilet and public comfort station and the drinking water supply schemes such as jalanidhi, jaladhara and swajaladhara. The Commission has decided to change the consumer category of such drinking water supply schemes from LT VI General (E) to LT I Domestic category subject to conditions relating to eligibility and calculation of tariff. The prevailing tariff and proposed tariff under LT-VI General (E) are tabulated hereunder.

Table-12.1
Tariff proposed for LT-VI(E) Category

Particulars	Existing Tariff	Proposed tariff
(a) Fixed charge (Rs/ consumer/month)		
Single phase consumers	20	30
Three phase consumers	60	80
(b) Energy charges (Rs/kWh)		
Upto 50 units	2.80	3.20
Upto 120 units	3.80	4.30
Upto 200 units	4.50	5.00
Above 200 units	6.30	6.50

At present the above tariffs are non-telescopic. The main grievance of the libraries is that, in the present non-telescopic tariff system in LT VI General (E) category, as and when the consumption crosses the limits fixed for the slab, the consumers will have to pay electric charges for the entire consumption at the rates specified for that slab.

Decision of the Commission

- 12.17 The Commission is of the considered view that, if the present non-telescopic billing is changed to telescopic billing for the consumers in this category with monthly ceiling up to 200 units would grant desired relief. However, the consumers having monthly consumption above 200 units shall be billed under non-telescopic billing system at the proposed rate of Rs.6.50/ unit. Further, the libraries and reading rooms with connected load of and below 2000 watts and monthly consumption of and below 100 units are brought under LT-VI-General (D). The tariff approved for LT VI General (E) category is given in the table below.

Table 12.2
Tariff approved for LT-VI(E) category

Particulars	Approved tariff
(a) Fixed charge (Rs/ consumer/month)	
Single phase consumers	30
Three phase consumers	80
(b) Energy charges (Rs/kWh)	
1 to 50 units	3.20
51 to 100 units	4.30
101 to 200 units	5.00
Above 200 units (non-telescopic for the entire consumption)	6.50

The tariff for consumption above 200 units shall be Rs.6.50 / unit for the entire consumption.

(g) Re-categorization of call centers to LT IV (B) IT and IT enabled services

12.18 Based on the directions of the Hon'ble High Court in judgment dated 26th May 2016 in WP (C) No. 31268 of 2015 and, judgment dated 24th September-2014 in WP (C) No. 8902 of 2013, the Government has instructed the Chief Executive Officer, Technopark to file a petition before the KSERC for categorizing the 'call centers' under LT-IV (B) IT & IT enabled services. Accordingly, M/s Technopark has filed a petition before the Commission on 04-11-2016, to categorise the 'call centers' under LT-IV (B) IT and IT enabled services in accordance with the IT Policy of the Government. M/s Technopark has presented the details of the petition during the public hearing at Thiruvananthapuram on 17-01-2017. Several other call centers have also given representation to the effect that they should be granted industrial tariff in accordance with the IT policy of the Government. As per the prevailing tariff order dated 14-8-2014, the call centers are categorized under LT-VI (F) category tariff along with computer training institutes.

Decision of the Commission

12.19 In due deference to the Policy guidelines of the State Government in its IT Policy and considering the nature of works in the present call centres, the Commission decides to categorise the call centers under LT-IV (B) IT and IT enabled services.

(h) Kochi Metro Rail Corporation Ltd (KMRL)

12.20 During the public hearing at Ernakulam, the representative of the KMRL requested before the Commission to create a special tariff category for KMRL with a lesser tariff than that of Railway traction tariff prevailing in the State. The Commission had, vide its letter dated 7-4-2016, provisionally decided to extent the railway traction tariff to KMRL. During the public hearing it was brought to the notice of the Commission that, the major income of Indian Railways is from goods trains and the additional income from goods trains would set off the loss sustained from passenger trains. In the case of KMRL, the metro rail is only for the mass transport of passengers and there is no goods transport. KMRL also has invested huge amounts for the Kochi Metro Rail Project. Therefore KMRL requested for a concessional tariff. It is noticed that, in other states, the tariff applicable to 'metro rail corporations are slightly less (by about Rs 0.20/unit to Rs 0.50 per unit) than the energy charges applicable to railway traction. The present and proposed tariff for railway traction is given below.

Table 12.3
Existing and proposed tariff for Railway traction

Particulars	Existing tariff	Proposed Tariff
Demand charge (Rs/ kVA/ month)	250	250
Energy charges (Rs/ kWh)	4.80	5.10

Decision of the Commission

12.21 Considering the above facts the Commission has decided to fix the energy charge applicable to railway traction of KMRL at Rs.4.80 / unit.

(i) Request of the private hospitals to grant a reduced tariff or to equate their tariff to that of Government hospitals

12.22 Kerala Rural Private Hospital Association, during the public hearing held at Kozhikode on 28-12-2016 has submitted that, the rural private hospitals in Kerala are in a disadvantageous position. Hence they requested for a separate tariff category for private hospitals in rural areas or the LT-VI(A) tariff, the tariff applicable to Government hospitals may be extended to them.

12.23 The Qualified Private Medical Practitioners' Association, (QPMPA), had submitted a separate petition for reclassification of tariff of the members of the petitioner association, who are presently categorised under Low Tension VI (F) at LT level and High Tension II (B) at HT level. The request was to classify them under in Low Tension IV (A) Industry and High Tension – I -

Industry (A) category. The petitioner had pointed out several decisions of the Hon'ble Supreme Court to substantiate their claim to include them in the industrial category. The Commission had found that the said judgments of the Hon'ble Supreme Court were with reference to the Industrial Disputes Act and that the Commission has classified manufacturing industry, hotel industry, tourism industry, IT industry, etc., into different consumer categories depending upon the nature, the purpose and the socio-economic importance. The Commission had disposed of the petition with the finding that private hospitals are not entitled for the tariffs applicable to LT IV (A) and HT I (A) categories.

- 12.24 The Lissie Hospital had submitted a petition to the effect that the tariff applicable to the private hospitals run by the societies registered under Travancore- Cochin Literary, Scientific and Charitable Societies Registration Act, 1955, should be made applicable to the private hospitals run by Charitable Trust registered under the Indian Trust Act. The Commission had disposed of the above petition finding that 'the private hospitals managed by the charitable trusts registered under the Trust Act are not eligible for the tariff applicable to the consumers of LT VI A and HT II A categories, which are applicable to the private hospitals managed by the charitable societies registered under the Travancore -Cochin Literary, Scientific and Charitable Societies Registration Act, 1955'. At present, the Government hospitals and the private hospitals registered under Travancore- Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 are categorized under LT VI(A)/ HT-II(A) category. The other private hospitals are generally categorized under LT-VI(F)/ HT-II(B) category. The Hon'ble APTEL has, in its various judgments, decided that, the private hospitals cannot be equated to Government hospitals for tariff categorization. (Judgment dated 28.2.2012 issued by Hon'ble APTEL in petition No 39/2012 - Rajasthan Engineering College Society vs. Rajasthan Electricity Regulatory Commission & Others; Judgment in appeal No 300 of 2013).
- 12.25 The Commission has found that even in the hospitals run by Charitable Societies and by Charitable Trust, only very few patients are given health care facilities at nominal charges. The majority of patients who occupy non-A/c rooms or A/c rooms are charged at higher rates. The major consumption in such hospitals is for air conditioning and such other facilities.
- 12.26 The Commission has collected the details of consumption of the private hospitals billed under LT- VI (F) category by the KSEB Ltd. The said details are given below.

Table 12.4
Details of private hospitals billed under LT

Monthly consumption	Consumer strength			Annual consumption		
	Number	%	Cumulative percentage	Consumption (%)	Cumulative percentage	Annual consumption (MU)
Up to 100 units	3301	33.9%	68.4%	1.60%	13.60%	11.76
101 to 200 units	1329	13.6%		2.70%		
201 to 300 units	843	8.6%		2.80%		
301 to 400 units	665	6.8%		3.20%		
401 to 500 units	527	5.4%		3.30%		
501 to 1000 units	1340	13.7%		13.1%		11.33
1001 to 2000 units	832	8.5%		16.20%		14.01
2000 to 5000 units	652	6.7%		28.1%		24.31
5000 to 10000 units	218	2.2%		20.40%		17.65
>10000 units	43	0.4%		8.60%		7.44
Total	9750	100.0%		100.00%		86.50

From the above details, it can be seen that about 68.4% of the private hospitals billed under LT-VI(F) category are having monthly consumption less than 500 units and their annual consumption is only about 11.76% of the total consumption of private hospitals billed under LT-VI (F).

Decision of the Commission

12.27 The Commission is of the considered view that if the energy charges under LT-VI General (A) applicable to the Government Hospitals is extended to the private hospitals having monthly consumption up to 500 units, the problems faced by the small clinics and private hospitals would be solved. Further, the following non-telescopic tariff can be introduced for the private hospitals having monthly consumption above 500 units. The Commission also has decided to dispense with the difference between the private hospitals run by charitable societies and by others. The existing tariff for the Government hospitals and that for private hospitals are tabulated below.

Table 12.5
Comparison of the existing tariff of Government hospitals and private hospitals

Existing tariff for Government Hospitals		Existing tariff for private hospitals	
Fixed charge (Rs/kW/month)		Fixed charge (Rs/ kW per month)	Existing rate
Single Phase	50	Single Phase	60
Three phase		Three phase	120
Energy Charge		Energy Charge (Rs per unit)	
Of and below 500 units	5.50	0 to 100 units per month	5.80
		0 to 200 units per month	6.50
		0 to 300 units per month	7.20
		0 to 500 units per month	7.80
Above 500 units	6.30	above 500 units per month upto 1000 units per month	9.00
		above 1000 units per month upto 2000 units per month	9.00
		Above 2000 units per month	9.00

12.28 The Commission has decided to introduce a separate tariff category LT-VI(G) for private hospitals as given below.

Table 12.6
Approved tariff for Private Hospitals

Approved tariff for consumers in LT VI General (G) for private hospitals and private clinics	
Fixed charge (Rs/ kW per month)	
Single Phase	60
Three phase	180
Energy Charge (Rs per unit)	
up to 500 units per month	5.50
501 units upto 1000 units per month	6.50
1001 units upto 2000 units per month	7.50
Above 2000 units per month	8.50

By the above decision, the private hospitals and clinics with single phase connection and a consumption up to 500 units, (about 68% of the total private hospitals / clinics) can avail electricity at the same energy charge as in the case of government hospitals.

(j) Government Medical College, Ernakulam

12.29 The Principal, Government Medical College, Ernakulam represented on 19.12.2016, that, their hospital is an EHT consumer and is presently billed under EHT General category in the absence of appropriate tariff.

Decision of the Commission

12.30 At present there are three consumer categories at EHT level, i.e., EHT Industry (66kV, 110kV and 220 kV), EHT Commercial and EHT-General. EHT General is generally applicable to ISRO and other utility services such as airport, self-financing educational institutions, and other consumers not included in EHT Industry and EHT commercial categories. The Government hospitals including Medical colleges, availing supply at LT is categorized under LT-VI(A) and at HT level categorized under HT-II(A) tariff. There is no separate tariff classification for Government hospitals/ medical colleges availing supply at EHT level.

12.31 As per the tariff determination initiated by the Commission on suo motu basis, the proposed tariff for HT-II(A) category is as follows.

Demand charge	- Rs 350/kVA/month
Energy charge	- Rs 5.30/unit.

12.32 The existing tariff for EHT General is given below.

Demand charge	- Rs 370/kVA/month
Energy charge of and below 60,000 units per month	- Rs 5.80/unit
Above 60,000 units	- Rs 6.80/unit.

12.33 The Commission therefore decides to introduce a new category namely EHT General (A) for the groups of consumers enumerated in LT VI General (A) category having EHT connection and to assign the following tariff to the EHT General (A) category.

Demand charge	- Rs 300/kVA/month
Energy charge	- Rs5.00/unit.

The existing consumers in EHT General category excluding those in EHT General (A) category mentioned above, will be classified as EHT General (B) category with the present tariff.

(k) Request of LT industrial consumers to increase the limit of LT connection to 160 kVA.

12.34 Many small industrial consumers requested that LT supply may be extended to the industrial consumers having connected load/ contract demand upto 160 kVA instead of the present limit of 100 kVA.

Decision of the Commission

12.35 As per the Regulation-8 of the Kerala Electricity Supply Code-2014 (KESC-2014), the electricity supply has to be availed at 11kV, if the connected load of the consumer is more than 100kVA. The Kerala Electricity Supply Code, 2014 was finalized after detailed deliberations including public hearings etc. The said limit has been fixed by the Commission taking into consideration the techno-economic aspects of the issue. There is no reason to change the said limit fixed for LT industrial connection. However, in the case of deemed HT consumers as on the date of coming into force of the Supply Code, 2014, the Commission has already issued an order on 09.10.2014 in petition No.8/2014. The Commission finds that there is no reason to change the limits fixed for LT industrial connection.

(l) Request of LT industrial consumers to reduce electricity duty under the Kerala Electricity Duty Act, 1963.

12.36 Many industrial consumers and their associations requested that the rate of electricity duty for the LT Industries may be fixed at 10 paise per unit, i.e., at

the same rate applicable to the HT industries, instead of the present rate of 10% of the energy charges.

Decision of the Commission

12.37 The electricity duty under section-4 of the Kerala Electricity Duty Act, 1963 is the statutory levy to the State Government as per the provisions of the said Act. The Commission has no authority to revise the rate of electricity duty payable by the consumers under the provisions of the said Act.

(m) Request to give power supply only to steel fabrication units/ welding units having valid license from local bodies.

12.38 Representatives of the steel fabrication units/ welding units at Kannur, Ernakulam and Pathanamthitta have represented before the Commission to give necessary direction to the KSEB Ltd to give power supply only to the steel fabrication / welding units at construction sites/ outdoor units, having valid license from local bodies.

Decision of the Commission

12.39 The distribution licensee has to provide electricity supply to the consumers as per the provisions of the Electricity Act-2003 and the Kerala Electricity Supply Code, 2014. Central and State Governments have already given direction to relax the conditions for giving electric connection as a part of the Government programmes namely 'electrification of 100% households' and 'Ease of Doing Business'. The requirements of safety and security of such units have to be examined by the electrical inspector. Local Self Government is the authority to decide whether or not the steel fabrication units/ welding units should function with licence. Therefore the Commission cannot grant the above request.

(n) The electricity tariff for electric hydraulic axe may be fixed at LT-IV A industrial tariff instead of LT-VII(A) Commercial tariff.

12.40 One consumer from Mavelikara has submitted that he is running small unit for breaking up the logs into fire wood using 'electric hydraulic kotali machine'. He undertakes such works as job work and also sells fire wood produced by him.

Decision of the Commission

12.41 Kotali is the Malayalam word for axe. Now a days LPG is used extensively for cooking purposes. Very poor families only resort to fire wood. The activity undertaken by this consumer is similar to the saw mills where, logs are converted to smaller sawn pieces. In view of the nature of job and purpose of

use of electricity, the Commission decides to assign LT IV(A) Industrial tariff to the said activity.

(o) Tariff increase for LT-IV (B) IT & IT enabled services.

12.42 M/s Technopark has submitted that, majority of the consumers of the licensee are LT-IV (B) Industry, IT and IT enabled services. The licensee requested for proportional increase in tariff for LT-IV (B) category in line with the increase in tariff proposed for LT-IV(A) industrial consumers.

Decision of the Commission

12.43 As per the prevailing tariff, the fixed charge of LT-IV (A) Industry and LT-IV (B) IT and IT enabled services are the same. However, the energy charge of LT-IV Industry is Rs 5.20/unit and the energy charge of LT-IV (B) IT & IT enabled services is Rs 5.80 per unit. The details are given below.

Table 12.7
Existing tariff for LT-IV (A) and LT-IV (B) category

	Particulars	LT-IV (A)	LT-IV (B)
1	Fixed charges		
	(a) Below 10kW (Rs/ consumer per month)	100	100
	(b) Above 10 kW and upto 20kW (Rs/kW/month)	60	60
	(c) Above 20kW (Rs/ kVA/ month)	125	125
2	Energy charge (Rs/ kWh)		
	Below 10 KW	5.20	5.80
	Above 10 kW and upto 20kW	5.20	5.80
	Above 20kW	5.20	5.80

12.44 In the proposals for determination of tariff in the suo motu proceedings, the Commission has proposed to increase the energy charge of LT-IV (A) consumers by Rs 0.30/unit and the demand charge of LT-IV (A) category by Rs 15/kW/month for connected load 'above 10 kW and upto 20kW' and Rs 25/kW/month for industrial consumers having connected load above 20kW. The vast majority of consumers in the category of LT-IV (B) IT and IT enabled services are served by the small licensees such as Technopark, Cochin Port Trust, Cochin Special Economic Zone Authority (CSEZA), KINESCO Power and Utilities Private Limited (KPUPL) and Infopark. The Commission has proposed to increase the bulk supply tariff of the said licensees. Therefore the Commission is of the considered view that the tariff applicable to the consumers in the category of LT-IV (B) IT and IT enabled services should also be appropriately increased. However in view of the importance of the IT and IT enabled industries, especially in the field of employment generation, the Commission decides to increase the energy charge applicable to the said

category only nominally from the present rate of Rs.5.80 / unit to Rs.6.00 / unit.

(p) Tariff applicable to Computer Training Institutes

12.45 M/s Logic Institute of Technology has filed a petition for categorizing the Computer Training Institute under LT-IV (B) IT and IT enabled services from the present category of LT-VI(F).

Decision of the Commission

12.46 At present computer training institutes are categorized under LT-VI(F) category along with self-financing educational institutions. It is noted that, the computer training institutes in the State are self-financing educational institutions which decide their fee and other charges by themselves. Hence it is found that, there is no reason to change the present tariff category of the computer training institutes.

(q) Request for increasing the generation based incentive (GBI) for the solar generation

12.47 Many consumers and stakeholders requested to promote renewable energy and to increase the present rate the GBI for off grid solar PV systems which has been fixed at Re. 1.00 per unit.

Decision of the Commission

12.48 The Commission vide the order dated 30-09-2014 has approved GBI at a rate of Re 1.00 per unit for Off Grid Captive Solar Power Plants and it was also directed that the licensees which pay such GBI can account such solar generation for meeting the solar RPO of the distribution licensees. It is noted that, the floor price of solar REC was in the range of Rs 3.50 / unit and hence the distribution licensees had considerable benefit by paying GBI at a rate of Re.1/unit since the licensee accounts such solar generation under their solar RPO. However, recently the CERC vide the draft order dated 28th February 2017 has proposed to reduce the floor price of solar REC to Re.1.00 / unit. It is also noted that the rate of solar energy as per the recent tenders is coming down. Therefore the Commission is of the view that there is no need to increase the GBI for solar generation from the present rate of Re.1.00/ unit.

(r) Educational Institutions run by IHRD

12.49 The Director, IHRD, Trivandrum during the hearing held at Thiruvananthapuram on 17-1-2017, has submitted that, IHRD is managed by GoK and registered under the Travancore, Cochin, Literary Scientific and

Charitable Societies Registration Act-1955. About 86 educational institutions are functioning under IHRD. It also receives grant-in-aid from the Government. The rules and regulations of Government institutions are generally followed by them. Presently the tariff applicable to the educational institutions under IHRD is LT-VI(F), the tariff applicable to self-financing educational institutions. They requested to re-categorise them under LT-VI(A), at the tariff applicable to Government or aided educational institutions.

Decision of the Commission

12.50 As per the prevailing tariff categorization, all the self-financing educational institutions are classified under LT-VI (F), irrespective of whether or not such educational institutions are under private management or under Government. As per the information available, the fee structure of the educational institutions run by IHRD is also same as that of the self-financing educational institutions run by private management. The Government has, vide the G.O (Ms) No. 55/2017/HEDN dated 14-2-2017, issued orders to the effect that all the institutions under the Institute of Human Resources Development (IHRD) may be treated on par with Government/ aided colleges for charging electricity tariff by KSEB Ltd., students scholarships, reimbursement of fee for SC / ST / OBC students, annual affiliation fee to the Universities etc. Though the said Government Order is not seen issued with concurrence of the Government in Power Department, the Commission, in compliance to the said GO, decides to include the educational institutions under IHRD also in LT VI General (A) and HT II (A).

(s) Representation from Kerala Television Federation, Thiruvananthapuram.

12.51 The Kerala Television Federation (KTF) has submitted a representation before the Commission for categorizing them under Industrial tariff instead commercial tariff. KTF claimed that, the federation is the recognized body of the television channels operating in Kerala. According to them, they are eligible to get the industrial tariff, which is allowed to print media. Subsequently KTF has confined their claim to the TV channels exclusively for telecasting news.

Decision of the Commission

12.52 As per the prevailing tariff schedule, the TV channels including Doordarshan and other broad casting companies, All India Radio, cable TV network, radio stations etc are categorized under LT-VI(F) under LT and HT-II(B) under HT category. No reasonable ground has been presented by the KTF for differentiating TV news channels from the other TV channels and Doordarshan, for the purpose of tariff determination. Therefore it is decided to continue the TV channels in the present category.

(t) Arguments of the HT& EHT Industrial Consumers Association in respect of past revenue gap.

12.53 The HT &EHT Industrial Electricity Consumers' Association (herein after referred as HT&EHT Association) has submitted that, the provisionally assessed revenue gap for the years 2011-12 and 2012-13 may not be considered while determining the tariff on suo motu basis, on the following grounds.

- (i) There was substantial delay in filing the application for approval of the truing up of accounts for the year 2011-12 and 2012-13. As per the *Supreme Court of India Judgment on: (2009) 6 SCC 235 dated March 3, 2009 in Civil Appeal No. 1110 of 2007 in UPPCL & Others vs. NTPC*, the revenue gap, if any approved, shall not be passed on to the consumers through tariff.
- (ii) As per the Second Transfer Scheme notified by the State Government on 31-10-2013 and subsequent notification dated 28-1-2015, the KSEB Ltd (the successor entity to the erstwhile KSEB) was created with a clean balance sheet with no past liabilities, revenue gap or outstanding regulatory assets. Hence KSEB Ltd cannot have any claim for the regulatory assets to be recovered from the consumers, since such past liabilities have already been adjusted with the State Government.
- (iii) KSEB Ltd is likely to sign tripartite UDAY agreement with Gol and State Government, wherein 75% of the loans would be taken over by GoK.

Decision of the Commission

12.54 The Commission has considered the arguments of the HT & EHT Association, in view of the relevant regulations, provisions in Tariff Policy and the judgments of the Hon'ble APTEL. In its judgment, dated 30-05-2015, in Appeal petition No. 147, 148 and 150 of 2013, the Hon'ble APTEL, had decided on the modus of treating the revenue gap approved in the process of truing up, when there is substantial delay in filing the applications for approval of truing up of accounts.

The relevant portion of the said judgment is extracted below.

"15. Let us examine the Tariff Policy notified by the Central Government in compliance with Section 3 of the Electricity Act, 2003.

The relevant para 8.1 (7) is reproduced as under:

"Appropriate Commission should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee."

16. This issue has been considered by this Tribunal in judgment dated 19.9.2007 in Appeal no. 70 of 2007.

“5. We now proceed to examine the tariff policy, paragraph 8.1.7 as extracted above. In our opinion the entire paragraph has to be read to interpret the expression given therein. The intention of the government in this part of the tariff policy is to maintain discipline in the matter of date of commencement of every new tariff. The policy says that it is desirable that MYT tariff should come to effect in the beginning of the financial year. The policy does not say that the tariff changes will come into effect at the commencement of the financial year irrespective of any prohibitive situation that may arise for various reasons. There can be no quarrel that if the tariff changes take place at the beginning of the financial year it becomes convenient for all the players in the electricity market as well as for the end consumers. In order to make this possible an advice is given to Appropriate Commissions to initiate tariff determination and regulatory scrutiny on a suomoto basis in case the licensee does not initiate filings in time. However, suomoto initiation of tariff determination may not be an easy process. A large amount of data is required for determination of tariff. Without a tariff petition being filed by a licensee the Appropriate Commission may find it quite difficult to collect and collate the necessary data and to fix a tariff. If the appropriate Commission is able to so determine the tariff on suomoto scrutiny, the same may be different from the tariff which could have been framed on an ARR and tariff petition with relevant data filed by a licensee. It is in this context that the tariff policy says that if there is a gap of this nature the licensee should be made to bear the same. This provision has been made to discourage the licensee from delaying its tariff petition and for compelling the Appropriate Commission to go into suomoto determination of tariff in the next financial year.

6. Undoubtedly, the suomoto tariff determination will commence only if the ARR filing is inordinately delayed. It is not expected that whenever ARR filing is delayed the Appropriate Commission would suomoto start initiating the exercise of tariff determination. In our considered view the last clause of para 8.1.7 of the tariff policy comes into play only when the ARR filing is so enormously delayed that the appropriate Commission is made to issue a tariff on its own suomoto regulatory scrutiny.

7. Further “any gap” on account of delay in filing has to be properly understood. The tariff policy is silent about the meaning and calculation of “gap”. The sole aim of tariff fixation by an independent body like the Appropriate Commission is to ensure viability of the licensees while maintaining a reasonable price for the consumer. Therefore, the cost of supply has to be met out of revenue earned by sale of electricity. In case the

MYT tariff comes into effect a month later than the day on which it was expected, the required annual revenue minus the revenue realized in that month will have to be recovered in the remaining months of that period. In such a situation the increased cost of the new period will have to be distributed over the remaining period of the MYT. The other way of fixing the tariff, in case of a delay, would be to distribute the ARR over the entire tariff period so that some amount of revenue for the delayed period remains under-recovered. Here again the under-recovered amount has to be recovered in order to maintain the viability of the licensee. However, if the under-recovery caused by increase in tariff is recovered in the rest of the MYT period a carrying cost will be involved. This carrying cost will be an additional burden which, in all fairness, should not be imposed on the consumer and has to be on account of the licensee.

8. In the present case the gap between the beginning of the FY and the date when the new MYT becomes effective is nearly a month. The loss of revenue in this given situation is Rs.88 Crores. This loss could be much higher if the delay in tariff fixation had been longer. In a given situation, if the licensee is unable to file the ARR petition due to some reasons will it be proper to say that tariff policy requires such difference to be denied to the licensee forever? The answer clearly is 'NO'. All that can be denied to a licensee in this situation is the carrying cost and not the legitimate claim towards revenue.

9. It has to be understood that the consumer has to pay for the electricity supplied to him. As per Section 61 of The Electricity Act 2003 the Appropriate Commission fixes the tariff safeguarding, inter alia, interest of consumers and at the same time, recovery of cost of electricity in a reasonable manner. Therefore, there is nothing unjust in recovering the sheer cost of supply of electricity from the consumers. It is not an additional burden on the consumer. The consumer in the present example would have paid the same tariff had the ARR and tariff petition been filed in time. Only, the tariff order comes into effect a month later. The expression used by the Commission namely "financial implications caused solely due to late submission of MYT applications by the licensees should not be passed on to the hapless consumers" indicates misplaced sympathy. In case consumer is made to pay more than the cost of supply he can be described as hapless. Secondly the financial implication caused solely due to late submission is only the delay in recovery and not the increase in tariff. It is not the case of the MERC that the tariff has gone up because of late filing. Only the determination of tariff is delayed because of late filing. The financial implication of the delay is nothing but the carrying cost. The consumer cannot be burdened with this resulting carrying

cost because the delay has not been caused on account of their default.”

17. The findings of the Tribunal in Appeal no. 70 of 2007 will squarely apply to the present case. Accordingly, the revenue gap for FY 2011-12 and 2013-14 has to be allowed to the Appellant. However, carrying cost, if any, for the period of delay in filing the ARR/Tariff petition shall not be allowed.”

12.55 Similarly, in the judgment dated 28-11-2013, in Appeal No. 190/2011, the Hon'ble APTEL has also decided on circumstances under which the utilities are eligible for carrying cost. The relevant portion of the said judgment is extracted below.

81.It is settled law that the carrying cost for legitimate expenditure has to be provided. In fact, this principle has been laid down in Appeal No.203 of 2010 and RP No.13 of 2012 by the Tribunal in its order dated 2.1.2013. The very same issue has been dealt with in another decision in Appeal No.36 of 2008.

82. That apart, this Tribunal again in Appeal No.153 of 2009 dated 30.7.2010 reported in 2010 ELR (APTEL) 0891 and Appeal No. 173 of 2009 dated 13.9.2012 has also dealt the very same issue.

83. The relevant principles which have been laid down in these decisions are extracted below:

- (a) We do appreciate that the State Commission intends to keep the burden on the consumer as low as possible. At the same time, one has to remember that the burden of the consumer is not ultimately reduced by under estimating the cost today and truing it up in future as such method also burdens the consumer with carrying cost.
- (b) The carrying cost is allowed based on the financial principle that whenever the recovery of cost is deferred the financing of the gap in cash flow arranged by the distribution company from lenders and/or promoters and/or accruals, has to be paid for by way of carrying cost.
- (c) The carrying cost is a legitimate expense and therefore recovery of such carrying cost is legitimate expenditure of the distribution company.
- (d) “11.5. The utility is entitled to carrying cost on its claim of legitimate expenditure if the expenditure is:
 - i) accepted but recovery is deferred e.g. interest on regulatory assets,
 - ii) claim not approved within a reasonable time, and

- iii) Disallowed by the State Commission but subsequently allowed by the Superior authority.
- iv) Revenue gap as a result of allowance of legitimate expenditure in the true up. The State Commission shall decide the claim of the Appellant regard to carrying cost on the above principles.

84. In view of the settled position of law, in the present case, the Appellant falls under sub-category (iv) as referred to above, and as such the Appellant is entitled for the Carrying Cost as per the Order dated 17.1.2009. Accordingly, ordered.”

12.56 The Hon'ble APTEL has, in its judgment dated 22.04. 2015 in Appeal No. 174 of 2013, also decided on the computation of carrying cost. The relevant portion of one of the said judgment is extracted below.

“19. Learned Counsel for the Appellant has submitted that the State Commission has only allowed the carrying cost for the deferred revenue only for a period of two years and not till such time the revenue gap is actually recovered in tariff of the Appellant. The decision of the State Commission in the impugned order is contrary to the decision of this Tribunal that carrying cost is to be allowed till such time the deferred revenue is recovered by the utility.

20. According to Learned Counsel for the State Commission carrying cost has been allowed as per the directions of the Tribunal.

21. The Tribunal in its judgment dated 18.10.2012 decided as under

“Carrying cost is normally required to be allowed for late recovery of the revenue requirements and the purpose of carrying costs is to compensate the utility for the revenue requirements that fell short of recovery but to be recovered in future. Therefore, revenue requirements cannot be restricted to a period of two years unless of course the appellant itself is responsible for late submission of true-up petition.”

.....
“11.5 On the basis of the above findings of the Tribunal we decide as under:

- i) When the utility gives its projected expenditure under a head in the ARR, the Commission either accepts it or decides a lower expenditure. However, if in the true up of the ARR subsequently the Commission finds that the expenditure which was denied/reduced earlier under*

that head needs to be approved then carrying cost may be allowed for such additional expenditure under that particular head which was denied earlier.

ii) The utility is entitled to carrying cost on his claim of legitimate expenditure if the expenditure is:

- a) accepted but recovery is deferred e.g. interest on regulatory assets*
- b) claim not approved within a reasonable time, and*
- c) disallowed by the State Commission but subsequently allowed by the Superior Authority.*

If the revenue gap is as a result of routine true up carried out in the time frame specified in the Regulations and not on account of genuine expenditure denied on a claim by the appellant earlier or on account of deferred recoveries then no carrying cost may be admissible as the claim was made for the first time at the time of true up. The State Commission shall decide the claim of the appellant on the above principles. Decided accordingly.”

We, therefore, direct the Commission to re-examine the issues upon consideration of the detailed particulars as are and as further may be provided by the appellant before the Commission according to the law.”

22. The Commission in the impugned order has stated that the Commission had been revising the tariff in such a way that the entire gap for the years covered in any tariff order gets recovered in the year of the tariff order itself except in exceptional cases when the Commission determines a Regulatory Asset. The Commission thus allows carrying cost for revenue gap for six months in the year it is built up, twelve months of the ensuing year and for a period of six months in the third year in which it gets recouped through recovery by way of increased tariff. In this way the maximum period for which carrying cost is allowable works out to two years. The Commission has also been allowing carrying cost for a period beyond two years where recovery is deferred for period beyond two years on account of establishment of Regulatory Assets. In the order dated 07.01.2013 the Commission has explained that based on Tribunal’s judgment, carrying cost shortfall on recovery which was not allowed earlier is to be allowed in subsequent years e.g. carrying cost for revenue gap determined for FY 2006-07 (true-up) which is allowed in the tariff year 2008-09 need not to be allowed again in the

subsequent tariff order. The revenue gap determined based on review exercise for FY 2007-08 will be allowed carrying cost in the tariff order for FY 2008-09. Since the revenue gap determined in the review exercise gets adjusted as a result of true up, the carrying cost will be allowable on the additional revenue gap in the subsequent tariff order for FY 2009-10 because there had been shortfall in recovery of additional revenue gap as also carrying cost thereon. According to the Commission, the Appellant is considering carrying cost on revenue gap on a year as recurring expenditure in all subsequent tariff orders and is of the view that Commission should allow carrying cost on revenue gap and interest on carrying cost so that tariff can be determined by the Commission after loading recurring carrying cost in passing a hefty amount to the consumers of the State.

23. The State Commission and the Appellant have given detailed calculations in support of their submissions. It is not possible for us to go into detailed calculation given by them. However, we agree with the explanation given by the State Commission giving the principle used for calculating the carrying cost which has been reproduced in the paragraph 22 above. However, in order to further clarify the principle we reproduce the finding of the Tribunal in a recent judgment dated 08.04.2015 in Appeal no. 160 of 2012 and batch in the matter of Rlnfra Ltd. Vs. Maharashtra Electricity Regulatory Commission and Others. The relevant findings are reproduced below:

“39. The fourth issue is regarding carrying cost on past recoveries raised in Appeals no. 215 and 211 of 2013.

40. The issue relates to the manner of computation of interest on past recoveries. According to the Appellant, the starting point for grant of carrying cost should be the mid year of the cost of incurrence and the end point to be the mid year in which the same is approved to be recovered. The revenue gap for FY 2010-11 approved to be recovered in FY 2013-14 should carry the cost from the mid of FY 2010-11 till mid of FY 2013-14. However, the State Commission in impugned order dated 13.06.2013 in respect of Rlnfra-T has computed the carrying cost from the end of FY 2010-11 till end of FY 2012-13. The cost is incurred evenly throughout the year and the recovery would

also be spread out evenly throughout the year. The impugned order does not grant carrying cost for the year in which the past recoveries had occurred and for the year in which the same is approved to be recovered. In impugned order dated 13.06.2013 in respect of RInfra's generation business, the State Commission has computed carrying cost till mid year of the year in which the recovery is permitted, the starting point is nonetheless the end of the year in which such gap had arisen.

41. According to Learned Counsel for the State Commission, determination of under/over recovery can only happen at the end of the year at the time of true up.

42. We find that for carrying cost the State Commission has considered the revenue gap to be applicable from the end of the year of the occurrence of revenue gap upto the middle of the year in which the same is proposed to be recovered. This is not correct. The interest should be calculated for the period from the middle of the financial year in which the revenue gap had occurred upto the middle of the financial year in which the recovery has been proposed. Thus, for the revenue gap of FY 2010-11, the Commission has to consider interest from middle of FY 2010-11 to middle of FY 2013-14 in which the recovery is proposed. This is because the expenditure is incurred throughout the year and its recovery is also spread out throughout the year. Admittedly, the revenue gap will be determined at the end of the financial year in which the expenditure is incurred. However, the under or over recovery is the resultant of the cost and revenue spread out throughout the year. Similarly, the revenue gap of the past year will be recovered throughout the year in which its recovery is allowed. Therefore, the interest on revenue gap as a result of true up for a financial year should be calculated from the mid of that year till the middle of the year in which such revenue gap is allowed to be recovered.

43. To explain this point let us assume that there is a revenue gap of 12 crores in the true-up of FY 2010-11. If the cost and the revenue and the permitted expenditure had been properly balanced this gap of 12 crores would have been recovered throughout the 12 months of FY 2010-11. Now this revenue gap is allowed to be recovered in tariff during FY 2013-14. The recovery of gap of Rs. 12

crores from the distribution licensee consumers will be spread over the 12 months period of FY 2013-14. Therefore, the carrying cost would be calculated from the middle of FY 2010-11 to middle of FY 2013-14 i.e. 3 years.

44. Accordingly, this issue is decided in favour of the Appellant.

24. For example, if the true up of 2006-07 is carried out in the ARR of 2008-09, the revenue gap of 2006-07 after true up with carrying cost of 2 years has to be added in the ARR of FY 2008-09. If there is a net revenue gap in FY 2008-09 after accounting for the revenue gap on account of true up of FY 2006-07 and carrying cost thereon for two years then that would be the cumulative revenue gap for FY 2008-09. This cumulative revenue gap with carrying cost will be accounted for in the year in which it is proposed to be recovered. If the State Commission has allowed carrying cost on the cumulative revenue gap at the end of a financial year in the subsequent tariff orders as per the explanation given by the Commission then that would be in order. If the above principles have not been followed then the State Commission will reconsider the issue and decide according to above principles.

Accordingly, we remand the matter to the State Commission for reconsideration.”

12.57 The HT&EHT Association further submitted as follows: *"Further, Hon. Supreme Court in UPPCL and Others Vs NTPC Limited in (2009) 6 SCC 235 has ruled "that additional costs shall not be passed on to the new tariff since some persons who are consumers during the tariff year in question may not continue to be consumers and some new consumers might have been added to the system and there is no reason why they should bear the brunt. Hence, it is clear that timely filing of true up of accounts is compulsory in a regulatory regime".*

12.58 KSEB Ltd in its written response to the above contention have submitted that:

"It is humbly submitted that the ratio in the referred Hon'ble Supreme Court Judgment cannot be applied in the instant matter since the facts and circumstances are entirely different.

First of all there has not been any undue delay in filing the true up petitions by KSEB LTD. There has been some delay, which has been explained adequately.

The case reported relates to a claim by NTPC made in 2005 against some expenses incurred by it during 2000-01. CERC denied the claim citing reasons like (i) the 2001 regulations were framed based on

actual expenses up to 2000-01 (ii) NTPC has made several review applications and preferred several appeal petitions during the period between 2001 and 2005; however no claim related to the claim preferred in 2005 was made in any of the earlier proceedings despite the entire facts being available to NTPC from 2000-01 onwards.

When the matter was disposed by the Hon Supreme Court, the claim was denied citing that the tariff determination cannot be a never ending process based on ever new data submitted every now and then by the generating company since new beneficiaries and consumers would be burdened with very old liabilities which could have very well been identified and recovered in the past itself.

Thus, the facts and circumstances in the cited case are entirely different from the instant matter and thus the ratio cannot be imported."

12.59 The Commission has gone through the contentions of both the parties and the order of Hon'ble Supreme Court. The instant order is a common judgment pertaining to Civil Appeals No.1110 of 2007 1138 of 2007 and 1152 of 2007, 1327 of 2007 and 1112 of 2007 between UP Power Corporation Ltd Vs NTPC and others. It has been mentioned therein that:

"We are in this batch of appeals are concerned with the power of the Central Commission to make tariff and to revise the same at the instance of a generating company....."

12.60 The case pertains to disallowance by Central Commission on employee expenditure incurred by NTPC consequent to pay revision. When NTPC went on appeal against the order of Central Commission to Hon'ble APTEL, the same was allowed and it was against this order of APTEL , UP Power Corporation approached the Hon'ble Supreme Court. In the context of the instant case the following points also need to be considered.

- (i) NTPC had created provision for the revision in employee costs and Central Commission had considered these provisions while fixing the norms.
- (ii) NTPC did not lay any claim in respect of the actual revised costs while filing a review petition before the Central Commission in 2003.
- (iii) When norms which have already considered the pay revisions are already in existence, the actuals cannot be considered.
- (iv) When the original petitions were filed before the Central Commission the actual data of employee expenditure was available with NTPC and it did not incorporate the same in its original petition nor in the amended petitions.
- (v) "...the question of exclusion of these expenses cannot be reagitated in the present proceedings as they are barred by the principle of res-judicata...."

- (vi) Revision of a tariff must be distinguished from a review of a tariff order.
- (vii) "They were already aware of the impending revision of scale of pay and had implemented in part, albeit, on a provisional basis. We fail to understand as to why it had filed applications for tariff determination for its generating stations.....Not only that the amended applications did not contain the details of the prescribed data....."
- (viii) "...We have been informed at the bar that the appeals were preferred on other issues but not this one."
- (ix) "Framing of tariff is made in several stages. The generating companies get enough opportunity not only at the stage of making of tariff but may be at a later stage also to put forth its case including the amount it has to spend on operation and maintenance expenses as also escalation It cannot, in our opinion be permitted to re-agitate the said question after passing of many stages.....Some persons who are consumers during the tariff year in question may not continue to be the consumers of the appellant. Some new consumers might have come in. There is no reason as to why they should bear the brunt. Such quick fix attitude, in our opinion, is not contemplated"
- (x) "We are not oblivious of the fact that in Rihand Case, the Central Commission allowed the application of the respondent, but, therein a provision was made therefore in the original tariff order itself. Respondent No.1 had filed a separate I.A claiming the impact of arrears paid by it in....."

12.61 A reading of the facts of the case along with above observation leads the Commission to the conclusion that the above ratio cannot be imported to the present situation due to the following reasons:

- (a) The norms fixed by the Commission had included a provision for the revision of wages and NTPC did not include the actual in the petitions filed in spite of having an opportunity of including the same therein. However it may be noted that another unit which had included the same was allowed the expenses.
- (b) The utility had filed a tariff petition, the Commission determined the tariff and after determination of tariff, the utility approached the commission to revise the tariff so as to incorporate the expenses not included therein. They had an opportunity to revise the figures when they filed a revised petition too which they did not do. It was not a trueing up petition as made out by the HT&EHT Association. In the instant case there has been a delay in filing the true up petition.
- (c) An expenditure which has been incurred by the licensee genuinely

has to be passed on to the consumers after prudence check. In case if there is a lapse and delay on the part of the licensee in filing the true up applications on time the licensee forfeit their carrying cost and not the actual expense incurred which passes the prudence check. This fact has been so decided by Hon'ble APTEL.

(d) On application of decisions of the courts in one case to other similar cases, the Hon'ble Supreme Court in Bharat Petroleum Corporation Ltd. Vs N. R. Vairamani (2004) 8 SCC 579 has observed that:

"9. Courts should not place reliance on decisions without discussing as to how the factual situation fits in with the fact situation of the decision on which reliance is placed. Observations of Courts are neither to be read as Euclid's theorems nor as provisions of the statute and that too taken out of their context. These observations must be read in the context in which they appear to have been stated. Judgments of Courts are not to be construed as statutes. To interpret words, phrases and provisions of a statute, it may become necessary for judges to embark into lengthy discussions but the discussion is meant to explain and not to define. Judges interpret statutes, they do not interpret judgments. They interpret words of statutes; their words are not to be interpreted as statutes. ...

...And, in *Herrington v. British Railways Board* (1972) (2) WLR 537 Lord Morris said: *"There is always peril in treating the words of a speech or judgment as though they are words in a legislative enactment, and it is to be remembered that judicial utterances made in the setting of the facts of a particular case."*

Circumstantial flexibility, one additional or different fact may make a world of difference between conclusions in two cases. Disposal of cases by blindly placing reliance on a decision is not proper.

The following words of Lord Denning in the matter of applying precedents have become locus classicus: *"Each case depends on its own facts and a close similarity between one case and another is not enough because even a single significant detail may alter the entire aspect, in deciding such cases, one should avoid the temptation to decide cases (as said by Cordozo) by matching the colour of one case against the colour of another. To decide therefore, on which side of the line a case falls, the broad resemblance to another case is not at all decisive."*

12.62 As per the Second Transfer Scheme notified by the Government on 31-10-2013, and the notification dated 28.01.2015, the outstanding liabilities on the date of re-vesting are as given below.

Table 12.8
Outstanding liabilities of KSEB Ltd as on 31.10.2013

Particulars	Rs Crore
Current Liabilities:	
Security Deposit from Consumers	2175.11
Other Current Liabilities	1897.08
Other Liabilities	
Borrowings for Working Capital	2816.38
Payments due on Capital Liabilities	2654.57
Terminal Benefit fund	12419.00
Provident Fund	1227.40
Provision for Interest on Bonds adjustable against Electricity Duty	2110.00

Apart from the infusion of cash by way of retention of electricity duty for the enhancement of equity capital to the tune of Rs 1946.00 crore, there was no cash infusion by the Government. As per the details available before the Commission, the State Government has not financed any amount for the liquidation of liabilities of the KSEB Ltd. The absence of regulatory asset in the opening balance sheet is a result of reconstruction of the balance sheet undertaken as part of the restructuring process of KSEB into KSEB Ltd, undertaken by the State Government without any cash infusion by Government of Kerala. It may be noted that, as per the restructured balance sheet, the Gross fixed asset has enhanced from Rs 12972.06 crore as on 31-10-2013 to Rs 24961.05 crore as on 01-11-2013. i.e., in the process of re-vesting the assets and liabilities of erstwhile KSEB in to KSEB Ltd, the GFA has increased by Rs 11988.99 crore by way of re-valuation of assets as per the first proviso to subsection-2 to Section-131 of the Electricity Act-2003. However, the Commission has been not granting depreciation and O&M expenses for the re-valued assets.

- 12.63 Further, as per the re-structured balance sheet, the State Government has knocked out the consumer contribution and grants amounting to Rs 4169.87 crore. However, the Commission while determining the revenue requirement of the KSEB Ltd, did not approve the depreciation on the entire assets created out of consumer contribution and grants. The entire unbridged revenue gap/ liability incurred over the years till 31-10-2013 by the erstwhile KSEB is now the liability of KSEB Ltd and the State Government has not taken any liability of erstwhile KSEB while re-vesting the assets liabilities of it into KSEB Ltd.
- 12.64 Regarding the issue on joining the UDAY scheme, the HT & EHT Association has, as per their letter dated 05.04.2017, brought to the notice of the Commission that KSEB Ltd, Government of Kerala and Government of India have entered into a Memorandum of Understanding (MoU) under UDAY

scheme. The HT & EHT Association has also submitted a copy of the MoU dated 02.03.2017. As per the Association, the participating State should undertake to achieve operational and financial turnaround of DISCOMs with measures outlined in the scheme. Further, as per the scheme, Government of Kerala has to take over 75% of the loan liability of KSEB Ltd as on 30.09.2015. KSEB Ltd as per letter dated 28.12.2015 had intimated its willingness to the government to join the scheme. Government of Kerala (GoK) as per letter 8565/C1/15/PD dated 03.08.2015 informed MOP, GOI that Kerala is willing to sign MoU under UDAY scheme only for the improvement of operational efficiency.

- 12.65 The Commission has examined the copy of the MoU dated 02.03.2017 signed by Government of India, Government of Kerala and KSEB Ltd. It is noted that the Government of Kerala has not taken over 75% of the loan liability of KSEB Ltd and has consented only to implement the measures mentioned therein to improve the operational efficiency of KSEB Ltd. Therefore it is found that the contention of the HT & EHT Association to the effect that the liabilities of KSEB Ltd would be taken over by Government of Kerala is not valid.
- 12.66 The Commission has, as per its order dated 16.03.2017 in the application for truing up of accounts of KSEB Ltd for the financial year 2011-12, determined the revenue gap as Rs1386.97 crore. Further the Commission has, as per its order dated 20.03.2017 in the application for truing up of accounts of KSEB Ltd for the financial year 2012-13, determined the revenue gap as Rs 3132.97 crore. In the notice dated 22-6-2016 issued by the Commission as a part of this suo motu proceedings, it was stated that the revenue gaps for 2011-12 and for 2012-13 would also be considered for determination of tariff. The lions' share of the said revenue gaps is additional cost of power purchase which is an uncontrollable item as per the Tariff Regulations. The licensee could have realized such additional cost of power purchase by way of fuel surcharge immediately after each financial year. The licensee has not realized such additional cost of power purchase from the consumers. In view of the delay in filing the application for truing up of accounts, the Commission does not propose to allow the carrying cost on such revenue gaps and therefore the licensee has to bear the burden of carrying cost. At the same time, the Commission is of the considered view that it is not just or fair to disallow the recovery of the revenue gaps as mentioned above since it has not been taken over by Government as per the MoU under UDAY scheme. In view of the judgments of the Hon'ble APTEL quoted above and in view of the provisions in Tariff Policy the Commission decides to include the said revenue gaps also for the purpose of tariff determination with a view to ensuring that the interest of consumers are safeguarded while reasonable cost of electricity is recovered by the licensee.

(u) Arguments of the HT& EHT Industrial Consumers Association in respect of return on equity.

12.67 HT&EHT Association further submitted that, RoE may be allowed @14% on the equity of Rs 283.91 crore, as recommended by the consultant engaged by the Commission for studying the re-vesting and related issues of KSEB Ltd, in view of the judgment of the Hon'ble APTEL dated 18-11-2015 in appeal petition No. 247 of 2014. The sub regulation (b) to Regulation-35 of the Tariff Regulations, 2014, provides that, the equity of GoK as per the transfer scheme notified by the State Government will qualify for computation of RoE. The relevant regulation is extracted below.

“35. Principles for adoption of Transfer Scheme under Section 131 of the Act.-The Commission may, for the purpose of approval of aggregate revenue requirements and determination of tariff, adopt the changes in the balance sheet, due to the re-organisation of the erstwhile Kerala State Electricity Board as per the provisions of the Transfer Scheme published by the Kerala State Government under Section 131 of the Act, subject to the following principles,-

(a) Increase in the value of assets consequent to the revaluation of assets shall not qualify for computation of depreciation or of return on net fixed assets;

(b) The equity of Government of Kerala as per the Transfer Scheme published under Section 131 of the Act will be considered for computation of return on equity.

(c) The reduction of the contribution from consumers, grants and such other subventions for creation of assets, made as a part of Transfer Scheme, shall not be reckoned while computing depreciation or return on net fixed assets;

(d) Only the payment of interest on the bonds issued to the Master Trust will be approved for computation of aggregate revenue requirement and the amount of repayment of such bonds shall not be reckoned for computation of aggregate revenue requirement.

(e) The Commission may take appropriate decision on the other issues relating to the Transfer Scheme and its implementation on a case to case basis.”

Decision of the Commission

12.68 The Commission, after having considered the arguments of the HT / EHT Association, decides to allow in accordance with clause (b) of the regulation 35 of the Tariff Regulations, 2014, the RoE at the rate of 14% on the equity of Government of Kerala as per the Second Transfer Scheme notified by the Government under Section 131 of the Act.

(v) Arguments of the HT& EHT Industrial Consumers Association in respect of interest on bonds issued to the Master Trust.

12.69 HT&EHT association and their members further submitted that, interest on the bond issued to Master Trust amounts to Rs 814.00 crore shall not be allowed as part of the interest and finance charge, since there is no evidence is available as whether KSEB Ltd has actually issued bonds, in accordance with the Second Transfer Scheme. Regulation-31 of the Tariff Regulation-2014 deals with the interest on bonds issued by KSEB Ltd to service the terminal liabilities of its employees. The relevant regulation is extracted below.

***“31. Interest on bonds issued by KSEB Limited to service the terminal liabilities of its employees. – (1) The interest on the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall be allowed for recovery through tariffs, at the rates stipulated in the relevant orders issued by Government of Kerala.
(2) The bonds shall be amortised at the same rate as prescribed in the Transfer Scheme notified by the Government of Kerala.
(3) The funds required for repayment of the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall not be allowed for recovery through tariffs.”***

12.70 Regarding the interest on bonds issued to Master Trust, KSEB Ltd submitted as follows,

“Liability towards terminal benefits is a firm liability and KSEB LTD cannot deny it. It is humbly submitted that the normative values determined by the Hon’ble Commission for the allowance of O&M expenses does not factor terminal liabilities of KSEB LTD. Hence denial of interest on Master Trust Bonds, without any allowance under O&M expenses, will put KSEB LTD in a precarious position of not being able to pay off pension and other benefits to the retired employees. Since the O&M norms does not cover the terminal benefits, the cash flow for the same can only be ensured through pass through of interest charges of the proposed bonds. The Commission is already seized of the circumstances that lead to delay in issue of bonds, like probable income tax liability on the master trust for the interest income which ultimately will be loaded to the consumers. Now the issues have been settled and KSEB LTD will issue the bonds immediately.”

Decision of the Commission.

12.71 Pension of the retired employees is their vested right and therefore it cannot be denied. Government has, as a part of the Second Transfer Scheme issued under Section 131 of the Act, decided to constitute a Master Trust for

facilitating payment of pension to the retired employees of KSEB Ltd. The constitution of Master Trust is only a strategic decision to absolve KSEB Ltd from the direct responsibility of payment of pension to the employees of its predecessor in interest namely, Kerala State Electricity Board. The transfer of fund to the Master Trust has been delayed by KSEB Ltd in view of the problems relating to getting exemption for the Master Trust from payment of Income Tax. If funds are transferred to Master Trust before getting exemption from payment of Income Tax, about 35% of the amount would be payable as Income Tax. Taxes, being inevitable and uncontrollable item of expenditure, will have to be allowed to pass on to the consumers by way of tariff. This will further increase the burden of consumers. Therefore, the Commission has decided to accept the submissions made by KSEB Ltd in this regard and to approve the amount of pension paid to the retired employees of KSEB.

(w) Issue relating to bridging the revenue gap by collection of arrears.

12.72 Many consumers raised a contention to the effect that the revenue gap can be bridged by collection of outstanding arrears.

Decision of the Commission

12.73 The contention made by many consumers during public hearings that, there would be no revenue gap if KSEB Ltd has taken proper steps to recover the outstanding arrears, is not correct. KSEB Ltd maintains its accounts on accrual basis and not on cash basis. The Commission also determines the ARR and tariff on accrual basis. Thus, the recovery of outstanding dues by KSEB Ltd cannot be treated as income in the ARR for the year in which arrear is collected. In accrual system, the charges are recognized as income once the bills are raised. In other words, all the arrears of electricity charges of KSEB Ltd have already been treated as income for the year in which corresponding demand was raised and the revenue gap is worked out in each year, based on the expenditure over and above such income on accrual basis. Hence the arrears cannot again be reckoned as income when the same is collected during subsequent years. Therefore, the Commission does also fix the tariff based on the accounts compiled on accrual basis. Treating the realization of arrears as an income would amount to double counting of income, first when the bills are raised and the second when the arrears are realized. Therefore, the arrears shown in the accounts of the KSEB Ltd which have already been considered as income when the bills were raised by KSEB Ltd cannot be treated as income again on realization. It is true that the non-realization of old dues leaves the utility cash starved having no option left but to resort to short term borrowing or withholding payment of dues resulting in creation of liabilities. Hence realization of arrears would definitely improve the financial position of the KSEB Ltd, but in no way it can be treated as income.

CHAPTER 13

AVERAGE COST OF SUPPLY, COST OF SUPPLY AT DIFFERENT VOLTAGE LEVELS AND AVERAGE COST OF POWER PURCHASE

- 13.1 Average cost of supply, cost of supply at different voltage levels and average cost of power purchase are important parameters required for revision of tariff, in accordance with the provisions in the Electricity Act, 2003, the Tariff Regulations, 2014, the Tariff Policy, 2016 and in the judgments of the Hon'ble APTEL. The relevant provisions in the Act, the regulations and in the Tariff Policy, 2016 stipulate that,
- (i) The tariff should be determined in such a way that it progressively reflects the cost of supply.
 - (ii) The Commission may fix tariff for different categories of consumers depending upon load factor, power factor, voltage, total consumption, time of consumption and the purpose of consumption.
 - (iii) The tariffs of the subsidizing consumer categories and the subsidized consumer categories shall be within plus or minus 20 percent of the average cost of supply
 - (iv) The Commission shall notify the road map for the reduction of cross subsidy and shall reduce the cross subsidy in phased manner in accordance with the road map.
 - (v) The minimum tariff shall at least be 50 percent of the average cost of supply.

Assessment of average cost of supply

- 13.2 The Commission had, vide the notification dated 20.11.2012 published the KSERC (Principles for Determination of Roadmap for Cross Subsidy Reduction for Distribution Licensees) Regulations, 2012. The term cross subsidy has been defined in the said regulations as follows,-

“Cross subsidy” in the context of this regulation means the difference between the applicable average tariff of that consumer category / sub category and the average Cost of Supply as approved by the Commission for that year

The relevant portions of the said Regulations regarding the average cost of supply and the reduction of cross subsidy are extracted below.

3. General principles for cross subsidy reduction.-The general principle for cross subsidy reduction shall be as follows:-

(1). The average tariff of a consumer category/sub-category for the purpose of computing cross subsidy shall be determined by dividing total tariff amount billed by the sales to that consumer category/sub-category. The billed tariff shall include fixed charges, energy charge and all applicable rebates and penalties as per the tariff schedule

approved by the Commission for that consumer category/sub-category.

(2). Cost of Supply for a financial year shall be the average cost of supply computed by dividing the Aggregate Revenue Requirement of the distribution licensee approved by the Commission for recovery through retail tariffs by the total energy sales forecast for that year. This methodology of determining cost of supply shall be applicable for a period of sixty months or such extended time as decided by the Commission. Thereafter the Cost of Supply shall be differentiated for various consumer categories as per the guidelines to be notified by the Commission. Finalization of the cost of supply methodology and its subsequent determination by all the distribution licensees shall be done as per the provisions of these regulations and shall be used for the determination of retail tariffs.

(3). Cross subsidy based on average cost of supply.- The cost of supply computed as explained in clause (2) above shall be used for assessing the cross subsidy levels of different category of consumers. For each consumer category, ratio of the average tariff of that category to the average cost of supply shall be increased / decreased based on whether that consumer category is subsidizing consumer category or subsidized consumer category. The rate of increase / decrease of the ratio shall be decided by the Commission taking into consideration various factors including the target cross subsidy level fixed by the Commission.

(4)The rate of increase / decrease in the ratio shall be determined by the Commission and shall remain fixed for each year of the ARR/ERC or for a period decided by the Commission. The ratio for the subsidised consumer categories, shall be determined considering tariff shock to affected consumers, future increases in distribution and retail costs, changes in consumer mix, cost of alternate supplies, and shall be increased till the ratio is equal to the target value decided by the Commission. The ratio for the subsidizing consumer categories shall be reduced till the ratio is equal to the value decided by the Commission.

According to the above provisions of the KSERC (Principles for Determination of Roadmap for Cross Subsidy Reduction for Distribution Licensees) Regulations, 2012, the average cost of supply shall be determined based on the ARR and the total energy sales forecast approved by the Commission. This procedure specified in the regulations will continue to be in force for 60 months from the date of coming into force of the regulations. Thereafter, the average cost of supply shall be determined as per the guidelines issued by the Commission. The Commission shall take the average cost of supply

(ACoS) as the basis for tariff determination and for assessing cross subsidy levels.

- 13.3 The total energy sale approved for the year 2017-18, is 21840.03 MU as detailed in Chapter-5 and the ARR of SBU-D approved for the year is Rs.11487.82 crore as detailed in Chapter 9. The average cost of supply approved for the year 2017-18 is Rs 5.26/unit.

Assessment of average cost of supply at different voltage levels

- 13.4 The Hon'ble APTEL has, vide the judgment dated 31.05.2013 in Appeal No. 179/2012 (filed by Kerala HT and EHT Industrial Electricity Consumers Association against the tariff order dated 25.07.2012 for the year 2012-13), directed the Commission to determine the voltage wise cost of supply for various categories of consumers within six months of passing of the order and to determine the cross subsidy and tariff in future as per the direction laid down by the Hon'ble APTEL. In the above judgment, Hon'ble APTEL has stated that it had, vide its judgment dated 30.05.2011 in Appeal petition No. 102 of 2010 (Tata Steel case and related batch of cases), given a formulation of determination of voltage-wise cost of supply in the absence of availability of detailed data. The relevant portions of the judgment are extracted below.

“31. We appreciate that the determination of cost of supply to different categories of consumers is a difficult exercise in view of non-availability of metering data and segregation of the network costs. However, it will not be prudent to wait indefinitely for availability of the entire data and it would be advisable to initiate a simple formulation which could take into account the major cost element to a great extent reflect the cost of supply. There is no need to make distinction between the distribution charges of identical consumers connected at different nodes in the distribution network. It would be adequate to determine the voltage-wise cost of supply taking into account the major cost element which would be applicable to all the categories of consumers connected to the same voltage level at different locations in the distribution system. Since the State Commission has expressed difficulties in determining voltage wise cost of supply, we would like to give necessary directions in this regard.

32. Ideally, the network costs can be split into the partial costs of the different voltage level and the cost of supply at a particular voltage level is the cost at that voltage level and upstream network. However, in the absence of segregated network costs, it would be prudent to work out the voltage – wise cost of supply taking into account the distribution losses at different voltage

levels as a first major step in the right direction. As power purchase cost is a major component of the Tariff, apportioning the power purchase cost at different voltage levels taking into account the distribution losses at the relevant voltage level and the upstream system will facilitate determination of voltage wise cost of supply, though not very accurate, but, a simple and practical method to reflect the actual cost of supply.

33. The technical distribution system losses in the distribution network can be assessed by carrying out system studies based on the available load data. Some difficulty might be faced in reflecting the entire distribution system at 11 KV and 0.4 KV due to vastness of data. This could be simplified by carrying out field studies with representative feeders of the various consumer mix prevailing in the distribution system. However, the actual distribution losses allowed in the Annual Revenue Requirement which include the commercial losses will be more than the technical losses determined by the system studies. Therefore, the difference between the losses allowed in the Annual Revenue Requirement and that determined by the system studies may have to be apportioned to different voltage levels in proportion to the annual gross energy consumption at the respective voltage level. The annual gross energy consumption at a voltage level will be the sum of energy consumption of all consumer categories connected at that voltage plus the technical distribution losses corresponding to that voltage level as worked out by system studies. In this manner, the total losses allowed in the ARR can be apportioned to different voltage levels including the EHT consumers directly connected to the transmission system of GRIDCO. The cost of supply of the Appellant's category who are connected to the 220/132 KV voltage may have zero technical losses but, will have a component of apportioned distribution losses due to difference between the loss level allowed in Annual Revenue Requirement (which includes commercial losses) and the technical losses determined by the system studies, which they have to bear as consumers of the distribution licensee.

34. Thus, Power Purchase Cost which is the major component of Tariff can be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for the relevant voltage level and upstream system. As segregated network costs are not available, all the other costs such as Return on Equity, Interest

on Loan, depreciation, interest on working capital and O&M costs can be pooled and apportioned equitably, on pro-rata basis, to all the voltage levels including the Appellant's category to determine the cost of supply Segregating Power Purchase cost taking into account voltage-wise transmission and distribution losses will be a major step in the right direction for determining the actual cost of supply to various consumer categories. All consumer categories connected to the same voltage will have the same cost of supply. Further, refinements in formulation for cost of supply can be done gradually when more data is available".

- 13.5 The Commission has to determine the cost of supply at different voltage levels, as per the directions issued by the Hon APTEL. In order to arrive at the cost at different voltage levels, the following details have to be estimated realistically.
- (i) Total energy input into the SBU-D of the KSEB Ltd
 - (ii) Total cost of energy input into SBU-D of KSEB Ltd., comprising of the cost of generation by SBU-G, the cost of power purchase and the transmission charges payable to SBU-T.
 - (iii) Total distribution cost of the SBU-D of the KSEB Ltd.
 - (iv) Details of energy sale at different voltage level (EHT, HT and LT levels) by SBU-D of the KSEB Ltd.
 - (v) Allocation of distribution loss among EHT, HT and LT levels.
- 13.6 The energy input into the SBU-D of the KSEB Ltd includes the following,-
- (i) Generation from hydel and thermal plants owned and operated by SBU-G of KSEB Ltd., plus
 - (ii) Power purchase from various sources including CGS, power purchase from IPPs within the State, power purchase through traders/generators from outside the state, power purchase from short-term market including power exchanges, less
 - (iii) The transmission losses in the transmission network of SBU-T of KSEB Ltd.

The details of the energy input of the SBU-D of KSEB Ltd as assessed by the Commission for the year 2017-18, are given below.

Table-13.1
Details of the energy input into the SBU-D of KSEB Ltd

SI No	Particulars	(MU)
1	Purchase from SBU –G of KSEB Ltd	6473.62
2	Power Purchase from other sources including CGS	18818.83
3	Total power purchase = (1)+(2)	25292.45
4	Less transmission loss at the rate of 4.5%	1138.16
5	Net energy input into SBU-D of KSEB Ltd = (3)-(4)	24154.29

13.7 The total cost of energy input into the SBU-D of the KSEB Ltd includes the following.

- (i) Cost of energy from the SBU-G of the KSEB Ltd (ARR of SBU-G).
- (ii) Cost of power purchase including CGS, power purchase from IPPs within the State, power purchase through traders/generators from outside the state, power purchase from short-term market including power exchanges.
- (iii) Transmission charges payable to SBU-T of KSEB Ltd for transmission of power through the transmission network of SBU-T (ARR of SBU-T).

The details of the cost of energy input into SBU-D of KSEB Ltd as assessed by the Commission for the year 2017-18, are given below.

Table-13.2
Details of the total cost of the energy input into SBU-D of KSEB Ltd

SI No	Particulars	(Rs.Cr)
1	Cost of power from SBU-G (ARR of SBU-G)	677.48
2	Cost of Power Purchase	7339.34
3	Transmission charges payable to SBU-T (ARR of SBU- T)	905.20
4	Total cost of power of SBU-D	8922.02

13.8 The cost of distribution of SBU-D (ARR) of the KSEB Ltd includes the following.

- (i) Operation and Maintenance expenses of SBU-D.
- (ii) Interest and finance charges of SBU-D.
- (iii) Depreciation of SBU-D.
- (iv) Return on equity.

The summary of the cost of distribution of SBU-D of KSEB Ltd as assessed by the Commission for the year 2017-18 as per the Tariff regulation, 2014 is detailed below.

Table-13.3
Summary of the cost of distribution for the year 2017-18

SI No	Particulars	(Rs. Cr)
1	O&M cost	1440.36
2	Interest & finance charges	998.68
3	Depreciation	58.12
4	RoE	68.64
	Total	2565.80

13.9 The summary of the sale of energy at different voltage levels for the year 2017-18 as assessed by the Commission is given below.

Table-13.4
Summary of the sale of energy at different voltage levels for the year 2017-18

Sl. No.	Particulars	(MU)
1	EHT category	1944.01
2	HT category	3448.06
3	LT category	16447.94
	Total	21840.01

13.10 As per the assessment made by the Commission in the suo motu proceedings, the total distribution loss level approved for the year 2017-18 is 10.42% of the total energy input into the SBU-D of KSEB Ltd. The transmission loss in the transmission system of the SBU-T has been accounted separately. The approved loss level of 10.42% is segregated among the different voltage levels based on the following assumptions.

- (i) Since the EHT consumers are availing supply at 66/110/220 kV level, it is assumed that, the distribution loss associated with providing supply at EHT level is 'zero'.
- (ii) While approving the ARR for the year 2014-15, the Commission had assessed the distribution loss for providing supply at HT level at 5.5%.

Based on the above, distribution loss associated with providing supply at LT level is assessed as follows.

Table-13.5

Segregation of distribution loss among EHT, HT and LT supply for the year 2017-18

Sl. No.	Particulars	
1	Total energy input into the distribution system of SBU-D (MU)	24154.29
2	Sale of energy at EHT level (MU)	1944.01
3	Distribution loss associated with sale at EHT level (%)	0.00
4	Energy available for sale at HT< levels = (1)-(2)-(3) (MU)	22210.28
5	HT sale (MU)	3448.06
6	Loss up to HT level (%)	5.50
7	Distribution loss associated with sale of energy at HT level (MU)	200.68
8	Energy input for sale at LT level =(4)-(5)-(7) (MU)	18561.54
9	Sale of energy at LT level (MU)	16447.94
10	Distribution loss associated with sale of energy at LT level(MU)	2113.60
11	Distribution loss associated with sale of energy at LT level (%)	11.39

As detailed above, the distribution loss associated with providing supply at LT level is assessed at 11.39% for the year 2017-18.

13.11 The cost of supply at different voltage level is estimated based on the above details and the formulation given by Hon'ble APTEL in the judgment dated 30th May-2011 in appeal petition No. 102 of 2010 (Tata Steel case and batch of other cases).

Table-13.6

The cost of supply at different voltage levels based the formulation of Hon'ble APTEL in the judgment in appeal petition No. 102 of 2010

Sl. No.	Particulars		EHT	HT	LT	Total
1	Energy sale at different voltage level (as per chapter-4)	(MU)	1944.01	3448.06	16447.94	21840.01
2	Distribution loss associated with energy sale at different voltage level (Table-5)	(%)	0.00	5.50	11.39	
		MU	0.00	200.68	2113.60	2314.28
3	Energy input for the sale at different voltage level = (1)+(2)	(MU)	1944.01	3648.74	18561.54	24154.29
4	Power purchase cost (apportioned at different voltage level in the ratio of energy input)	Rs. Cr	718.07	1347.76	6856.19	8922.02
5	Distribution cost (apportioned in the ratio of energy input)	Rs. Cr	206.50	387.59	1971.71	2565.80
6	Total cost = (4)+ (5)	Rs. Cr	924.57	1735.35	8827.90	11487.82
7	Cost per unit	Rs/ kWh	4.76	5.03	5.37	

Assessment of average pooled purchase cost (APPC) of power

13.12 The details of the cost of power purchase approved for the year is detailed under Chapter-9 of this order. Based on the power purchase and its cost approved for the year 2017-18, the average cost of power purchase of SBU-D of KSEB Ltd for the year 2017-18 given below.

Table 13.7
Average cost of power purchase for the year 2017-18

Sl No	Particulars	Quantity	Amount	Avg. Rate
		(MU)	(Rs. Cr)	(Rs/ kWh)
1	Own Generating stations of SBU-G	6473.62	677.48	
2	CGS	11000.05	3755.97	3.41
3	IPP- wind and SHPs	142	45.87	3.23
4	Traders	5729.8	2195.02	3.83
5	Short-term market	1946.98	778.79	4.00
6	PGCIL transmission charges		563.7	
7	Intra state transmission charges		905.2	
	Total	25292.45	8922.03	
Weighted average cost of power purchase (Rs/unit)			3.53	3.53

CHAPTER -14

TARIFF ORDER FOR THE FINANCIAL YEAR 2017-18

14.1 The Commission had, vide the public notice dated 22.06.2016, published a proposal in initiation of this suo motu proceedings for revision of electricity tariff applicable to the licensees and consumers of the State. The said notice was published in the website of the Commission on 22.06.2016. A public hearing on the said proposal was conducted on 27.07.2016. Taking into consideration the objections, suggestions and remarks submitted by the stakeholders in the said public hearing, the Commission had published the proposal dated 01.12.2016, wherein the proposals for revision of tariff were presented before the stakeholders and other public, for their objections, suggestions and remarks. The said proposal was also published in the Mathrubhoomi daily dated 05.12.2016, the Deshabhimani daily dated 05.12.2016 and the Times of India dated 05.12.2016. The summary of the tariff proposal is given below.

“An abstract of important tariff proposals for the financial years 2016-17 and 2017-18 is given below.

- 1) No tariff increase is proposed for the Below Poverty Line consumers with a connected load upto 1000 watts and monthly consumption is of and below 40 units.*
- 2) It is noticed that the occupants of colonies maintained by industrial units or by plantations of cash crops, are generally poor labourers and the consumption of electricity by them would broadly come under domestic category. At present the fixed charge for a connection to the colony is Rs.2200 / colony / month. The Commission proposes to change the rate of fixed charge for the colonies to Rs.30 / month / family unit in the colony. It is also proposed to reduce the present tariff of Rs.6.50 per unit to the energy charge applicable to the industrial unit or the plantation which maintain the colony.*
- 3) In view of the difficulties faced by the farmers, no tariff increase is proposed for agricultural sector. It is also proposed to unify the tariff applicable to irrigation and dewatering irrespective of whether it is for garden lands, paddy fields or plantations under LT VA.*
- 4) It is proposed to assign domestic tariff to the community drinking water schemes such as Jaladhara, Sujaladhara and Jalanidhi instead of LT VIE.*
- 5) In view of the fact that the present tariffs of the categories such as LT III (A), LT III(B), LT VI(A), LT VI(B), LT VI(C), LT VI(F), LT VII(A), LT VII(B), LT VII(C), LT IX, HT II(B), HT IV, EHT 220 kV, EHT General and EHT Commercial are above 120% of the*

average cost of supply, it is not proposed to increase the tariff of such categories.

6) The important proposals for increase in tariff are given below.

Domestic category

Telescopic tariff applicable to domestic consumers having monthly consumption upto 250 unit.

Category	Existing tariff	Proposed tariff
Fixed charges – Single phase	Rs. 20 / month	Rs. 30 per month
Fixed charges – Three phase	Rs. 60 / month	Rs. 80 per month
Monthly consumption	Energy charge (Rs. / unit)	
Upto 50 units	2.80	2.90
51-100 units	3.20	3.50
101-150 units	4.20	4.50
151-200 units	5.80	6.10
201-250 units	7.00	7.30

Domestic category

Non-telescopic tariff applicable to domestic consumers having monthly consumption above 250 unit.

Category	Existing tariff	Proposed tariff
Fixed charges – Single phase	Rs. 20 / month	Rs. 30 per month
Fixed charges – Three phase	Rs. 60 / month	Rs. 80 per month
Monthly consumption	Energy charge (Rs. / unit)	
Upto 300 units	5.00	5.50
Upto 350 units	5.70	6.20
Upto 400 units	6.10	6.50
Upto 500 units	6.70	6.70
Above 500 units	7.50	7.50

Industrial (LT)

Existing tariff		Proposed tariff
Fixed charges		Fixed charges
Connected load upto 10 kW	Rs. 100 per consumer per month	Rs.25 per kW / month
Connected load above 10 kW and upto 20 kW	Rs. 60 per kW per month	Rs. 75 per kW / month
Connected load above 20 kW	Rs.125 per kVA / month	Rs.150 per KVA / moth
Energy charge for LT IV A	Rs.5.20 / unit	Rs.5.50 / unit

LT (VI E) Tariff applicable to Political parties, sports clubs etc.

Category	Existing tariff	Proposed tariff
Fixed charges – Single phase	Rs. 20 / month	Rs. 30 per month
Fixed charges – Three phase	Rs. 60 / month	Rs. 80 per month
Monthly consumption	Energy charge (Rs. / unit)	
Upto 50 units	2.80	3.20
Upto 120 units	3.80	4.30
Upto 200 units	4.50	5.00
Above 200 units	6.30	6.50

Public lighting, traffic signals etc.

Category	Existing tariff	Proposed tariff
Fixed charges – (meter / month)	Rs. 30	Rs. 50
Energy charge (unit)	Rs. 3.60	Rs. 4.10

High Tension

It is not proposed to increase the demand charge for high tension categories. The increases in energy charge are indicated below

Category	Existing tariff (Rs. / unit)	Proposed tariff (Rs. / unit)
HT I (A) Industry	5.20	5.50
HT I (B) IT Industry	5.60	5.80
HT II (A) General	5.10	5.30

Extra High Tension

It is not proposed to increase the demand charge for extra high tension categories. The increases in energy charge are indicated below

Category	Existing tariff (Rs. / unit)	Proposed tariff (Rs. / unit)
EHT 66 kV	4.90	5.20
EHT 110 kV	4.80	5.10
Railway traction	4.80	5.10

BST applicable to Licensees and other consumers

Category	Present tariff	Proposed tariff
KINESCO Power Utilities Pvt Ltd (KPUPL)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	5.30	5.60
Cochin Special Economic Zone Authority (CSEZA)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	5.30	5.40
Rubber Park India Ltd (RPIL)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	4.55	4.55
Technopark		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	4.85	5.20
Cochin Port Trust (CPT)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	5.75	6.00
Thrissur Corporation (TCED)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	5.40	5.85
Kanan Devan Hills Plantations Company Ltd (KDHPCL)		
Demand Charge (Rs. / kVA / month)	300	350
Energy Charge (Rs. / unit)	4.30	4.60
Military Engineering Service (MES)		
Demand Charge (Rs. / kVA / month)	350	400
Energy Charge (Rs. / unit)	5.10	5.60
Electricity Department Karnataka		
Demand Charge (Rs. / kVA / month)	350	400
Energy Charge (Rs. / unit)	5.10	5.60
Electricity Department Puducherry		
Demand Charge (Rs. / kVA / month)	350	400

<i>Energy Charge (Rs. / unit)</i>	<i>5.10</i>	<i>5.60</i>
Infopark		
<i>Demand Charge (Rs. / kVA / month)</i>	<i>300</i>	<i>350</i>
<i>Energy Charge (Rs. / unit)</i>	<i>5.55</i>	<i>5.50</i>

- 14.2 The Commission had conducted 7 public hearings at different places, during the period from 27.12.2016 to 17.01.2017, on the tariff proposal published by it. The date and venue of the public hearings are given in Chapter- 1. The Commission had received objections, comments and suggestions on the tariff proposal, during the public hearings. The Commission had also received comments and suggestions in writing from the stakeholders. The main issues raised by the stakeholders during the public hearing and in writing on the proposal on tariff revision and the decision of the Commission thereon have been explained in Chapter-12 of this order.
- 14.3 The Commission, after duly considering the deliberations in the public hearings on the suo motu determination of tariff, the annual revenue requirements of the SBU-G, SBU-T and SBU-D of KSEB Ltd, as approved by the Commission and the suggestions and objections received in writing, does hereby issues the following orders.
- 14.4 The aggregate revenue requirements of the SBU-G as approved by the Commission for the years 2016-17 and 2017-18 are Rs.672.61 crore and Rs.677.48 crore respectively. The details are available in Chapter-7 of this order. The ARR of SBU-G amounting to Rs.677.48 crore for the year 2017-18 is reckoned as the cost of power availed by SBU-D from SBU-G.
- 14.5 The aggregate revenue requirements of the SBU-T as approved by the Commission for the years 2016-17 and 2017-18 are Rs 881.30 crore and Rs. 905.20 crore respectively. The details are available in Chapter-8 of this order. The ARR of SBU-T amounting to Rs 905.20 crore for the year 2017-18 is reckoned as the transmission charges to be paid by SBU-D to SBU-T.
- 14.6 The aggregate revenue requirements of the SBU-D as approved by the Commission for the years 2016-17 and 2017-18 are Rs 11741.84 crore and Rs. 11487.82 crore respectively. The details are available in Chapter-9 of this order.

Table 14.1
Summary of the ARR &ERC approved for SBU-D of KSEB Ltd
for the years 2016-17 and 2017-18

Particulars	2016-17	2017-18
	(Rs. Cr)	(Rs. Cr)
Cost of own power Generation (ARR of SBU-G)	672.61	677.48
Transmission charges (ARR of SBU-T)	881.30	905.20
Cost of Power Purchase	7752.76	7339.34
Interest & Finance charges	981.79	998.68
Depreciation	58.12	58.12
O&M expenses	1326.62	1440.36
RoE	68.64	68.64
Total ARR	11741.84	11487.82
Non-Tariff income	441.00	449.00
Net ARR	11300.84	11038.82
Revenue from Tariff	10900.72	11529.74
Revenue surplus	(400.12)	490.92

The entire ARR of SBU-D amounting to Rs.11487.82 crore for the year 2017-18 is taken for determination of tariff for 2017-18 along with a portion of the revenue gap pertaining to previous period.

- 14.7 The Commission has, vide the order dated 16-03-2017, approved the truing up of accounts of KSEB Ltd for the year 2011-12 with the revenue gap of Rs.1386.97 crore. The Commission has also, vide the order dated 20-03-2017, approved the truing up of accounts of KSEB Ltd for the year 2012-13 with the revenue gap of Rs 3132.97 crore. KSEB Ltd had an unrecovered revenue gap of Rs 424.11 crore as on 31.03.2011. Thus the total accumulated revenue gap as on 31.03.2013 is Rs.4944.05 crore, the details of which are given below.

Table-14.2
Accumulated revenue gap as on 31-03-2013

SI No	Particulars	Amount (Rs. Cr)
1	Total unbridged revenue gap as on 31-03-2011 (as per Table 1.3 of the order dated 14-8-2014 in OP No. 9/2014)	424.11
2	Revenue gap as per the orders on truing up for the year 2011-12	1386.97
3	Revenue gap as per the orders on truing up for the year 2012-13	3132.97
	Total	4944.05

- 14.8 In the public notice dated 22-6-2016 and 01-12-2016, the Commission had proposed to revise the tariff with a view to recovering in a phased manner, the outstanding revenue gap as on 31-03-2013 in the ensuing years, without causing any tariff shock to the consumers as envisaged in the Tariff Policy 2016, in the relevant regulations and in the judgments of the Hon'ble APTEL.

- 14.9 The Commission has found that there would be a revenue surplus of about Rs.490.92 crore as per the ARR approved for the year 2017-18. The Commission has also decided to recover through tariff during the year 2017-18, an amount of Rs.1040.92 crore, being a portion of the total outstanding revenue gap. Thus the net revenue gap, after adjusting the revenue surplus of Rs.490.92 crore, considered for the tariff determination for the year 2017-18 is Rs. 550.00crore as detailed below.

Table-14.3
Net revenue gap approved for determining the tariff for the year 2017-18

Particulars	(Rs. Cr)
Cost of purchase of power from SBU-G (ARR of SBU-G)	677.48
Transmission charges payable to SBU-T (ARR of SBU-T)	905.2
Cost of power purchase	7339.34
Interest & finance charges	998.68
Depreciation	58.12
O&M expenses	1440.36
Return on Equity (RoE)	68.64
Total ARR	11487.8
Non-tariff income	449.00
Net ARR to be recovered through tariff during the year 2017-18	11038.82
Part of the unrecovered revenue gap to be recovered through tariff during the year 2017-18	1040.92
Amount to be recovered through tariff for 2017-18	12079.74
Revenue at the existing tariff	11529.74
Net revenue gap to be recovered through revision of tariff	550.00

- 14.10 As per the provisions of the KSERC (Principles for Determination of Roadmap for Cross Subsidy Reduction for Distribution Licensees) Regulations, 2012, and Tariff Policy 2016, the Commission shall take the average cost of supply (ACoS) as the basis for tariff determination and assessing the subsidy levels. The Commission has determined the tariff in such a way that, the existing level of cross subsidy is not affected considerably. At the same time, the Commission has to ensure that, the net revenue gap as assessed above, is recovered through tariff revision, leaving the balance unrecovered revenue gap, for the appropriate consideration in the subsequent years. The Commission has also taken care to ensure that, tariff shock is avoided while increasing the tariff of the subsidised categories such as domestic and public lighting.
- 14.11 Taking into consideration, the facts and circumstances explained above, the Commission takes the following decisions in respect of determination of tariffs for the financial year 2017-18.
- a) No tariff increase is approved for the Below Poverty Line consumers with a connected load upto 1000 watts if their monthly consumption is of and below 40 units.

- b) In view of the additional financial burden that may have to be borne by the low-end domestic consumers with consumption up to 100 unit per month, if the proposed increases of Rs.10 in fixed charges and of Rs.0.30 / unit in energy charges are approved, it is decided to limit the increase in energy charges to Rs.0.10 per unit for the lowest slab of 1 to 50 units per month and Rs.0.20 per unit for the next slab of 51 to 100 units per month
- c) In view of the acute and prolonged health problems and consequent socio-economic problems faced by the families of the victims of endosulfan tragedy, in Hosdurg and Kasaragod Taluks of Kasaragod District, it has been decided to grant considerable relief to such families by supplying electricity for their domestic consumption up to 150 units per month at a rate of Rs.1.50 / unit.
- d) It is noticed that the occupants of colonies maintained by industrial units or by plantations of cash crops or by educational institutions or by similar establishments, are generally labourers / employees in the lower income group and the purpose of consumption of electricity by them would mainly come under domestic category. At present the fixed charge for a connection to the colony is Rs.2200 / colony / month. The Commission decides to change the rate of fixed charge for the colonies to Rs.30 / month / family unit in the colony. It is also approved to reduce the present tariff of Rs.6.50 per unit to the energy charge applicable to the industrial unit or the plantation or the educational institution or similar establishment which maintains the colony.
- e) In view of the adverse problems faced by the farmers, the Commission does not intend to increase the tariff for agricultural sector. It is also decided that the tariff applicable to pumping of water for irrigation or for dewatering for the cultivation of food crops shall be made applicable to pumping of water for the irrigation of vegetables, fruits, cash crops such as cardamom and coffee and for the cultivation of crops such as coconut, arecanut, pepper, nutmeg, cloves, cocoa and betel leaves as pure crops or as inter crops.
- f) It is decided to assign domestic tariff to the community drinking water supply schemes such as Jaladhara, Sujaladhara and Jalanidhi.
- g) It is decided to include the call centres in the category of LT IV – (B) IT and IT Enabled Services.
- h) It has been decided to eliminate the difference between the private hospitals registered under Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) and other private hospitals by introducing a separate category namely LT VI-General – G (LT VI-G) for all the private hospitals and other institutions working in the field of health care and by assigning to them, a tariff in such a way that the problems presented by them during public hearing

and in separate petitions would be mitigated to a large extent, especially for the private hospitals and other private health care institutions having a monthly consumption up to 500 units.

- i) In view of the problems faced by rural libraries, which are sustaining mainly on the grants received from Government or such other institutions, it has been decided to include the libraries with connected load up to 2000 watts in LT VI General –D (LT VI-D). The libraries with connected load above 2000 watts will continue in LT VI-General (E) category.
- j) In view of the problems faced by Kochi Metro Rail Ltd (KMRL), which is engaged exclusively in the mass transport of public, it has been decided to supply electricity to the Traction load of KMRL at an energy charge of Rs.4.80/unit, as against the energy charge of Rs.5.10 / unit fixed for general railway traction.
- k) The problems pointed out by the Medical College, Ernakulam has been addressed by assigning appropriate reduced tariff.
- l) At present the offices of Department of Posts are categorized under LT VI General C and the post offices including extra departmental (ED) post offices are categorized under LT VI General B. It has been decided to bring the offices of Department of Posts and the post offices under the same category namely LT VI General B.
- m) It is decided to minimise or avoid tariff increase to the consumer categories of which the existing tariff is above 120% of the average cost of supply.
- n) It is decided to extend the concessional tariff for the institutions registered under Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) to the institutions registered under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882, also, the donations to which are exempted from payment of Income Tax.

PART-A RETAIL TARIFF FOR VARIOUS CATEGORIES OF CONSUMERS

LT- I Domestic

14.12 In the public notice dated 01-12-2016, the Commission had published the slab wise details of the strength and consumption of the domestic consumers and annual revenue estimated for the year 2016-17 at the prevailing tariff, the details of which are given below.

Table –14.4
Details of domestic consumers and revenue from energy charges estimated for 2016-17 as per the public notice dated 01-12-2016

Monthly consumption slab	Consumer strength		Annual consumption		Energy charge	Revenue from energy charge
	(Nos)	(%) of total	(MU)	(%) of total	(Rate) (Rs/unit)	(Rs. Cr)
BPL Consumers with connected load upto 1000 watts and consumption upto 40 units						
0-40	225165	2.38	40	0.38	1.50	5.99
Telescopic tariff for consumption upto 250 units						
0-50	2496727	26.39	873	8.2	2.80	244.48
51-100	3254009	34.4	3040	28.55	3.20	894.71
101-150	2111629	22.32	3139	29.48	4.20	1014.32
151-200	812078	8.58	1706	16.02	5.80	638.72
201-250	313225	3.31	799	7.5	7.00	333.5
Non-telescopic tariff for consumption above 250 units						
0-300	120151	1.27	385	3.62	5.00	192.73
0-350	53926	0.57	202	1.9	5.70	115.32
0-400	27436	0.29	117	1.1	6.10	71.45
0-500	25544	0.27	128	1.2	6.70	85.61
Above 500	20814	0.22	218	2.05	7.50	163.71
Total	9460704	100	10648	100		3760.53

14.13 The average tariff of the domestic category at the prevailing tariff is Rs 3.76/unit. As per the provisions of the Tariff Policy-2016, the tariff shall be within plus or minus 20 percent of the average cost of supply. The cost coverage of the domestic categories at the prevailing tariff is less than 80% of the average cost of supply. Therefore it is decided to increase the domestic tariff moderately without causing tariff shock to the consumers.

14.14 The increases in fixed charges proposed for domestic category, as per the notice dated 01-12-2016 in this suo motu proceedings, are detailed below.

Table 14.5
Proposed revision of fixed charges for LT I Domestic
as per the public notice dated 01-12-2016

Particulars	Consumer strength	Fixed charge (Rs/ consumer / month)	Revenue expected (Rs.Cr)	
		Proposed rate	At proposed rate	Addl revenue
Single phase consumers	8788294	30	316.38	105.46
Three phase consumers	447245	80	42.94	10.73
Total*	92,35,539		359.31	116.19

*BPL consumers having connected load up to 1000 watts and monthly consumption up to 40 units are exempted from payment of fixed charge.

14.15 The increases in energy charges proposed for different slabs of domestic category, as per the notice dated 01-12-2016 in this suo motu proceedings and consequential increases in revenue are detailed below.

Table 14.6
Proposed increase in energy charge for LT I domestic category
vide the public notice dated 01-12-2016

Monthly consumption slab	Consumer strength		Annual consumption		Energy charge proposed	Revenue from energy charge	Addl revenue
	(Nos)	(%) of total	(MU)	(%) of total	(Rate) (Rs/unit)	(Rs. Cr)	(Rs. Cr)
BPL Consumers with connected load upto 1000 watts and consumption upto 40 units							
0-40	225165	2.38	40	0.38	1.50	5.99	0.00
Telescopic tariff for consumption upto 250 units							
0-50	2496727	26.39	873	8.2	2.90	253.21	8.73
51-100	3254009	34.4	3040	28.55	3.50	946.86	52.15
101-150	2111629	22.32	3139	29.48	4.50	1083.15	68.83
151-200	812078	8.58	1706	16.02	6.10	680.16	41.44
201-250	313225	3.31	799	7.50	7.30	353.70	20.20
Non-telescopic tariff for consumption above 250 units							
0-300	120151	1.27	385	3.62	5.50	212.00	19.27
0-350	53926	0.57	202	1.9	6.20	125.43	10.11
0-400	27436	0.29	117	1.1	6.50	76.13	4.68
0-500	25544	0.27	128	1.2	6.70	85.61	0.00
Above 500	20814	0.22	218	2.05	7.50	163.71	0.00
Total	9460704	100	10648	100		3985.96	225.43

14.16 The Commission has duly considered the objections raised by domestic consumers including residents' associations, on the proposal to increase tariff for domestic consumers. Considering the socio-economic reasons, the

Commission has not approved any tariff increase for domestic BPL consumers having monthly consumption up to 40 units with connected load of and below 1000 watts. The Commission has decided to retain the present telescopic tariff system for domestic consumers having monthly consumption up to 250 units and non-telescopic tariff system for monthly consumption above 250 units. Commission has decided to increase the domestic tariff moderately. The existing and approved tariff for domestic consumers for the year 2017-18 are given below.

Table 14.7

Existing tariff and approved tariff for domestic category for the year 2017-18

	Existing Tariff	Approved tariff
<u>I. Fixed charge (Rs/ consumer/ month)</u>		
Single phase	20	30
Three phase	60	80
<u>II. Energy Charge (Rs/kWh)</u>		
Monthly consumption slab		
BPL Consumers with connected load up to 1000 watts and consumption up to 40 units		
0-40	1.50	1.50
Telescopic tariff for consumption up to 250 units		
0-50	2.80	2.90
51-100	3.20	3.40
101-150	4.20	4.50
151-200	5.80	6.10
201-250	7.00	7.30
Non-telescopic tariff for consumption above 250 units		
0-300	5.00	5.50
0-350	5.70	6.20
0-400	6.10	6.50
0-500	6.70	6.70
Above 500	7.50	7.50

- 14.17 The tariff for domestic consumption by the families of the victims of endosulfan tragedy in Hosdurg and Kasaragod Taluks of Kasaragod District shall be Rs.1.50 / unit for a monthly consumption up to 150 units. If the consumption of the consumer, who is eligible for the above concession exceeds 150 units per month, the consumption in excess of 150 units will be charged at the rates specified for the slabs 151-200 units or 201-250 units as the case may be. This concession will not be available for the consumers with monthly consumption above 250 units
- 14.18 There are several drinking water supply schemes which are being implemented under the schemes approved by the Government such as,-
- (i) Water supply schemes under Jalanidhi, Jaladhara, Sujaladhara projects.
 - (ii) Water supply schemes under the societies and beneficiary committees.

- (iii) Water supply schemes for the members of Scheduled Caste and Scheduled Tribe.
- (iv) Water supply schemes for Laksham Veedu settlements taken over and managed by local self-government institutions.
- (v) Water supply schemes established using Local Area Development Funds of MLAs and MPs.
- (vi) Water supply schemes established using funds of local self-government institutions.
- (vii) Water supply schemes under peoples participatory schemes and
- (viii) Water supply schemes under the Rajeev Gandhi Drinking Water Schemes managed by beneficiary groups.

The above water supply schemes are intended for supplying drinking water to the poor families in the society. Presently all the above schemes are categorized under LT-VI(E). There are several requests from the beneficiaries of such water supply schemes and from the Government Departments in charge of such schemes, to re-categorise the said drinking water supply schemes and bring them under LT- I domestic tariff. The consumers in domestic category are also allowed to use electricity under LT- I domestic tariff for pumping of water for their drinking purposes. The Commission is of the view that the beneficiaries of the above mentioned water supply schemes are also eligible for such benefits. Therefore it was proposed to include such water supply schemes in LT- I domestic tariff, with the following system of billing. The total monthly consumption of electricity of the units of such water supply schemes will be divided by the number of beneficiary households and the average consumption per households will be billed under LT – I domestic tariff. The amount of electricity charges assessed for the average consumption per beneficiary household will then be multiplied by the number of beneficiary households to assess the total electricity charges to be paid by the units of such schemes. The above proposal of the Commission was generally welcomed. No licensee has submitted any objection. The Commission therefore decides to implement the above proposal and to assign domestic tariff to the above mentioned water supply schemes subject to the billing system as explained above.

LT-II Colonies

14.19 The existing tariff for LT-II category is detailed below.

Table 14.8
Existing tariff for LT-II category

LOW TENSION – II COLONIES (LT- II)	
Fixed Charge (Rs./Month)	2200
Energy Charge (Rs /kWh)	6.50

14.20 The Commission has noted the fact that, the purpose of use of electricity in the colonies with LT-II tariff is generally domestic. Hence it is found that the present tariff applicable to this category should be suitably modified to grant considerable relief. Considering these facts, the Commission had, in the public notice dated 01-12-2016, proposed to revise the fixed charges of LT-II category to Rs.30 / month / domestic connection in the colony, instead of Rs.2200 /colony/ month. The proposed energy charge is at the tariff applicable to respective industrial establishments or plantations or organizations which maintain such colonies. There was no objection against the revision proposed for the tariff for LT-II Colonies. Taking into consideration the above facts, the Commission approves the tariff for LT-II Colonies as given below.

Table- 14.9
Existing and approved tariff for LT-II colonies

Existing tariff		Approved tariff	
Fixed Charge (Rs./Month)	2200	Fixed Charge (Rs/month/ domestic connection.	30
Energy Charge (Rs /kWh)	6.50	Energy Charge (Rs /kWh)	Energy charge applicable to the respective industry or plantation or organization which maintains the colony

Low Tension III A – Temporary connections (LT III - A)

14.21 The Commission has decided to continue for 2017-18, the prevailing tariff applicable for single or three phase temporary connections for the purposes such as illumination, exhibition, festivals, public meeting and fairs. The Commission has also decided to extent the concession at 40% to the exhibitions sponsored by Government and / or public sector undertakings. The tariff approved for this category is given below.

Table-14.10
Approved tariff for LT-III(A) Temporary connections

Energy Charge (Rs /kWh)	14.00
OR	
Daily minimum Rs.140 /kW or part thereof of connected load, whichever is higher	

Note: 40% concession in the rates shall be allowed if the connection is for;

- (a) exhibitions conducted or sponsored by Local self-Government institutions or Government educational institutions or public sector undertakings and exhibitions conducted by recognized private educational institutions.
- (b) festivals of religious worship centres for illumination, public address system and security lighting. (This concession is limited to the energy availed by the religious worship centres and not by other agencies who function in the premises of religious worship centers where festival is being organized).

Low Tension III B – Temporary Extensions –(LT-III-B)

14.22 The Commission has decided to continue for the financial year 2017-18, the prevailing tariff applicable to the category of Low Tension III-B Temporary Extension for the electricity availed from the premises of existing consumers on a temporary basis. Such temporary extension shall be allowed only for a maximum period of 15 days at a time. The approved tariff is shown below.

Table- 14.11
Tariff approved for LT-III(B) Temporary Extension

Fixed charges per day - Rs.65/kW or part thereof of connected load plus the application fee, test fee etc. Energy charges shall be recovered from the consumer from whom the extension is availed, at the tariff applicable to him.

LT-IV (A) Industry

14.23 LT-IV (A) Industrial tariff is applicable for the general purpose industrial loads (single or three phase) which include

- (i) manufacturing units,
- (ii) grinding mills, flour mills, oil mills, rice mills,
- (iii) saw mills, units using electric hydraulic axe machine to break down logs into small pieces.
- (iv) ice factories,
- (v) rubber smoke houses, tyre vulcanizing/re-treading units, manufacturing rubber sheets from latex,
- (vi) workshops using power mainly for production and/or repair,
- (vii) public waterworks, drinking water pumping for public by Kerala Water Authority, corporations, municipalities and panchayats, telemetry stations of KWA, pumping water for non- agricultural purposes, sewage pumping units,
- (viii) power laundries,
- (ix) screen printing of glass ware or ceramic, SSI units engaged in computerized colour photo printing,
- (x) audio/video cassette/CD manufacturing units,
- (xi) printing presses including presses engaged in printing dailies,
- (xii) bakeries (where manufacturing process and sales are carried out in the same premises)
- (xiii) diamond- cutting units, stone crushing units,
- (xiv) book binding units with allied activities,
- (xv) garment making units,
- (xvi) seafood processing units, prawn peeling and processing units, granite cutting units (where large granite blocks are cut into sheets in the same premises),
- (xvii) plantations of cash crops, tea factories, cardamom drying and curing units,

- (xviii) units carrying out extraction of oil in addition to the filtering and packing activities carrying out in the same premise under the same service connection,
- (xix) dairy, processing of milk by pasteurization and its storage and packing,
- (xx) soda and drinking water manufacturing units,
- (xxi) electric crematoria.

14.24 Vide the public notice dated 01-12-2016, the Commission had proposed to revise the tariff applicable to LT-IV (A) Industrial consumers. During the public hearing, many small industrial consumers had requested to withdraw the proposals to revise the fixed charge of industrial consumers having connected load less than or equal to 10kW. The Commission has considered their request and decided not to increase the fixed charge of LT-IV (A) Industrial consumers having connected load of and below 10 kW. The existing and approved tariffs for LT-IV (A) category for the year 2017-18 are detailed below.

Table 14.12
Existing tariff and approved tariff for LT-IV (A) Industrial category

Particulars	Existing Tariff	Approved Tariff
Fixed charges		
(a) Of and Below 10kW (Rs/ consumer per month)	100	100
(b) Above 10 kW and up to 20kW (Rs/kW/month)	60	75
(c) Above 20kW (Rs/ kVA/ month)	125	150
Energy charge (Rs/ kWh)		
Of and Below 10 KW	5.20	5.50
Above 10 kW and up to 20kW	5.20	5.50
Above 20kW	5.20	5.50

IT and IT enabled Industry [LT IV -B]

14.25 The LT IV -B tariff is applicable to Information Technology (IT) and IT enabled services including Akshaya-e-centres, computer consultancy services units, software services, data processing activities, desktop publishing (DTP), software development units and such other IT enabled services. It has been decided to include call centres also in this category.

14.26 In view of the facts and circumstances explained in Chapter 12, it has been decided to increase the prevailing tariff moderately for this category. The existing tariff and the approved tariff for the year 2017-18 are given below.

Table 14.13
Existing and Approved tariff for LT-IV (B) IT & IT enabled services

Particulars	Existing tariff	Approved Tariff
Fixed charges		
(a) Of and Below 10kW (Rs/ consumer per month)	100	100
(b) Above 10 kW and up to 20kW (Rs/kW/month)	60	60
(c) Above 20kW (Rs/ kVA/ month)	125	125
Energy charge (Rs/ kWh)		
Of and Below 10 kW	5.80	6.00
Above 10 kW and upto 20kW	5.80	6.00
Above 20kW	5.80	6.00

LT- V (A) AGRICULTURE

14.27 The tariff in this category has been applicable to the use of electricity for pumping, dewatering and lift irrigation for cultivation of food crops, fruits and vegetables. In view of the submissions made by the cultivators during the public hearing and considering the serious problems faced by the agricultural sector as a whole, it has been decided to extend this concessional tariff to pumping, dewatering and lift irrigation for the cultivation of cash crops such as cardamom and coffee and for the cultivation of crops such as coconut, arecanut, pepper, nutmeg, cloves, cocoa and betel leaves as pure crops or as inter crops. The Commission has also decided not to increase the tariff to LT-V(A) agriculture category, considering the acute socio-economic, labour and other problems faced by the agriculture sector.

Table 14.14
Existing and approved tariff for LT-V (A) Agriculture

Particulars	Existing	Approved tariff
Fixed Charge Rs. per kW or part thereof per Month	8	8
Energy Charge (Rs/kWh)	2.00	2.00

LT- V (B) AGRICULTURE

14.28 The tariff under this category is applicable to the supply of electricity for the use of the following activities such as,-

- (i) livestock farms, combination of livestock farms with dairy, poultry farms, rabbit farms, piggery farms, hatcheries,
- (ii) silk worm breeding units, sericulture,
- (iii) floriculture, tissue culture, agricultural and floricultural nurseries, mushroom culture,
- (iv) aquaculture, fish farms including ornamental fish farms, prawn farms, other aqua farms, aquarium run by the Agency for Development of Aquaculture, Kerala, and

- (v) cheenavala without fish farming and egger nurseries,
- 14.29 The Commission has decided not to increase the tariff under LT-V(B) Agriculture category for the year 2017-18. The existing tariff and the approved tariff for LT-V(B) Agriculture category for the year 2017-18 is given below.

Table 14.15
Existing and approved tariff for LT-V (B) Agriculture

Particulars	Existing tariff	Approved tariff
Fixed Charge Rs. per kW or part thereof per Month	8	8
Energy Charge (Rs/kWh)	2.50	2.50

Low Tension –VI-General (A) [LT-VI(A)]

- 14.30 The tariff under LT-VI (A) category is applicable to
- (i) Government or aided educational institutions; libraries and reading rooms of government or aided educational institutions, educational institutions run by IHRD,
 - (ii) Government hospitals; X-Ray units, laboratories, blood banks, mortuaries and such other units attached to the government hospitals; blood banks of IMA or of local self-government institutions; poly clinics under Ex-servicemen Contributory Health Scheme (ECHS).
 - (iii) Centres for religious worship such as temples, mosques and churches; institutions imparting religious education, monasteries and convents;
- The Commission has decided to continue the existing tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VI(A) category are given below.

Table-14.16
Existing and approved tariff for LT-VI(A) category

Particulars	Existing Tariff	Approved tariff
Fixed charges (Rs/per kW or part thereof per month)	50	50
Energy charge (Rs/ kWh)		
Up to 500 units (all units)	5.50	5.50
Above 500 units (all units)	6.30	6.30

Low Tension –VI-General (B) [LT-VI(B)]

- 14.31 The tariff under this category is applicable to,-
- (i) offices and institutions under the State or Central Governments or under the Local Self Government Institutions, except those which are included in the category LT-VI General (C); village offices; Government Treasuries.
 - (ii) offices of the Corporations, Boards and other Public Sector Undertakings under State or Central Governments;

- (iii) offices of the Kerala Water Authority (KWA), Kerala State Road Transport Corporation (KSRTC) and Kerala State Water Transport Corporation (KSWTC);
- (iv) museum and / or zoo;
- (v) hostels of educational institutions affiliated to Universities, hostels under the control of the Director of Technical Education or the Director of Medical Education or the Director of Public Instruction or such other offices of government,
- (vi) hostels run by the State or Central Government, hostels run by State Social Welfare Board,
- (vii) hostels run by institutions registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) or under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882, the donations to which are exempted from payment of Income Tax;
- (viii) Working women hostels operating under the scheme approved by the Ministry of Women and Child Development, Government of India, hostels under the supervision and monitoring of Department of Social Welfare, Government of Kerala;
- (ix) Pay wards and institutions of Kerala Health Research and Welfare Society (KHRWS);
- (x) travellers bungalows, rest houses and guest houses under government; Police Clubs,
- (xi) type writing institutes;
- (xii) offices of advocates or chartered accountants or company secretary or consulting engineers or tax consultants or architects or cost accountants or of management consultants;
- (xiii) offices of social organizations, offices of service pensioners' associations.
- (xiv) offices of political parties not approved by the Election Commission of India;
- (xv) collection centres of 'FRIENDS'; single window service centres under Department of Information Technology;
- (xvi) offices of Department of Posts, all post offices including extra departmental (ED) post offices;
- (xvii) micro financing institutions registered and functioning as per the guidelines issued by Reserve Bank of India;
- (xviii) cameras at traffic signal points.

The Commission has decided to continue the existing tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VI(B) category are given below.

Table- 14.17
Existing and approved tariff for LT-VI(B)

Particulars	Existing tariff	Approved tariff
(a) Fixed Charge (Rs. per kW or part thereof per Month)	70	70
(b) Energy Charge (Rs/kWh)		
(i) Of and Below 500 kWh (all units)	6.30	6.30
(ii) Above 500 kWh (all units)	7.00	7.00

Low Tension –VI-General (C) [LT-VI(C)]

14.32 The tariff under this category is applicable to

- (i) offices or institutions under Income Tax or Central Excise and Customs Departments,
- (ii) offices under Motor Vehicles Department or Sales Tax department or Excise Department; Sub-Registry offices; and such other tax earning departments under State or Central Government (other than Local Self Government Institutions);
- (iii) light houses;
- (iv) pawn brokers; banking and / or financing institutions (excluding micro financing institutions registered and functioning as per the guidelines issued by Reserve Bank of India);
- (v) ATM counters;
- (vi) offices of Railways including railway stations; offices of KMRL including railway stations,
- (vii) offices of Airport Authority of India except airport; and
- (viii) any other LT categories not included in this schedule.

The Commission has decided to continue the existing tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VI(C) category are given below.

Table- 14.18
Existing and approved tariff for LT-VI(C) category

Particulars	Existing tariff	Approved tariff
(a) Fixed Charge (Rs. per kW or part thereof per Month)	180	180
(b) Energy Charge (Rs/kWh)		
(i) Of and Below 500 kWh (all units)	7.00	7.00
(ii) Above 500 kWh (all units)	8.50	8.50

Low Tension –VI-General (D) [LT-VI(D)]

14.33 The tariff under LT-VI (D) category is applicable to

- (i) orphanages;
- (ii) anganwadis; schools and hostels for differently abled or physically challenged persons (including mentally retarded students, deaf/dumb/blind persons),
- (iii) old age homes run by charitable institutions or social organizations or non-governmental organizations where no charges are levied for the boarding and lodging of inmates,
- (iv) Cheshire homes; polio homes; SoS Childrens' Villages,
- (v) charitable centres for cancer care, pain and palliative care and HIV rehabilitation,
- (vi) charitable hospital guidance centres registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) or under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882, donations to which are exempted from payment of Income Tax,
- (vii) charitable institutions recognized by the Government for the care and maintenance of the destitute and differently abled or physically challenged persons including mentally retarded persons and deaf/dumb/blind persons,
- (viii) shelters exclusively for orphaned animals and birds run by charitable institutions registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) or under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882;
- (ix) libraries and reading rooms with connected load of and below 2000 watts and monthly consumption of and below 100 units.
- (x) e-toilet and public comfort stations, where no charges are levied for the use.

Considering the social sensitivity and the need to promote the institutions run for the care and maintenance of the destitute, deprived, differently abled and such other persons, the Commission has decided not to increase the tariff for LT-VI(D) category. The existing tariff and the approved tariff for LT-VI(D) category are given below.

Table- 14.19
Existing and approved tariff for LT VI (D) tariff

Particulars	Existing tariff	Approved tariff
Fixed charge (Rs/kW)	Nil	Nil
Energy charges (Rs/kWh)	1.80	1.80

Low Tension –VI-General (E) [LT-VI(E)]

14.34 The tariff under LT-VI(E) category is applicable to

- (i) sports and / or arts clubs (with connected load not exceeding 2000 W);
- (ii) sailing and / or swimming clubs (with connected load not exceeding 2000 W);
- (iii) gymnasium (with connected load not exceeding 2000 W);
- (iv) libraries and reading rooms excluding those which are included in LT VI-A and LT VI-D categories,
- (v) press clubs;
- (vi) offices of political parties approved by Election Commission of India;
- (vii) e-toilet and public comfort stations, where charges are levied for the use.

14.35 The Commission has proposed a moderate increase in the tariff for this category. The existing tariff and the approved tariff for the LT-VI (E) are given below.

Table 14.20
Existing and approved tariff for LT-VI(E) category

Particulars	Existing tariff	Approved tariff
(a) Fixed charge (Rs/ consumer/month)		
Single phase consumers	20	30
Three phase consumers	60	80
(b) Energy charges (Rs/kWh)		
1 to 50 units	2.80	3.10
51 to 100 units	3.80	4.10
101 to 200 units	4.50	4.80
Above 200 units (non-telescopic for the entire consumption)	6.30	6.50

Low Tension –VI-General (F) [LT-VI(F)]

14.36 The tariff under LT- VI (F) is applicable to

- (i) computer training institutes, private coaching or tuition centres, self-financing educational institutions including the hostels run by them,
- (ii) cinema studios, audio/video cassette recording/duplication units, CD recording units, cinema dubbing and animation studios,
- (iii) all construction works,
- (iv) installations of cellular mobile communications, satellite communications, offices and / or exchanges of telecom companies,
- (v) offices or institutions of All India Radio (AIR), Doordarshan and other television broadcasting companies, cable TV networks, radio stations,
- (vi) insurance companies,
- (vii) hall marking centres.

14.37 The Commission has decided to continue the existing tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VI(F) category are given below.

Table-14.21
Existing tariff and approved tariff for LT-VI(F) category

Particulars	Existing tariff	Approved tariff
Fixed charge (Rs/ kW per month)		
Single Phase	60	60
Three phase	120	120
Energy Charge (Rs per unit)		
0 to 100 units per month	5.80	5.80
0 to 200 units per month	6.50	6.50
0 to 300 units per month	7.20	7.20
0 to 500 units per month	7.80	7.80
above 500 units per month	9.00	9.00

Low Tension –VI-General (G) [LT-VI(G)]

14.38 The Commission has, under the facts and circumstances explained in Chapter 12, decided to introduce a new category namely LT -VI (G) for the private hospitals and such other private sector institutions in the health care sector. The Commission has also decided to include under this category, the private clinical laboratories, private X-ray units, private mortuaries, private blood banks and private scanning centres, which were hitherto included in LT –VI (F) category. Hitherto, the private hospitals run by Charitable Societies registered under the Travancore – Cochin Literary, Scientific and Charitable Societies Registration Act, 1955, the donations to which were exempted from payment of Income Tax, were included in LT –VI (A) category. The Commission had received application for including the private hospitals run by Charitable Trust also under LT VI (A) category. Further, the association of Qualified Medical Practitioners had submitted application for reducing their tariff and for including them in the tariff category for industry. On careful examination of the issues relating to private hospitals, it has been noticed that about 68% of the private hospitals are small units with consumption below 500 units per month. The Commission has noticed that such small private hospitals / clinics deserve a more lenient consideration when compared to the large private hospitals. In view of the facts and circumstances explained above and in Chapter 12, the Commission has decided to eliminate the difference between the private hospitals run by Charitable Societies registered under the Travancore – Cochin Literary, Scientific and Charitable Societies Registration Act, 1955, the donations to which were exempted from payment of Income Tax and the other private hospitals. The Commission has also decided to formulate a tariff structure which would give considerable relief especially to the small private hospitals and clinics with consumption of and

below 500 units / month, which will now be able to avail electricity at the same energy charge of Rs.5.50 / unit applicable to the Government hospitals. The tariff under this category is applicable to all the private hospitals, private clinics, private clinical laboratories, private X-ray units, private mortuaries, private blood banks and private scanning centres and such other private institutions in health care sector. The tariff approved for LT-VI (G) category is detailed below.

Table-14.22

Tariff approved for Private Hospitals and such other private health care units.

Approved tariff for consumers in LT VI General (G) for private hospitals and private clinics	
Fixed charge (Rs/ kW per month)	
Single Phase	60
Three phase	180
Energy Charge (Rs per unit)	
up to 500 units per month	5.50
501 units upto 1000 units per month	6.50
1001 units upto 2000 units per month	7.50
Above 2000 units per month	8.50

LOW TENSION - VII – COMMERCIAL (A) [LT- VII (A)]

14.39 The tariff under LT-VII (A) category is applicable to commercial and trading establishment such as,

- (i) shops, showrooms, display outlets, business houses,
- (ii) hotels and restaurants (having connected load exceeding 1000 W), house boats
- (iii) private lodges, private hostels, private guest houses, private rest houses, private travellers bungalows,
- (iv) freezing plants, cold storages, milk chilling plants,
- (v) shops selling confectioneries, sweetmeat, breads and such other eatables without manufacturing process,
- (vi) petrol/diesel/ LPG /CNG bunks, LPG bottling plants,
- (vii) automobile service stations, computerized wheel alignment centres,
- (viii) marble and granite cutting units,
- (ix) units carrying out filtering, packing and other associated activities of oil brought from outside,
- (x) share broking firms, stock broking firms, marketing firms.

14.40 The Commission has decided to continue the existing non-telescopic tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VII (A) category are given below.

Table-14.23
Existing tariff and approved tariff for LT-VII(A) category

Particulars	Existing	Approved tariff
(a) Fixed charge (Rs/ kW per month)		
(i) Single Phase	60	60
(ii) Three phase	120	120
(b) Energy Charge (Rs per unit)		
(i) Of and below 100 units per month	6.00	6.00
(ii) Of and below 200 units per month	6.70	6.70
(iii) Of and below 300 units per month	7.40	7.40
(iv) Of and below 500 units per month	8.00	8.00
(v) Above 500 units per month	9.30	9.30

LT- VII COMMERCIAL (B)

14.41 Tariff applicable to commercial and trading establishments such as,-

- (i) shops, bunks, hotels, restaurants, having connected load of and below 1000 Watts
- (ii) telephone / fax / e-mail / photocopy booths and internet cafes having connected load of and below 1000 Watts.

When connected load of the above mentioned consumers exceeds 1000 Watts, such consumers shall be charged under LT -VII (A) tariff. If monthly consumption of LT- VII (B) consumers having connected load of and below 1000 Watts, exceeds 300 units, the energy charges shall be realized at the rate of energy charges applicable to LT -VII (A) consumers. The existing and approved tariff for LT-VII(B) category is given below.

Table-14.24
Existing tariff and approved tariff for LT-VII(B) category

Particulars	Existing tariff	Approved tariff
Fixed charge (Rs/kW/ month)	40	40
Energy charge (Rs/ kWh)		
Upto 100 Units	4.70	5.00
Upto 200 Units	5.70	5.70
Upto 300 Units	6.30	6.30

LT- VII COMMERCIAL (C) [LT VII (C)]

14.42 The tariff under LT VII (C) is applicable to,-

- (i) cinema theatres;
- (ii) circus;
- (iii) sports and arts clubs, sailing or swimming clubs and gymnasium having connected load exceeding 2000W.

14.43 The Commission has decided to continue the existing non-telescopic tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-VII (C) category are given below.

Table-14.25
Existing tariff and approved tariff for LT-VII(C) category

Particulars	Existing tariff	Approved tariff
(a) Fixed Charge (Rs. per kW or part thereof) Month	90	90
(b) Energy Charge (Rs/kWh)		
(i) Of and below 1000 kWh	5.90	5.90
(ii) Above 1000 kWh	7.30	7.30

LOW TENSION – VIII- PUBLIC LIGHTING (LT-VIII)

14.44 This tariff is applicable to street lights / public lighting system managed by local self-government institutions in the State. At present the tariff for public lighting is divided into the following two sub-categories.

- (i) LT-VIII(A)- Composite tariff for Unmetered street lights, and
- (ii) LT-VIII(B) tariff for metered street lights.

In the public notice dated 01-12-2016 on suo motu determination of tariff, the Commission had proposed an overall increase of about 16% for the tariff in this category. Though the Commission has given wide publicity on the tariff proposals and conducted public hearing at seven places across the State, the Commission has not received any objection or other response from local self-government institutions. However, the Commission has decided to limit the increase in tariff of this category to about 8%. With a view to promoting energy conservation and change-over from incandescent bulbs and sodium vapour lamps to LED lighting, the Commission has decided to allow 50% concession in the composite tariff for street lights with LED. The tariff for LED street lighting as given in the table below has been worked-out accordingly.

14.45 The composite tariff under LT-VIII (A) approved for unmetered street lighting is given below.

Table-14.26

LT – VIII (A) – Composite Tariff approved for Unmetered Street Lights				
TYPE OF LAMP	Watts (W)	Rs/Lamp/Month		
		Burning Hours per day		
		4 Hours	6 Hours	12 Hours
Ordinary	40	22	33	66
Ordinary	60	33	50	102
Ordinary	100	55	84	167
Fluo tube	40	22	33	66
Fluo tube	80	44	66	134
Floodlight	1000	559	838	1677
MV Lamp	80	51	70	143
MV Lamp	125	75	112	222
MV Lamp	160	96	143	286
MV Lamp	250	149	222	447
MV Lamp	400	239	356	714
SV Lamp	70	42	64	125
SV Lamp	80	48	70	143
SV Lamp	100	59	89	178
SV Lamp	125	75	112	222
SV Lamp	150	89	134	267
SV Lamp	250	149	222	447
CFL	11	5	8	16
CFL	15	7	11	22
CFL	18	9	13	26
CFL	22	11	16	32
CFL	30	15	22	44
CFL	36	17	26	53
CFL	44	21	32	64
CFL	72	35	53	105
CFL	144	70	105	210
LED	12	3	4	9
LED	18	4	7	14
LED	20	5	7	15
LED	24	6	9	20
LED	30	7	11	25
LED	40	10	15	30
LED	45	11	16	35
MV Lamp on semi high mast only for 12 hrs burning per day	1200			2160
SV Lamp on semi high mast only for 12 hrs burning per day	250			450

14.46 The existing tariff and approved tariff for metered street lights under LT-VIII(B) category are given below.

Table-14.27
Approved tariff for metered street lights

Particulars	Existing tariff	Approved Tariff
Fixed charges (Rs/meter/month)	30	40
Energy charges (Rs/ kWh)	3.60	3.90

LT IX : DISPLAY LIGHTINGS AND HOARDINGS

14.47 The tariff under this category is applicable to display lightings, hoardings, external illumination of buildings for publicity and sales- promotion purposes. The Commission has decided to continue the existing tariff for this category for 2017-18 also. The existing tariff and the approved tariff for LT-IX category are given below.

Table- 14 .28
Existing tariff and approved tariff for Display Board and Hoardings

Particulars	Existing tariff	Approved tariff
(a) Fixed Charge (Rs. per Connection per month)	500	500
(b) Energy Charge (Rs per unit)	12.50	12.50

High Tension I - Industrial (A)[HT-I(A)]

14.48 Tariff applicable to general purpose industrial load of all classes of consumers listed in LT-IV (A) category availing supply of electricity at high tension. Vide the public notice dated 01-12-2016 in this suo motu proceedings for determination of tariff, the Commission had proposed to increase the energy charge of HT-I(A) Industrial tariff by Rs 0.30 per unit. Commission had not proposed any increase for demand charges. The Commission has decided to implement the said proposal. The existing tariff and approved tariff for HT-I(A) Industry are given below.

Table-14.29
Existing and approved tariff for HT-I (A) Industry

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	300	300
Energy charges (Rs/ kWh)	5.20	5.50

High Tension - I Industrial (B) - IT and IT enabled services [HT- I (B)]

14.49 The tariff under this category is applicable to all classes of consumers listed in LT-IV (B) category availing supply of electricity at high tension. The existing tariff and approved tariff for HT-I(B) category are given below.

Table-14.30
Existing tariff and approved tariff for HT-I (B) IT and IT enabled services

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	300	300
Energy charges (Rs/ kWh)	5.60	5.80

High Tension – II- General (A) [HT-II (A)]

14.50 The tariff under this category is applicable to all classes of consumers listed in LT-VI (A),LT-VI (B), LT-VI(D) and LT-VI (E) categories availing supply of electricity at high tension. The existing tariff and approved tariff for HT-II(A) category are given below.

Table-14.31
Existing tariff and approved tariff for HT-II(A) category

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	350	350
Energy charges (Rs/ kWh)	5.10	5.40

High Tension – II- General (B) [HT-II (B)]

14.51 The tariff under this category is applicable to all classes of consumers listed in LT-VI (C), LT-VI (F) and LT-VI (G) categories availing supply of electricity at high tension. The Commission has decided to continue the existing tariff for the year 2017-18. The existing tariff and approved tariff for HT-II (B) for the financial year 2017-18 are given below.

Table-14.32
Existing tariff and approved tariff for HT-II(B) category

Particulars	Existing tariff	Approved tariff
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	400	400
(b) Energy Charge (Rs/kWh)		
(i) Of and below 30,000 units	6.20	6.20
(ii) Above 30,000 units	7.20	7.20

High Tension – III- Agriculture (A) [HT-III (A)]

14.52 The tariff under this category is applicable to the classes of agricultural consumers listed in LT-V (A) category, availing supply of electricity at high tension. The Commission has decided to continue the existing tariff for the year 2017-18. The existing tariff and approved tariff for HT-III (A) for the financial year 2017-18 are given below.

Table-14.33
Existing tariff and approved tariff for HT-III(A) category

Particulars	Existing tariff	Approved tariff
Demand charge (Rs/ kVA/ month)	170	170
Energy charges (Rs/ kWh)	2.80	2.80

High Tension – III- Agriculture (B) [HT-III (B)]

14.53 The tariff under this category is applicable to classes of agricultural consumers listed in LT-V (B) category, availing supply of electricity at high tension. The Commission has decided to continue the existing tariff for the year 2017-18. The existing tariff and approved tariff for HT-III (B) for the financial year 2017-18 are given below.

Table-14.34
Existing tariff and approved tariff for HT-III(B) category

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	170	170
Energy charges (Rs/ kWh)	3.30	3.30

High Tension –IV – Commercial (HT-IV)

14.54 The tariff under this category is applicable to all classes of commercial consumers listed in LT-VII (A) and LT-VII (C) categories, availing supply of electricity at high tension. The Commission has decided to continue the existing tariff for the year 2017-18. The existing tariff and approved tariff for HT-IV Commercial for the financial year 2017-18 are given below.

Table 14.35
Existing tariff and approved tariff for HT-IV- Commercial

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	400	400
Energy charges (Rs/ kWh)		
(a) Monthly consumption upto 30000 units	6.30	6.30
(b) Monthly consumption above 30000 units	7.30	7.30

High Tension-V- Domestic (HT-V)

14.55 The tariff under this category is applicable to the domestic consumers in LT I and the colonies in LT II, availing supply of electricity at high tension. The Commission has decided to continue the existing tariff for the year 2017-18. The existing tariff and approved tariff for HT-V Domestic for the financial year 2017-18 are given below.

Table-14. 36
Existing tariff and approved tariff for HT-V- Domestic

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	350	350
Energy charges (Rs/ kWh)	5.50	5.50

Extra High Tension (EHT) Industrial – 66 kV tariff

14.56 The tariff under this category is applicable to the general purpose industrial loads at 66kV. The Commission has decided to increase the energy charge by Rs.0.30 / unit as proposed. The existing tariff and the approved tariff for EHT-66kV category are given below.

Table-14.37
Existing tariff and approved tariff for EHT-Industrial- 66kV

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	300	300
Energy charges (Rs/ kWh)	4.90	5.20

Extra High Tension (EHT) Industrial – 110 kV tariff

14.57 The tariff under this category is applicable to the general purpose industrial loads at 110kV. The Commission has decided to increase the energy charge by Rs.0.30 / unit as proposed. The existing tariff and the approved tariff for EHT-110kV category are given below.

Table-14.38
Existing tariff and approved tariff for EHT-Industrial- 110kV

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	290	290
Energy charges (Rs/ kWh)	4.80	5.10

Extra High Tension (EHT) Industrial – 220 kV tariff

14.58 The tariff under this category is applicable to the general purpose industrial loads at 220kV. The Commission has decided not to increase the tariff for this category. The existing tariff and the approved tariff for EHT-220kV category are given below.

Table-14.39
Existing tariff and approved tariff for EHT-Industrial- 220kV

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	280	280
Energy charges (Rs/ kWh)	4.70	4.70

Extra High Tension (EHT) Commercial – (66 kV, 110kV, 220 kV)

14.59 The tariff under this category is applicable to the general purpose EHT commercial at **66 kV, 110kV, 220 kV**. The Commission has decided not to increase the tariff for this category. The existing tariff and the approved tariff for EHT commercial at **66 kV, 110kV, 220 kV** category are given below.

Table-14.40
Existing tariff and approved tariff for EHT-Commercial

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	400	400
Energy charges (Rs/ kWh)		
(a) Monthly consumption upto 60000 units	6.10	6.10
(b) Monthly consumption above 60000 units	7.10	7.10

Extra High Tension –General A (EHT-General-A) (66 kV, 110kV, 220 kV)

14.60 The Commission has, for the reasons explained in Chapter 12 of this order, decided to introduce a new category namely EHT-General –A for consumers enumerated under LT-VI(A) category, availing supply at EHT level,. The tariff approved for EHT-General - A is given below.

Table-14.41
Approved tariff for EHT-General-A (66kV, 110kV, 220kV)

Particulars	Approved Tariff
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	300
(b) Energy Charge (Rs /kWh)	5.00

Extra High Tension –General – B (EHT-General-B) (66 kV, 110kV, 220 kV)

14.61 The tariff under this category is applicable to Indian Space Research Organisation (ISRO), utility services such as Airport, Self-Financing Educational Institutions and any other EHT consumers not included elsewhere. The Commission has decided not to increase the tariff for this category. The existing tariff and the approved tariff for EHT-General B (66kV, 110kV and 220kV) category are given below.

Table-14.42
Existing tariff and approved tariff for EHT-I-General B (66kV, 110kV, 220kV)

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	370	370
Energy charges (Rs/ kWh)		
(a) Monthly consumption upto 60000 units	5.80	5.80
(b) Monthly consumption above 60000 units	6.80	6.80

Tariff for Railway Traction

14.62 The tariff under this category is applicable to the electricity for traction availed by Railways at 110 kV level. The Commission has decided to increase the energy charge by Rs.0.30 / unit as proposed. The existing tariff and approved tariff for Railway Traction for the year 2017-18 are given below.

Table-14.43
Existing tariff and approved tariff for Railway Traction

Particulars	Existing Tariff	Approved Tariff
Demand charge (Rs/ kVA/ month)	250	250
Energy charges (Rs/ kWh)	4.80	5.10

Koch Metro Rail Corporation Ltd (KMRL)

14.63 In view of the facts and circumstances explained in Chapter 12, the Commission has decided to introduce a separate tariff for traction for KMRL. The tariff approved for the traction of KMRL is given below.

Table-14.44
Approved tariff for KMRL (110 kV)

Particulars	Approved Tariff
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	250
(b) Energy Charge (Rs/kWh)	4.80

REVISION OF BULK SUPPLY TARIFF

14.64 The details of the small licensees/ bulk suppliers/ sanction holders, procuring power from KSEB Ltd and distributing within their area of jurisdiction of the small licensees are given below.

Table-14.45
Details of the bulk licensees/ sanction holders

Sl No	Licensee	Contract Demand	Annual consumption	Existing tariff		Revenue at existing tariff
				Demand charge	Energy charge	
		(MVA)	(MU)	(Rs/ kVA/month)	(Rs/ kWh)	(Rs. Cr)
*1	KPUPL	15.03	84.44	300	5.30	50.16
2	CSEZ	10.98	55.42	300	5.30	33.33
3	RPL	4.98	26.81	300	4.55	13.99
4	Technopark	19.86	85.02	300	4.85	48.38
5	CPT	9.08	35.24	300	5.75	23.53
6	Thrissur Corporation	33.00	159.16	300	5.40	97.83
7	KDHPCL	7.00	45.96	300	4.30	22.28
8	MES	15.18	70.51	350	5.10	42.34
9	Puducherry (Mahe)	8.09	44.26	350	5.10	25.97
10	Karnataka	0.35	0.53	350	5.10	0.42
11	Infopark	0.56	2.04	300	5.55	1.33
	Total	124.11	609.39			359.56

14.65 Out of the above, the retail supply tariff of the following licensees namely, MES, Puducherry (Mahe) and Karnataka, which purchase electricity in bulk from KSEB Ltd, are not regulated by the Commission. However, since these licensees are procuring power from KSEB Ltd, the Commission, as per the powers conferred under the provisions of the Electricity Act-2003, has been approving the BST applicable to them for procuring power from KSEB Ltd,

14.66 The Commission has been adopting uniform retail supply tariff (RST) and differential bulk supply tariff (BST) for the other licensees in the State, such as Thrissur Municipal Corporation; KDHPCL, Munnar; Cochin Port Trust; Technopark; Infopark; CSEZA; KPUPL and RPIL. Further, the Commission has been fixing the BST rates payable by the said small licensees in such a way that, the net revenue collected from consumers after meeting their approved distribution cost is allowed to be passed on to KSEB Ltd by way of differential BST.

14.67 The Commission has tried up the accounts of the said small licensees upto the year 2014-15. The details of the accumulated revenue surplus available with the small licensees up to the year 2014-15 are given below.

Table 14.46
Accumulated surplus with the small licensee vide the orders on true-up

SI No	Particulars	Accumulated revenue surplus/ gap as per the orders on True up of accounts (Rs.Cr)	Remarks
1	KPUPL	43.56	Upto the year 2014-15
2	Technopark	4.25	Upto the Year 2013-14
3	KDHPCL	5.92	Upto the year 2014-15
4	TCED	99.68	Upto the year 2014-15
5	CSEZA	13.64	Upto the year 2014-15
6	CoPT	34.17	Upto the year 2014-15
7	Rubber park	-0.03	Upto the year 2014-15
8	Infopark	0.35	Upto the year 2014-15

14.68 As detailed above, except for 'Rubber Park' and 'Infopark', there is considerable revenue surplus available with the small licensees as per the orders on truing up of accounts as approved by the Commission.

14.69 As per the orders on ARR approved by the Commission, the revenue surplus/ gap approved for the year 2017-18 is detailed below.

Table-14.47
Revenue surplus/gap approved for the year 2017-18

SI No	Particulars	Revenue surplus (+) / gap (-) approved for the year 2017-18 (Rs. Cr)
1	KPUPL	(+)2.21
2	Technopark	(+)3.19
3	KDHPCL	(+)0.88
4	TCED	(-)0.60
5	CSEZA	(-)1.71
6	CoPT	(-)0.14
7	Rubber park	(-)0.98
8	Infopark	(-)0.90

14.70 The Commission has, as per this order, decided to revise the retail supply tariff (RST) applicable to various categories of consumers such as domestic, LT-IV A Industry, LT-IV (B) IT and IT enabled services, HT-I(A) Industry, HT-I(B) Industry, HT-II(A) General and public lighting. The small licensees will also have additional revenue mobilization by way of the revision of the RST of the above categories. The additional revenue expected to the small licensees by revising the RST for the year 2017-18 is given below.

Table 14.48
Additional revenue expected to the small licensees by way of
revising the RST for the year 2017-18

SI No	Licensee	Additional revenue expected through tariff revision (Rs. Cr)
1	KPUPL	3.23
2	CSEZA	1.60
3	RPL	0.81
4	Technopark	1.02
5	CPT	0.85
6	TCED	3.98
7	KDHPCL	1.07
8	Infopark	0.46

14.71 Duly considering the accumulated revenue surplus available with the small licensees while truing up the accounts up to the year 2014-15 as detailed under Table 14.46, the revenue surplus/gap approved for the year 2017-18 vide the orders on ARR as detailed under Table 14.47, and the additional revenue anticipated by way of revising the RST of the consumers as detailed under Table 14.48 above, the Commission vide the public notice dated 01.12.2016 had proposed to revise the BST applicable to the small licensees as follows.

Table-14.49
BST revision proposed for small licensees and sanction holders

SI No	Licensee	Proposed BST		Revenue to KSEB Ltd at proposed tariff (Rs. Cr)	Addl revenue to KSEB Ltd (Rs. Cr)
		Demand charge	Energy charge		
		(Rs/ kVA/ month)	(Rs/ kWh)		
1	KPUPL	350	5.60	53.60	3.44
2	CSEZ	350	5.40	34.54	1.21
3	RPL	350	4.55	14.29	0.30
4	Technopark	350	5.20	52.55	4.17
5	CPT	350	6.00	24.96	1.43
6	Thrissur Corporation	350	5.85	106.97	9.14
7	KDHPCL	350	4.60	24.08	1.80
8	MES	400	5.60	46.77	4.44
9	Pudusserry	400	5.60	28.67	2.70
10	Karnataka	400	5.60	0.46	0.05
11	Infopark	350	5.50	1.36	0.02
	Total			388.25	28.69

14.72 The Commission has considered the comments of the small licensees on the proposed revision of BST applicable to them. Considering the accumulated revenue surplus available with the small licensees, and the additional revenue expected through the RST revision, the Commission approves the BST for the year 2017-18 as given below.

Table 14.50
BST approved for the year 2017-18

Sl No	Licensee	Existing tariff		Approved tariff	
		Demand charge	Energy charge	Demand charge	Energy charge
		(Rs/ kVA/ month)	(Rs/ kWh)	(Rs/ kVA/ month)	(Rs/ kWh)
1	KPUPL	300	5.30	300	5.60
2	CSEZ	300	5.30	300	5.40
3	RPL	300	4.55	300	4.55
4	Technopark	300	4.85	300	5.20
5	CPT	300	5.75	300	6.00
6	Thrissur Corporation	300	5.40	300	5.85
7	KDHPCL	300	4.30	300	4.60
8	MES	350	5.10	350	5.60
9	Pudusserry	350	5.10	350	5.60
10	Karnataka	350	5.10	350	5.60
11	Infopark	300	5.55	300	5.50

PART-B - OTHER CHARGES

(Transmission charges, wheeling charges, cross subsidy surcharges, pooled cost of power purchase)

Transmission charges

14.73 As per the details on approved energy sale to different categories of consumers for the year 2017-18, as detailed in Chapter-5 of this order and transmission losses approved as per Chapter-6 of this report, the energy flow in the transmission system is given in the table below.

Table 14.51
Energy flow in the transmission system

Sl No	Particulars	Transmission system
1	Energy injected into the system (MU)	25292.45
2	Percentage of Loss	4.50
3	Loss of energy (MU)	1138.16
4	Energy handled (MU)= (1)-(3)	24154.29
5	Sale of energy at 66kV system and above (MU)	1944.01
6	Sum of loss and sale of energy (MU=(3)+(5))	3082.17
7	Energy transmitted to next level (MU) = (1)-(6)	22210.28

14.74 As detailed under Chapter-8 of this order, the ARR of the SBU-T of the KSEB Ltd approved for the year 2017-18 is Rs 905.20 crore. Further, as detailed in the Table 13.63 above, energy handled in the transmission system is about 24154.29 MU. Accordingly, the transmission charges approved for the year 2017-18 is given in the Table below.

Table 14.52
Transmission charges approved for the year 2017-18

Particulars	Approved by Commission
Transmission ARR for the year 2017-18 (Rs. Crore)	905.20
Energy handled in Transmission system (MU)	24154.29
Transmission charges (Rs/unit)	0.37
Transmission charges (Rs/MW/day) (based on the system load factor of 72%)	8580

14.75 Based on the above, the transmission charges approved for the year 2017-18 is Rs 0.37/unit, for short-term collective transaction through power exchanges. The transmission charges per MW per day is approved as Rs.8580/- for the year 2017-18 for short-term consumers of the transmission system other than short-term transaction through power exchanges.

- 14.76 The transmission charges as approved above may be applicable to all consumers who are availing open access facility, irrespective of whether the consumers belong to the KSEB Ltd or other small licensees.

Wheeling charges at HT level

- 14.77 As per the Regulation-87 of the Tariff Regulations, 2014, the wheeling charges of the distribution licensee may be determined on the basis of segregated accounts of the distribution wire business. The relevant provisions in the Tariff Regulations, 2014 is extracted below.

“87. Determination of wheeling charges.– (1) The wheeling charges of the distribution business/licensee may be determined by the Commission on the basis of segregated accounts for distribution wires business:

(2) (a) Where the distribution business/licensee is not able to submit audited and certified separate accounts for the distribution wires business and for the retail supply business, the distribution business/licensee shall submit to the Commission for its approval, an allocation matrix for segregation of expenses between the distribution wires business and the retail supply business.

(b) The Commission may take appropriate decision on such allocation matrix for segregation of expenses between the distribution wires business and the retail supply business.

(3) The wheeling charges payable by a user of the distribution system of the distribution business/licensee may comprise of any combination of demand charges and variable charges, as may be stipulated by the Commission in such order.”.

- 14.78 Since the present proceedings on determination of tariff for the year 2017-18 was initiated by the Commission on suo motu basis, the details of the allocation matrix for segregation of expenses between wire business and retail supply business is not available before the Commission. In the absence of such details, the Commission decided to follow the methodology specified in its Tariff Order dated 30-09-2014 for determining the wheeling charges for the year 2017-18 .

- 14.79 As per the details on approved energy sale to different categories of consumers for the year 2017-18, as detailed in Chapter-5 of this order and the losses in HT system approved under Chapter-6 of this order, the energy flow in the HT system is given in the Table below.

Table 14.53
Energy flow in the HT system

SI No	Particulars	HT system
1	Energy injected into the HT system (MU) (from SBU-T)	22210.28
2	Percentage of Loss	5.50
3	Loss of energy (MU)	1221.57
4	Energy handled (MU)= (1)-(3)	20988.71
5	HT sale to consumers (MU)	3448.06
6	Sum of loss and sale of energy (MU)=(3)+(5)	4669.63
7	Energy transmitted to LT system (MU) = (1)-(6)	17540.65

- 14.80 The Commission had approved the ARR of the SBU-D of KSEB Ltd (excluding cost of generation and power purchase) for the year 2017-18 at Rs 2565.80 crore. In order to determine the wheeling charge at HT level, the total ARR of SBU-D has to be segregated among HT level and LT level. Since KSEB Ltd has not submitted the necessary and sufficient details for segregating the ARR of SBU-D among HT and LT level, the Commission in the previous tariff orders for the years 2012-13, 2013-14 and 2014-15 had adopted the ARR up to the HT level at 25% of the total ARR of the SBU-D. Accordingly, the wheeling charges approved for the year 2017-18 is given in the Table below.

Table 14.54
Wheeling charges for the year 2017-18

Particulars	Approved by the Commission
Distribution ARR for the year 2017-18 (Rs. Cr)	2565.80
Distribution ARR at HT level (25% of the distribution ARR)	641.45
Energy handled at HT level (MU)	20988.71
Wheeling charges at HT level (Rs/unit)	0.31

Based on the above, the wheeling charges approved for the year 2017-18 is Rs 0.31/unit.

Cross subsidy surcharge

- 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

Sl 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) Industry	6.39	3.53	9.75%	0.68	0.00	1.80	1.28	1.28
HT-I(B) Industry	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) Industry	5.50	3.53	9.75%	0.68	0.00	0.91	1.10	0.91
HT-I(B) Industry	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

14.89 Since the Commission has been following uniform RST for all consumers irrespective of whether the consumers are availing supply from KSEB Ltd or other licensees, and differential BST for other licensees who are purchasing power from KSEB Ltd for distributing within their area of jurisdiction, and the Commission by invoking the powers conferred on it under second proviso to the formula for calculating the cross subsidy surcharge given as Annexure-XI to KSEB (Terms and Conditions for Determination of Tariff) Amendment Regulations, 2017, the Commission order that, cross subsidy surcharge as approved above, are applicable to KSEB Ltd and other licensees operating in the State.

Additional surcharge

14.90 The Section 42(4) 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.”

14.91 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, which 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.”

14.92 Further, regulation-41 of the KSERC (Connectivity and Intrastate Open Access) Regulations, 2013, (hereinafter 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.”*

14.93 In order to approve the additional surcharge, KSEB Ltd has to submit necessary and sufficient details before the Commission, to convincingly demonstrate the details of the stranded capacity and the fixed cost liability thereon in terms of its existing power purchase commitments , on account

of providing open access. The Commission may consider such applications as and when received and will take appropriate decisions.

Low voltage supply surcharge

14.94 The Regulation 9 of the Kerala Electricity Supply Code, 2014 (hereinafter referred as KESC, 2014) provide as under:

“9. Low voltage supply surcharge.- Consumers availing supply at voltage lower than the one specified in regulation 8 for the respective limits of connected load or contract demand shall pay the low voltage supply surcharge to the licensee at the rates as approved by the Commission from time to time in the tariff order.”

14.95 Commission has noted that, there are many consumers with KSEB Ltd and other licensees, having connected load above 100kVA has been availing supply at LT. As per the Regulation-9 of the KESC, 2014, such consumers shall pay low voltage supply surcharge at the rate approved by the Commission.

14.96 As per the distribution loss level approved by the Commission in this order for the year 2017-18 , the loss associated with providing supply at HT level is about 5.50%, whereas the loss associated with providing supply at LT is about 11.39%. Further, the distribution loss incurred by the licensee is for the electrical energy flow in the distribution system.

14.97 Further, as per the provisions of the KESC, 2014, the consumers availing supply at HT level shall bear the cost of service line or of the plant or of both, provided exclusively for him by the licensee. But in the case of LT supply, it is the responsibility of the distribution licensee to create necessary infrastructure for providing supply to the consumer.

14.98 In the ‘Schedule of Tariff and Terms and Conditions for Retail Supply of Electricity by KSEB Ltd and all other licensees with effect from 16-8-2014’, paragraph-9 of Part-B of the General Conditions for HT&EHT Tariff, states as follows,-

“In the case of Deemed HT Consumers, the tariff applicable shall be demand charges of respective HT category and energy charge of respective LT category”.

14.99 Though the ‘Deemed HT consumers’ are not defined under KESC, 2014 or Tariff Schedule, the consumers having connected load above 100 kVA, but availing supply at LT is considered as Deemed HT consumers. Accordingly, for such consumers, the electricity charge is being levied at energy charge at

respective LT category and demand charges of respective HT category. The majority of the Deemed HT consumers belongs to Industry, LT-VI(A) – educational institutions, hospitals etc and LT-VII(C) cinema theatre etc. A comparison of the demand charges of LT-IV(A) Industry, LT-VI(A) and LT-VII(C) categories are given below.

Table 14.59
Comparison of demand charges/ fixed charges
for LT and HT supply of certain categories

Category	LT supply	HT supply
	Fixed charge/ Demand charge	Fixed charge/ Demand charge
Industry	Rs 150/kVA/month	Rs 300/kVA/month
Govt Hospitals, Educational institutions etc	Rs 50/kW/month	Rs 350/kVA/month
Cinema theatres etc	Rs 90/kW/month	Rs 400/kVA/month

14.100 The Commission has considered the technical and financial consequences of the issue. As per regulation 8 of the Supply Code, 2014, consumers with connected load / contract demand above 100 kVA shall avail supply at HT level. However, certain consumers, who should avail supply at HT level as per the above regulations, are availing supply at LT level, for their own convenience. Such consumers have to pay, as per regulation 9 of the Supply Code, the low voltage surcharge as specified below, which has been calculated taking into consideration the difference between the demand charges payable at HT level and fixed / demand charges payable at LT level.

Low voltage surcharge for consumers having connected load/ contract demand above 100 kW/kVA and availing supply at LT level

Particulars	Low voltage surcharge
Consumers listed under LT-IV (A) category	Rs 150/kVA/month
Consumers listed under LT-IV (B) category	Rs 175/kVA/month
Consumers listed under LT-VI(A) category	Rs 268/kW/month
Consumers listed under LT-VI(B) category	Rs 248/kW/month
Consumers listed under LT-VI(F) category	Rs 243/kW/month
Consumers listed under LT-VII (A) category	Rs 243/kW/month
Consumers listed under LT-VII(C) category	Rs 273/kW/month

Average Pooled purchase Cost for the year 2017-18

14.101 The average pooled purchase cost for the year 2017-18, for settling the net banked energy at the end of the accounting period as provided under Regulation 15 and 16 of the KSERC (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014, is approved as follows.

14.102 Hon'ble CERC vide the regulation 5 (1) (c) of the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010, has defined the Pooled Cost of Power Purchase as extracted below.

“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.”

14.103 As per the said regulation, the pooled cost of power purchase for the year 2016-17 excluding the power purchase from renewable energy source is detailed below.

Table 14.60
Pooled cost of purchase

Source	Quantity (MU)	Cost (Rs. Cr)
Own generation	4376.87	672.61
CGS (KSEB Ltd periphery)	9734.10	3203.32
Traders (Long term & Medium term)	7302.84	2936.16
Short-term	2399.71	959.88
Total	23813.52	7771.97
Pooled cost of power purchase (Rs/unit)		3.26

Accordingly, the Commission approves the average pooled purchase cost of KSEB Ltd for the year 2017-18, at Rs. 3.26/ unit for the payment for the net electricity banked by the eligible consumer in accordance with sub-regulation (9) of regulation 15 of KSERC (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014.

Meter rent

14.104 The Commission vide the order dated 30-09-2014 in OP No. 9 of 2014 had approved the meter rent as follows.

Table 14.61
Meter rent approved vide the order dated 30-09-2014

SI No	Description	Meter rent (Rs/meter/month)	
		Existing up to 30-09-2014	Approved from 01-10-2014
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	10	6
2	Three phase static meters with LCD and ToD facility with ISI certification	20	15
3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	75	30
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS)protocol		1000

14.105 The Commission had approved the meter rent based on the following details.

- (i) Cost of meter adopted for revising meter rent vide the order dated 30-09-2014

Table 14.62
Approximate cost of meters adopted for revising the meter rent vide the order dated 30-09-2014

SI No	Description	Approximate present cost (Rs)
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	700 to 800
2	Three phase static meters with LCD and TOD facility with ISI certification	2100 to 2200
3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	2500 to 2600
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS)protocol	85000

- (ii) Useful life of the meter is taken as 15 years.
(iii) The rate of interest is adopted as 12%.

14.106 The Commission has noted that, there is a small reduction in the cost of meter and in the rate of interest, since last tariff revision order dated 30.09.2014. However, considering the fact that, the vast majority of the meters were procured earlier at the higher rates prevalent in those days,

and KSEB Ltd had availed loan for the purchase of meters at the interest rates prevalent in those days, the Commission decides to continue the existing meter rent till further orders.

14.107 Considering these factors, the Commission approves the meter rent for the year 2017-18 as given in the table below.

**Table 14.63
Meter rent approved**

SI No	Description	Meter rent approved (Rs/meter/month)
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	6
2	Three phase static meters with LCD and ToD facility with ISI certification	15
3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	30
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS) protocol	1000

Summary of other charges approved by the Commission for the year 2017-18

14.108 As detailed in the preceding paragraphs, the summary of the other charges approved by the Commission for the year 2017-18 is detailed below.

1. The transmission charges approved for the year 2017-18 is Rs 0.37/unit or Rs.8580/MW/day.
2. The wheeling charges approved for the year 2017-18 is Rs 0.31/unit.
3. The cross subsidy surcharge approved for various categories of consumers for the year 2017-18 is given in the table below.

Category	Cross subsidy surcharge (Rs/unit)	
	For embedded consumers	Other than embedded consumers
EHT-1	1.04	1.14
EHT-II	1.02	1.16
EHT-III	0.63	1.34
EHT-G	1.26	1.62
HT-1(A) Industry	0.91	1.28
HT-I(B) Industry	1.16	1.33
HT-II(A)	0.81	1.40
HT-II (B)	1.34	1.66
HT-III(A)	0.00	0.16
HT-III(B)	0.00	0.00
HT-IV	1.36	1.80
HT-V	0.91	1.53

4. The average pooled power purchase cost for the financial year 2017-18 is Rs 3.26/unit.
5. The consumers who are required to avail supply at HT and above as per the regulation 8 of the Kerala Electricity Supply Code, 2014, however, availing supply at LT, shall pay the low voltage surcharge as specified in this order.
6. The transmission charges, wheeling charges, cross subsidy surcharge, low voltage surcharge and average pooled power purchase cost approved in this order are applicable to KSEB Ltd and other licensees in the State.
7. Meter rent to be levied from the consumers is approved as given below.

SI No	Description	Meter rent approved (Rs/kWh)
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	6
2	Three phase static meters with LCD and ToD facility with ISI certification	15
3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	30
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS) protocol	1000

14.109 The Schedule of Tariff approved by the Commission along with this order shall form part and parcel of the tariff order. The general conditions for supply of electricity are specified in the schedule of tariff. Time of the day (ToD) tariff, power factor incentives and disincentives, recommended values of static capacitors, billing procedures under ToD tariff system, and optional demand based tariff have been specified in the following annexures to the Schedule of Tariff.

Annexure	Particulars
Annexure A	ToD tariff applicable to EHT, HT and LT industrial consumers (with connected load of and above 20KW)
Annexure B	Power factor incentive / disincentive
Annexure C	Recommended values of static capacitor in kVAR for power factor improvements
Annexure D	ToD tariff for domestic consumers
Annexure E	Billing under ToD tariff system for LT-IV Industrial, HT and EHT consumers
Annexure F	Optional demand based tariff

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

SCHEDULE OF TARIFF AND TERMS AND CONDITIONS FOR RETAIL SUPPLY OF ELECTRICITY BY KERALA STATE ELECTRICITY BOARD LIMITED AND ALL OTHER LICENSEES WITH EFFECT FROM 18-04-2017 to 31-03-2018

(Vide order dated 17-04-2017)

Unless the context otherwise requires, the words and expressions used in this schedule and defined in the Electricity Act, 2003 or in the Regulations specified by the Kerala State Electricity Regulatory Commission shall have the meaning respectively assigned to them in the Act or in the Regulations mentioned above.

The tariff mentioned in this schedule shall apply to consumers to whom the Kerala State Electricity Board Limited or other distribution licensee has undertaken or undertakes to supply electricity, notwithstanding anything to the contrary contained in any agreement entered into with any consumer earlier by the Kerala State Electricity Board, or other distribution licensees or Government of Kerala or in any of the Tariff Regulations or rules and / or orders previously issued.

The rates specified in this schedule are exclusive of Electricity Duty and / or surcharge and/or any other cess, taxes, minimum fees, duties and other impositions existing or that may be levied or imposed in future by the Government or the Commission, which are payable in addition to the charges payable as per the tariff mentioned in this Schedule.

PART A - LOW TENSION (LT) TARIFF

The expression 'Low Tension Consumer' (LT) means a consumer who is supplied with electrical energy at low or medium voltage by the Kerala State Electricity Board Limited and other distribution licensees in the State. The voltage limits specified for low tension supply are however subject to the variations allowed under the provisions of the Kerala Electricity Supply Code, 2014.

General Conditions

1. The minimum charge payable by all LT consumers other than the consumers in the category of LT-VI General (D) shall be the fixed charge of respective category. Minimum charge applicable to the category LT –VI General (D) shall be as specified under the tariff for that category.
2. All LT Industrial (both LT-IV (A) and LT-IV (B) consumers) and LT Agricultural consumers shall, for power factor improvement, install static capacitors with ISI certification as specified in Annexure C attached to this schedule and obtain the approval of the licensee. Such consumers shall submit to the licensee, an application for approval of the capacitor, as soon as it is installed. The licensee shall communicate to the consumer, its decision about such approval or otherwise within a period of 15 days from the date of submission by the

consumer, the application for approval of capacitor. If the licensee does not communicate to the consumer its decision about such approval or otherwise within a period of 15 days, it shall be deemed that the licensee has granted the required approval for the installation of the capacitor.

3. For LT industrial and agricultural consumers who have not installed capacitors with ISI certification of specified value, the fixed charge and energy charge shall be higher by 20% of the tariff applicable to the respective categories.
4. For the consumers using welding sets without installing capacitors with ISI certification of specified value, the fixed charge and energy charge shall be higher by 30% of the tariff applicable to the respective categories.
5. The officer of the licensee who is authorized to take meter reading shall inspect the static capacitor and ensure that it is functioning properly. If such officer notices that the static capacitor has become faulty or unserviceable, he shall forthwith intimate the matter to the officer in charge of the electrical section / Sub-division of Kerala State Electricity Board Limited or to the concerned officer in the case of other distribution licensees, who shall issue notice to the consumer directing him to replace such faulty or unserviceable capacitor within one month or within such other time limit as stipulated by the concerned officer of the licensee. The consumer shall replace such faulty /unserviceable capacitors within the time limit as directed by the officers of the licensee.
6. If the capacitor is not replaced or put back into service duly repaired, to the satisfaction of the concerned officer of Kerala State Electricity Board Limited or of other distribution licensees, as the case may be, within one month or such other time limit as stipulated by the concerned officer of the licensee, enhanced charges as per clause 3 or clause 4 above shall be payable for the whole period during which the capacitor remains faulty or unserviceable.
7. The consumers, other than those in LT-IV Industry and LT-V Agriculture categories, who have segregated their power load and lighting load may install static capacitors with ISI certification for power factor improvement as specified in the Annexure C to this schedule and obtain approval of the concerned officers of Kerala State Electricity Board Limited or of other licensees, as the case may be. Such consumers shall submit to the licensee, an application for approval of the capacitor, as soon as it is installed. The licensee shall communicate to the consumer, its decision about such approval or otherwise within a period of 15 days from the date of submission by the consumer, the application for approval of capacitor. If the licensee does not communicate to the consumer its decision about such approval or otherwise within a period of 15 days, it shall be deemed that the licensee has granted the required approval for the installation of capacitor.
8. Such consumers other than those in LT-IV Industry and LT-V Agriculture category who install capacitors as specified above shall be eligible for a rebate at the rate of 5% on the energy charges. Such rebate shall be allowed from the billing month succeeding the month in which the approval / deemed approval has been obtained for the capacitors installed by the consumer. No rebate is admissible on the fixed charges.

9. (a) Power supply for common facilities such as fire control, common lighting, lifts, water pumping, sewage treatment, waste disposal, etc. in residential apartment complexes and in individual houses shall be billed at domestic tariff.
- (b) Power supplies to common facilities in high rise buildings mainly for domestic occupation shall be under the domestic tariff if the connected load other than for domestic purpose, is less than 5% of the total load.
- 10.(a) Power supply for common facilities in the high rise buildings, for the occupation by consumers in LT-VI or in LT-VII categories shall be charged at the respective tariffs for such categories.
- (b) In the case of combination of occupation of different categories of consumers, common facilities shall be charged at the highest of LT-VI or LT-VII tariff applicable to such categories.
11. ToD tariff shall be applicable to LT-IV Industrial consumers having connected load above 20 kW and to LT-I domestic consumers (3 Phase) having monthly consumption above 500 units. The charges and other terms & conditions for ToD tariff shall be as per Annexures 'A, D & E' to this schedule.
12. Optional Demand Based Tariff can be availed by consumers under LT VI General(A), LT VI General (B), LT VI General (C), LT VI General (E), LT VI General (F), LT-VI General (G), LT VII Commercial (A) and LT VII Commercial (C) as per the conditions in Annexure – F to this schedule.
13. The consumers who are required to avail supply at HT and above as per the regulation 8 of the Kerala Electricity Supply Code, 2014, but availing supply at LT, shall pay the low voltage surcharge at the following rates.

Low voltage surcharge for consumers having connected load/ contract demand above 100 kW/kVA and availing supply at LT level

Particulars	Low voltage surcharge
Consumers listed under LT-IV (A) category	Rs 150/kVA/month
Consumers listed under LT-IV (B) category	Rs 175/kVA/month
Consumers listed under LT-VI(A) category	Rs 268/kW/month
Consumers listed under LT-VI(B) category	Rs 248/kW/month
Consumers listed under LT-VI(F) category	Rs 243/kW/month
Consumers listed under LT-VII (A) category	Rs 243/kW/month
Consumers listed under LT-VII(C) category	Rs 273/kW/month

LOW TENSION – I- DOMESTIC (LT- I)

The tariff applicable to supply of electrical energy for domestic purpose (both single phase and three phase)

LOW TENSION – I- DOMESTIC (LT- I)		
Fixed charge	Single Phase: Rs.30 per consumer per month Three phase : Rs.80 per consumer per month	
Energy Charge		
Monthly Slab	Rate	Remarks
0-40 units	1.50 Rs. per unit	This rate is applicable only to consumers belonging to below poverty line (BPL) category with connected load of and below 1000 watts.
0-50 units	2.90 Rs. per unit	Telescopic
51-100 units	3.40 Rs. per unit	
101-150 units	4.50 Rs. per unit	
151-200 units	6.10 Rs. per unit	
201-250 units	7.30 Rs per unit	
0-300 units	5.50 Rs. per unit	Non-Telescopic
0-350 units	6.20 Rs. per unit	
0-400 units	6.50 Rs. per unit	
0-500 units	6.70 Rs. per unit	
Above 500 units	7.50 Rs. per unit	

Note1. Fixed charges shall not be applicable to consumers belonging to below poverty line (BPL) category with connected load of and below 1000 watts and monthly consumption of and below 40 units.

Note2. The minimum electricity charges payable during the period of disconnection shall be at the following rates:

Single phase – Rs. 30 per consumer per month

Three Phase – Rs. 80 per consumer per month

Note 3. Home stay units approved as such by Department of Tourism shall be billed under LT-I domestic.

Note 4. Domestic consumers shall be allowed to utilize electrical energy in a portion of their residence for their own use for purposes other than domestic if the connected load for the purposes other than for domestic, in their premises does not exceed 20% of the total connected load or 1000 Watts whichever is less. When connected load other than for domestic use in such cases exceeds 20% of the total connected load or 1000 Watts whichever is less, such loads shall be segregated and separate service connection shall be obtained under appropriate tariff. When this is not done, the tariff applicable to the whole service connection shall be at the appropriate tariff applicable to the connected load used for purposes other than domestic, if such tariff is higher than the tariff for LT-I category.

Note.5: (a) The following water supply schemes, solely for domestic purposes shall be charged under domestic tariff.

- (i) water supply schemes under Jananidhi, Jaladhara or Swajaladhara Projects;
- (ii) water supply schemes coming under water supply societies or under beneficiary committees;
- (iii) water supply schemes for Scheduled Caste (SC) and / or Scheduled Tribe (ST);
- (iv) water supply schemes for Laksham Veedu Settlements taken over and managed by Local Self Government Institutions;
- (v) social drinking water supply schemes established using local area development funds of Members of Legislative Assembly (MLA) and / or Members of Parliament (MP);
- (vi) social drinking water supply schemes established using funds of Local Self Government Institutions;
- (vii) social drinking water supply schemes under Peoples Participatory Schemes (PPS);
- (viii) Rajeev Gandhi Drinking Water Schemes managed by beneficiary groups.

(b) The method for billing for the above mentioned water supply schemes solely for domestic purpose shall be as specified hereunder;

(c) The total monthly consumption of electricity of the units of such water supply schemes will be divided by the number of beneficiary households and the average consumption per households will be billed under LT – I domestic tariff. The amount of electricity charges assessed for the average consumption per beneficiary household will then be multiplied by the number of beneficiary households to assess the total electricity charges to be paid by the units of such schemes.

(d) Anganwadies, if any, availing drinking water from the above water supply schemes shall also be considered as a beneficiary availing the water supply for domestic purpose and the benefit of such community drinking water schemes shall be extended to them.

Note.6: (a) The tariff for domestic consumption by the families of the victims of endosulfan tragedy in Hosdurg and Kasaragod Taluks of Kasaragod District shall be Rs.1.50 / unit for a monthly consumption up to 150 units. If the consumption of the consumer, who is eligible for the above concession exceeds 150 units per month, the consumption in excess of 150 units will be charged at the rates specified for the slabs 151-200 units or 201-250 units as the case may be. This concession will not be available for the consumers with monthly consumption above 250 units.

(b) The consumer who is eligible for this concession granted to endosulfan victims has to submit to the officer in charge at the section office of the

licensee, a certificate from the revenue authorities or from the local self-government authority to prove his / her eligibility for this tariff concession.

LOW TENSION – II COLONIES (LT- II)

Tariff applicable to,-

- (i) the colonies of HT and EHT consumers,
- (ii) the colonies of universities,
- (iii) the colonies of State / Central Government Departments and of public institutions like companies / boards / corporations under State /Central Government,
- (iv) the colonies of hospitals,
- (v) the colonies of Railways, Bharat Sanchar Nigam Limited (BSNL), All India Radio (AIR) and Doordarshan and
- (vi) the private colonies,

where resale of energy is not involved and where supply at a single point is given at LT by Kerala State Electricity Board Limited or by any other licensee for domestic use, for street lighting and for pumping water for domestic use.

LOW TENSION – II COLONIES (LT- II)	
Fixed Charge (Rs/Month/ domestic connection)	30
Energy Charge (Rs/kWh)	Energy charge applicable to the respective industry or plantation or organization which maintains the colony

LOW TENSION – III TEMPORARY SERVICES INCLUDING TEMPORARY CONNECTIONS AND EXTENSION (LT- III)

Low Tension – III (A) Temporary connections {LT III(A)}

Tariff applicable for single or three phase temporary connections for purposes such as illumination, exhibition, festivals, public meeting and fairs.

LT – III (A) Temporary connections	
Energy Charge (Rs/kWh)	14.00
OR	
Daily minimum of Rs.140 /kW or part thereof of the connected load, whichever is higher	

Note: 40% concession in the rates shall be allowed if the connection is for;

- (a) the exhibitions conducted or sponsored by the Government or Local self-

Government institutions or by Government educational institutions or by public sector undertakings and the exhibitions conducted by recognized private educational institutions;

- (b) festivals of religious worship centres for the illumination, public address system and security lighting. (This concession is limited to the energy availed by the religious worship centres and not by other agencies who function in the premises of religious worship centers where festival is being organized).

LOW TENSION – III (B) - TEMPORARY EXTENSIONS {LT III (B)}

Applicable to temporary extension taken from the premise of existing consumers.

LT - III(B) Temporary extensions
Fixed charges per day - Rs.65/kW or part thereof of connected load plus the application fee, test fee etc. Energy charges shall be recovered from the consumer wherefrom extension is availed, at the tariff applicable to him.

Note: Temporary extension shall be allowed only for a maximum period of 15 days at a time.

LOW TENSION IV - INDUSTRY (LT- IV)

(a) LT- IV (A) – INDUSTRY

LT-IV (A) Industrial tariff is applicable for the general purpose industrial loads (single or three phase) which include,-

- (i) manufacturing units,
- (ii) grinding mills, flour mills, oil mills, rice mills,
- (iii) saw mills, units using electric hydraulic axe machine to break down logs into small pieces.
- (iv) ice factories,
- (v) rubber smoke houses, tyre vulcanizing/re-treading units, manufacturing rubber sheets from latex,
- (vi) workshops using power, mainly for production and/or repair,
- (vii) public waterworks, drinking water pumping for public by Kerala Water Authority, corporations, municipalities and panchayats, telemetry stations of KWA, pumping water for non- agricultural purposes, sewage pumping units,
- (viii) power laundries,
- (ix) screen printing of glass ware or ceramic, SSI units engaged in computerized colour photo printing,
- (x) audio/video cassette/CD manufacturing units,
- (xi) printing presses including presses engaged in printing dailies,

- (xii) bakeries (where manufacturing process and sales are carried out in the same premises)
- (xiii) diamond- cutting units, stone crushing units,
- (xiv) book binding units with allied activities,
- (xv) garment making units,
- (xvi) seafood processing units, prawn peeling and processing units, granite cutting units (where boulders are cut into sheets in the same premises),
- (xvii) plantations of cash crops, tea factories, cardamom drying and curing units,
- (xviii) units carrying out extraction of oil in addition to the filtering and packing activities carrying out in the same premise and under the same service connection,
- (xix) dairy, processing of milk by pasteurization and its storage and packing,
- (xx) soda manufacturing units, bottling plants/ packaging drinking water.
- (xxi) electric crematoria.

LT - IV (A) INDUSTRY	
(a) Fixed Charge	
(i) Connected load of and below 10 kW (Rs. per consumer per month)	100
(ii) Connected load above 10kW and up to 20 kW (Rs. per kW or part thereof per month)	75
(iii) Connected load above 20 kW (Rs. per kVA or part thereof per month)	150
(b) Energy Charge (Rs/kWh)	5.50

Note: 1.- Workshops with automobile service stations shall segregate the workshop load for availing the benefit of industrial tariff. If loads are not segregated the charges shall be realized at the rates applicable to automobile service stations.

Note : 2.- General conditions relating to installation of capacitors will apply.

LOW TENSION – IV (B) – IT and IT Enabled Services. {LT IV (B)}

Tariff applicable to Information Technology (IT) and IT enabled services including akshaya-e-centres, computer consultancy services units, call centers, software services, data processing activities, desktop publishing (DTP), software development units and such other IT enabled services.

LT - IV (B) IT and IT Enabled Services	
(a) Fixed Charge	
(i) Connected load of and below 10kW (Rs. per consumer per month)	100
(ii) Connected load above 10 kW and up to 20kW (Rs. per kW or part thereof per month)	60
(iii) Connected load above 20 kW (Rs. per kVA or part thereof per month)	125
(b) Energy Charge (Rs/kWh)	6.00

Note: General conditions relating to installation of capacitors will apply.

LOW TENSION - V- AGRICULTURE

(a) LT- V AGRICULTURE (A) {LT- V (A)}

This tariff applicable to the use of electricity for:

- (1) pumping, dewatering and lift irrigation for cultivation of food crops, fruits and vegetables.
- (2) pumping, dewatering and lift irrigation for the cultivation of cash crops such as cardamom and coffee and for the cultivation of crops such as coconut, arecanut, pepper, nutmeg, cloves, cocoa and betel leaves as pure crops or as inter crops.

LT - V (A)- Agriculture	
Fixed Charge Rs. per kW or part thereof per Month	8
Energy Charge (Rs/kWh)	2.00

Note: - General conditions relating to installation of capacitors will apply.

(b) LT – V - AGRICULTURE (B) {LT -V (B)}

The tariff under this category is applicable to the supply of electricity for the use of the following activities such as,-

- (i) livestock farms, combination of livestock farms with dairy, poultry farms, rabbit farms, piggery farms, hatcheries,
- (ii) silk worm breeding units, sericulture,
- (iii) floriculture, tissue culture, agricultural and floricultural nurseries, mushroom culture,
- (iv) aquaculture, fish farms including ornamental fish farms, prawn farms, other aqua farms, aquarium run by the Agency for Development of Aquaculture, Kerala, and
- (v) cheenavala without fish farming and egger nurseries,

LT - V (B)- Agriculture	
Fixed Charge Rs. per kW or part thereof per Month	8
Energy Charge (Rs/kWh)	2.50

Note: General conditions relating to installation of capacitors will apply.

LOW TENSION –VI GENERAL

LT-VI- General (A) [LT- VI (A)]

The tariff under LT-VI (A) category is applicable to,-

- (i) Government or aided educational institutions; libraries and reading rooms of government or aided educational institutions, educational institutions run by IHRD,
- (ii) Primary health centres, dispensaries and hospitals under the Central Government or State Government or Local Self Government Institutions; X-Ray units, laboratories, blood banks, mortuaries and such other units attached to such primary health centres, dispensaries and hospitals; blood banks of IMA; poly clinics under Ex-servicemen Contributory Health Scheme (ECHS).
- (iii) Centres for religious worship such as temples, mosques and churches; institutions imparting religious education, monasteries and convents;

LT - VI GENERAL (A)	
(a) Fixed Charge (Rs. per kW or part thereof per Month)	50
(b) Energy Charge (Rs/kWh)	
(i) Of and Below 500 kWh (all units)	5.50
(ii) Above 500 kWh (all units)	6.30

LT- VI GENERAL (B)

The tariff under this category is applicable to,-

- (i) offices and institutions under the State or Central Governments or under the Local Self Government Institutions except those which are included in the category LT-VI General (C); village offices; Government Treasuries.
- (ii) offices of the Corporations, Boards and other Public Sector Undertakings under State or Central Governments;
- (iii) offices of the Kerala Water Authority (KWA), Kerala State Road Transport Corporation (KSRTC) and Kerala State Water Transport Corporation (KSWTC);
- (iv) museum and / or zoo;
- (v) hostels of educational institutions affiliated to Universities, hostels under the control of the Director of Technical Education or Director of Medical Education or Director of Public Instruction or such other offices of government, hostels run by the State or Central Government, hostels run by State Social Welfare Board, hostels run by institutions registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) or under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882, the donations to which are exempted from payment of Income Tax; Working women hostels operating under the scheme approved by the Ministry of Women and Child Development, Government of India, hostels under the supervision and monitoring of Department of Social Welfare, Government of Kerala;
- (vi) Pay wards and institutions of Kerala Health Research and Welfare Society (KHRWS);
- (vii) travellers bungalows, rest houses and guest houses under government; Police Clubs,
- (viii) type writing institutes;
- (ix) offices of advocates or chartered accountants or company secretary or consulting engineers or tax consultants or architects or cost accountants or of management consultants;
- (x) offices of social organizations, offices of service pensioners' associations.
- (xi) offices of political parties not approved by the Election Commission of India;
- (xii) collection centres of 'FRIENDS'; single window service centres under Department of Information Technology;
- (xiii) offices of Department of Posts, all post offices including extra departmental (ED) post offices;
- (xiv) micro financing institutions registered and functioning as per the guidelines issued by Reserve Bank of India;
- (xv) cameras at traffic signal points.

LT - VI GENERAL (B)	
(a) Fixed Charge (Rs. per kW or part thereof per Month)	70
(b) Energy Charge (Rs/kWh)	
Of and below 500 kWh (all units)	6.30
Above 500 kWh (all units)	7.00

LT- VI GENERAL (C)

The tariff under this category is applicable to:

- (i) offices or institutions under Income Tax or Central Excise and Customs Departments,
- (ii) offices under Motor Vehicles Department or Sales Tax department or Excise Department; Sub-Registry offices; and such other tax earning departments under State or Central Government (other than Local Self Government Institutions);
- (iii) light houses;
- (iv) pawn brokers; banking and / or financing institutions (excluding micro financing institutions registered and functioning as per the guidelines issued by Reserve Bank of India);
- (v) ATM counters;
- (vi) offices of Railways including railway stations; offices of KMRL including railway stations,
- (vii) offices of Airport Authority of India except airports; and
- (viii) any other LT categories not included anywhere in this schedule.

LT - VI GENERAL (C)	
(a) Fixed Charge (Rs. per kW or part thereof per Month)	180
(b) Energy Charge (Rs/kWh)	
(i) Of and below 500 kWh (all units)	7.00
(ii) Above 500 kWh (all units)	8.50

LT- VI GENERAL (D)

The tariff under LT-VI (D) category is applicable to:

- (i) orphanages;
- (ii) anganwadis; schools and hostels for differently abled or physically challenged persons (including mentally retarded students, deaf/dumb/blind/physically handicapped persons),

- (iii) old age homes run by charitable institutions or social organizations or non-governmental organizations where no charges are levied for the boarding and lodging of inmates,
- (iv) Cheshire homes; polio homes; SoS Childrens' Villages,
- (v) charitable centres for cancer care, pain and palliative care and HIV rehabilitation,
- (vi) charitable hospital guidance centres registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 (12 of 1955) or under the Societies Registration Act, 1860 (21 of 1860) or under Indian Trust Act, 1882, donations to which are exempted from payment of Income Tax,
- (vii) shelters exclusively for orphaned animals and birds run by charitable institutions registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Registration Act, 1955;
- (viii) libraries and reading rooms with connected load of and below 2000 watts and monthly consumption of and below 100 units.
- (ix) e-toilet and public comfort stations, where no charges levied for use.

LT - VI GENERAL (D)	
(a) Fixed Charge	Nil
(b) Energy Charge (Rs/kWh)	1.80

The minimum charge payable, including the period of disconnection, shall be:

Single Phase – Rs. 15 per consumer per month
 Three Phase – Rs. 25 per consumer per month

LT VI GENERAL (E)

The tariff under LT-VI(E) category is applicable to:

- (i) sports and / or arts clubs (with connected load not exceeding 2000 W);
- (ii) sailing and / or swimming clubs (with connected load not exceeding 2000 W);
- (iii) gymnasium (with connected load not exceeding 2000 W);
- (iv) libraries and reading rooms excluding those which are included in LT VI-A and LT VI-D categories,
- (v) press clubs;
- (vi) offices of political parties approved by Election Commission of India;
- (vii) e-toilet and public comfort stations, where charges are levied for use

LT-VI-GENERAL (E)	
Particulars	Approved tariff
(a) Fixed charge (Rs/ consumer/month)	
Single phase consumers	30
Three phase consumers	80
(b) Energy charges (Rs /kWh)	
1 to 50 units	3.10
51 to 100 units	4.10
101 to 200 units	4.80
Above 200 units (non-telescopic for the entire consumption)	6.50

LT VI GENERAL (F)

The tariff under LT- VI (F) is applicable to:

- (i) computer training institutes, private coaching or tuition centres, self-financing educational institutions including the hostels run by them,
- (ii) cinema studios, audio/video cassette recording/duplication units, CD recording units, cinema dubbing and animation studios,
- (iii) all construction works,
- (iv) installations of cellular mobile communications, satellite communications, offices and / or exchanges of telecom companies,
- (v) offices or institutions of All India Radio (AIR), Doordarshan and other television broadcasting companies, cable TV networks, radio stations,
- (vi) insurance companies,
- (vii) hall marking centres.

LT VI GENERAL (F)	
Fixed charge (Rs/ kW per month)	
Single Phase	60
Three phase	120
Energy Charge (Rs per unit)	
0 to 100 units per month	5.80
0 to 200 units per month	6.50
0 to 300 units per month	7.20
0 to 500 units per month	7.80
above 500 units per month	9.00

LT-VI- GENERAL (G)

The tariff under this category is applicable to all the private hospitals, private clinics, private clinical laboratories, private X-ray units, private mortuaries, private blood banks and private scanning centres and such other private institutions in health care sector.

LT VI General (G)	
Fixed charge (Rs/ kW per month)	
Single Phase	60
Three phase	180
Energy Charge (Rs per unit)	
up to 500 units per month	5.50
501 units upto 1000 units per month	6.50
1001 units upto 2000 units per month	7.50
Above 2000 units per month	8.50

LOW TENSION - VII – COMMERCIAL

LT- VII-Commercial (A) [LT- VII (A)]

The tariff under LT-VII (A) category is applicable to commercial and trading establishment such as,

- (i) shops, showrooms, display outlets, business houses,
- (ii) hotels and restaurants (having connected load exceeding 1000 W), house boats
- (iii) private lodges, private hostels, private guest houses, private rest houses, private travellers bungalows,
- (iv) freezing plants, cold storages, milk chilling plants,
- (v) shops selling confectioneries, sweetmeat, breads and such other eatables without manufacturing process,
- (vi) petrol/diesel/ LPG /CNG bunks, LPG bottling plants,
- (vii) automobile service stations, computerized wheel alignment centres,
- (viii) marble and granite cutting units,
- (ix) units carrying out filtering, packing and other associated activities of oil brought from outside,
- (x) share broking firms, stock broking firms, marketing firms.

LT VII Commercial (A)	
(a) Fixed charge (Rs/ kW per month)	
(i) Single Phase	60
(ii) Three phase	120
(b) Energy Charge (Rs per unit)	
(i) Of and below 100 units per month	6.00
(ii) Of and below 200 units per month	6.70
(iii) Of and below 300 units per month	7.40
(iv) Of and below 500 units per month	8.00
(v) Above 500 units per month	9.30

LT- VII Commercial (B) [LT-VII-B]

Tariff applicable to commercial and trading establishments such as,-

- (i) shops, bunks, hotels, restaurants, having connected load of and below 1000 Watts.
- (ii) telephone / fax / e-mail / photocopy booths and internet cafes having connected load of and below 1000 Watts.

When connected load of the above mentioned consumers exceeds 1000 Watts, such consumers shall be charged under LT -VII (A) tariff. If monthly consumption of LT- VII (B) consumers having connected load of and below 1000 Watts, exceeds 300 units, the energy charges shall be realized at the rate of energy charges applicable to LT -VII (A) consumers.

LT - VII Commercial (B)	
(a) Fixed Charge (Rs. per kW or part thereof) Month	40
(b) Energy charge (Rs/unit)	
(i) 0 to 100 units	5.00
(ii) 0 to 200 units	5.70
(iii) 0 to 300 units	6.30

LT- VII Commercial (C) [LT-VII-C]

The tariff under LT VII (C) is applicable to,-

- (i) cinema theatres;
- (ii) circus;
- (iii) sports and arts clubs, sailing or swimming clubs and gymnasium having connected load exceeding 2000W.

LT - VII Commercial (C)	
(a) Fixed Charge (Rs. per kW or part thereof) Month	90
(b) Energy Charge (Rs/kWh)	
(i) Of and below 1000 kWh	5.90
(ii) Above 1000 kWh	7.30

LOW TENSION – VIII PUBLIC LIGHTING (LT- VIII)

LT – VIII (A) Unmetered street lights {LT VIII (A)}

Tariff applicable to various categories of unmetered public lighting per lamp.

LT – VIII (A) – Composite Tariff approved for Unmetered Street Lights				
TYPE OF LAMP	Watts (W)	Rs/Lamp/Month		
		Burning Hours per day		
		4 Hours	6 Hours	12 Hours
Ordinary	40	22	33	66
Ordinary	60	33	50	102
Ordinary	100	55	84	167
Fluo tube	40	22	33	66
Fluo tube	80	44	66	134
Floodlight	1000	559	838	1677
MV Lamp	80	51	70	143
MV Lamp	125	75	112	222
MV Lamp	160	96	143	286
MV Lamp	250	149	222	447
MV Lamp	400	239	356	714
SV Lamp	70	42	64	125
SV Lamp	80	48	70	143
SV Lamp	100	59	89	178
SV Lamp	125	75	112	222
SV Lamp	150	89	134	267
SV Lamp	250	149	222	447
CFL	11	5	8	16
CFL	15	7	11	22
CFL	18	9	13	26
CFL	22	11	16	32
CFL	30	15	22	44
CFL	36	17	26	53
CFL	44	21	32	64
CFL	72	35	53	105
CFL	144	70	105	210
LED	12	3	4	9
LED	18	4	7	14
LED	20	5	7	15
LED	24	6	9	20
LED	30	7	11	25
LED	40	10	15	30
LED	45	11	16	35
MV Lamp on semi high mast only for 12 hrs burning per day	1200			2160
SV Lamp on semi high mast only for 12 hrs burning per day	250			450

LT – VIII (B) METERED STREET LIGHTS AND TRAFFIC SIGNAL LIGHTS
{LT-VIII (B)}

Tariff applicable for metered street lights and tariff signal lights.

LT – VIII (B) Tariff for Metered Street Lights and Traffic-Signal Lights	
(a) Fixed charge (Rs/ meter/month)	40
(b) Energy Charge (Rs per unit)	3.90

Note: 1.- When public lighting is to be done after extension of lines, the beneficiaries shall pay the cost of the work as per the cost data approved by the Commission.

Note: 2.- In campuses where lines and lights are provided by the beneficiary, LT metered supply shall be provided at 3.90 Rs /kWh plus fixed charge of Rs.40 per meter per month subject to other conditions regarding the payment of cost of the work.

Note: 3.- Supply to light houses when taken from the street mains of Kerala State Electricity Board Limited or any other licensee will be charged at appropriate public lighting tariff. Where metered independent supply is provided at low tension, the rate applicable will be 3.90 Rs/kWh plus fixed charge at Rs.40 per meter per month and subject to other conditions regarding payment of cost of the work.

Note: 4.- In areas where low tension distribution lines of Kerala State Electricity Board Limited and other licensees exist, metered supply shall be given by the respective licensee for special type of lamps, for which the rates are not given in the table above, provided the lamps are installed and maintained by the local bodies at their cost. The tariff applicable in such cases shall be 3.90 Rs per unit plus fixed charge at Rs 40/- per meter per month, subject to other conditions regarding payment of cost of the work.

Note: 5.- Separate charges shall not be collected from the consumers towards service charges for street lighting.

Note: 6.- Electricity duty is not payable for public lighting as per the provisions of Kerala Electricity Duty Act, 1963.

LT IX : DISPLAY LIGHTING AND HOARDINGS

Tariff applicable to display lighting, hoarding, external illumination of buildings for publicity and sales- promotion purposes.

LT - IX Display Lighting and Hoardings	
(a) Fixed Charge (Rs. per Connection per month)	500
(b) Energy Charge (Rs per unit)	12.50

Note: The electricity used for the purposes of displaying the name, address, working time and such essential details of commercial, industrial or other category of consumers is allowed to be charged at same tariff applicable to the category to which such consumers belong.

PART B – HIGH TENSION (HT) AND EXTRA HIGH TENSION (EHT) TARIFF

General conditions for HT and EHT tariff

1. For the purpose of conversion from kVA to kW or vice versa, an average power factor of 0.9 shall be taken.
2. Billing demand shall be the recorded maximum demand for the month in kVA or 75% of the contract demand as per the agreement, whichever is higher.
3. When the recorded maximum demand during normal period and peak period in a month exceeds the contract demand as per the agreement and the recorded maximum demand during off-peak hours exceeds 130% of the contract demand, the excess demand shall be charged at a rate of 150 percent of the demand charges applicable.
4. (a) As per Section 55 of the Electricity Act, 2003 and provisions of the Central Electricity Authority (Installation and Operation of meters) Regulations 2006, consumer meter shall generally be installed and owned by the licensee.
(b) Even if the consumer elects to purchase the meter as stipulated in proviso under sub section 1 of section-55 of the Electricity Act, 2003, such meter shall be tested, calibrated, sealed, installed, operated and maintained by the licensee as provided in the said regulations.
(c) The consumer has to purchase only such meters which are included in the list of makes and models of meters which has to be provided by the licensee, as stipulated in clause (c) of sub-regulation (2) of regulation 6, of the Central Electricity Authority (Installation and Operation of Meters) Regulations 2006.
(d) If any existing consumer, having elected to purchase and supply the meter for replacement of the defective meter in his premises, fails to do so within two

months, such consumer will be charged 50% extra over the prevailing rates applicable to him for both demand and energy, for the said two months and one month thereafter.

(e) The licensee shall, in performance of its duty under Section 55 of the Act, replace the defective meter and realize the security deposit and meter rent in accordance with the provisions of Section 55 of the Electricity Act, 2003.

5. All EHT consumers (except Railway Traction) and all HT consumers (except drinking water supply pumping stations of Kerala Water Authority, Municipal Corporations, Municipalities and Panchayats) shall be billed on ToD tariff as per the formula indicated in the Annexure - A to this schedule.
6. The monthly minimum charge payable shall be the minimum guarantee amount as per minimum guarantee agreement, if any, or the billing demand as per condition 2 above, whichever is higher. This applies even during the period of disconnection of power supply.
7. In the case of factory lighting and colony supply of HT /EHT (Industrial) consumers, the applicable tariff shall be subject to the following conditions:
 - a. Factory lighting – When the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off from the power mains without segregation. When the above lighting load exceeds this limit of 5%, the whole lighting load should be segregated and metered by a sub-meter and lighting consumption in excess over 10% of the bulk supply consumption for power, shall be charged at 20 paise extra per kWh for HT and 10 paise extra per kWh for EHT consumers.
 - b. Colony Supply: Colony supply, when availed from the HT / EHT supply of the consumer, such supply shall be segregated and metered by means of a sub-meter and the consumption will be charged at 20 paise extra per kWh for HT and 10 paise extra per kWh for EHT consumers.
 - c. If no segregation is made as specified in clauses (a) or (b) above, the bill amount of the consumer shall be increased for demand and energy charges by 10% for both HT and EHT consumers.
8. Power factor incentives/penalties as per Annexure - B shall be applicable to all HT and EHT consumers.

TARIFF FOR HIGH TENSION (HT) CONSUMERS

This tariff shall be applicable to all high tension consumers to whom the Kerala State Electricity Board Limited or other licensees has undertaken or undertakes to supply energy. The expression 'high tension' (HT) consumer means a consumer who is supplied with electrical energy at a voltage of 33,000 Volts, 22,000 Volts or 11,000 Volts under normal conditions, subject however to, the variation indicated in the agreement with the Kerala State Electricity Board Limited or other licensees or the variation allowed under the Kerala Electricity Supply Code, 2014.

HIGH TENSION- I - INDUSTRY (A) {HT- I (A)}

Tariff applicable to general purpose industrial load of all classes of consumers listed in LT-IV (A) category availing supply of electricity at high tension.

HIGH TENSION- I - INDUSTRY (A)	
(a) Demand Charge (Rs./kVA of Billing Demand/Month)	300
(b) Energy Charge (Rs/kWh)	5.50

HIGH TENSION-I - IT and IT Enabled Services {HT – I (B)}

Tariff applicable to of all classes of consumers listed in LT-IV (B) category availing supply of electricity at high tension.

HIGH TENSION-I (B)- IT and IT Enabled Services	
(a) Demand Charge (Rs./kVA of Billing Demand/Month)	300
(b) Energy Charge (Rs/kWh)	5.80

HIGH TENSION - II - GENERAL (A) {HT – II (A)}

Tariff applicable to all classes of consumers listed in LT-VI (A), LT-VI (B), LT-VI (D), and LT-VI (E) categories availing supply of electricity at high tension.

HIGH TENSION - II - GENERAL (A)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	350
(b) Energy Charge (Rs/kWh)	5.40

HIGH TENSION – II - GENERAL (B) {HT –II (B)}

Tariff applicable to all classes of consumers listed in LT-VI(C), LT-VI (F) and LT-VI (G) categories availing supply of electricity at high tension.

HIGH TENSION – II - GENERAL (B)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	400
(b) Energy Charge (Rs/kWh)	
(j) Of and below 30,000 units (All units)	6.20
(ii) Above 30,000 units (All units)	7.20

HIGH TENSION –III AGRICULTURE (A) –{HT – III (A)}

Tariff applicable to the classes of agricultural consumers listed in LT-V (A) category, availing supply of electricity at high tension.

HIGH TENSION –III (A) AGRICULTURE	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	170
(b) Energy Charge (Rs/kWh)	2.80

HIGH TENSION - III AGRICULTURE (B) – (HT – III (B))

Tariff applicable to classes of agricultural consumers listed in LT-V (B) category, availing supply of electricity at high tension.

HIGH TENSION – III (B) AGRICULTURE	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	170
(b) Energy Charge (Rs/kWh)	3.30

HIGH TENSION – IV COMMERCIAL (HT – IV)

Tariff applicable to all classes of commercial consumers listed in LT-VII (A) and LT-VII (C) categories availing supply of electricity at high tension.

HIGH TENSION – IV COMMERCIAL (HT – IV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	400
(b) Energy Charge (Rs/kWh)	
(i) Of and below 30,000 units (All units)	6.30
(ii) Above 30,000 units (All units)	7.30

HIGH TENSION – V DOMESTIC (HT – V)

Tariff applicable to domestic consumers and colonies availing supply of electricity at high tension.

HIGH TENSION – V DOMESTIC (HT – V)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	350
(b) Energy Charge (Rs/kWh)	5.50

Note: The HT domestic connection shall be effected subject to the following conditions:

- 1. The connections provided shall be for domestic use only.*
- 2. The consumer shall not resell the power supplied to the occupants inside or outside the premises to which HT connection is provided .*
- 3. If the apartment /flat/ room is rented out or made use of for any other purpose, he shall take individual LT connection at his cost. Appropriate LT tariff shall apply in such cases, based on the purpose of electricity usage. The consumer shall maintain the transformer and allied equipment at his cost in such cases.*

HIGH TENSION –VI -SEASONAL CONSUMERS (HT – VI)

1. HT consumers with seasonal load shall register themselves with the Kerala State Electricity Board Limited or other licensees as seasonal consumers for the purpose for which electricity is used. They shall be billed under appropriate tariff applicable to the category to which they belong, for the period of use.
2. For registration as a seasonal consumer, the consumer should have a minimum of four working months per annum or he should guarantee a minimum equivalent thereto for the working season.

3. If a consumer registered with the Kerala State Electricity Board Limited or other licensees as a seasonal consumer, specifies the use of electricity for different purposes during different seasons and also specifies the period of usage for each such purpose, then the consumer shall be billed under appropriate tariff for each purpose during different seasons separately.
4. If a registered seasonal consumer using electricity for different purposes without specifying the purposes and the period of usage, then the consumer shall be charged at the highest tariff applicable to the different uses, for the various operations for the whole year.
5. The conditions for lighting for seasonal industrial consumers shall be the same as applicable in the case of HT-I.
6. If a registered seasonal consumer opts for disconnection of supply during the period other than the period of usage (specified seasonal usage), then he shall pay higher demand charges during the working season as below:
 - (a) Demand charges shall be increased by $5(12-N)$ % where 'N' is the number of months during which the consumer registers himself with the Kerala State Electricity Board Limited or other licensees to utilize the service in the year.
 - (b) There will be no billing for the idling period.
 - (c) The service to the consumer will be disconnected without notice immediately on termination of the registered period unless the consumer asks for continuance of the service during the idle period for which also he will be charged at the same seasonal rate applicable for the original period.
 - (d) Monthly minimum charge equivalent to demand charges for 75% of the contract demand increased as per (a) above shall be collected from the consumer in each working month.

EXTRA HIGH TENSION (EHT) TARIFF

This tariff shall be applicable to all Extra High Tension consumers. The expression Extra High Tension (EHT) consumer means a consumer who is supplied with electrical energy at a voltage exceeding 33000 Volts under normal conditions subject however to, the variation indicated in the agreement with the Kerala State Electricity Board Limited or other licensees or allowed under the Kerala Electricity Supply Code, 2014.

EXTRA HIGH TENSION (EHT) INDUSTRIAL

EHT Industrial (66 kV)

Tariff applicable to general purpose industrial load at 66 KV.

EHT Industrial (66 kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	300
(b) Energy Charge (Rs/kWh)	5.20

EHT Industrial (110 kV)

Tariff applicable to general purpose industrial load at 110 kV.

EHT Industrial (110 kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	290
(b) Energy Charge (Rs/kWh)	5.10

EHT Industrial (220 kV)

Tariff applicable to general purpose industrial load at 220 KV.

EHT Industrial (220 kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	280
(b) Energy Charge (Rs/kWh)	4.70

EHT COMMERCIAL (66 kV, 110 kV, 220kV)

Tariff applicable to commercial institutions availing power at EHT.

EHT Commercial (66 kV, 110 kV, 220kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	400
(b) Energy Charge (Rs/kWh)	
(i) Of and below 60,000 units	6.10
(ii) Above 60,000 units	7.10

Extra High Tension –General A (EHT-General-A) (66 kV, 110kV, 220 kV)

This tariff is applicable to the consumers enumerated under LT-VI(A) category, availing supply at EHT level.

EHT-General A (66kV, 110kV, 220kV)	
Particulars	Approved Tariff
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	300
(b) Energy Charge (Rs/kWh)	5.00

Extra High Tension –General – B (EHT-General-B) (66 kV, 110kV, 220 kV)

The tariff under this category is applicable to Indian Space Research Organisation (ISRO), utility services such as Airport, Self-Financing Educational Institutions and any other EHT consumers not included elsewhere.

EHT -General –B (66 kV, 110 kV, 220kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	370
(b) Energy Charge (Rs/kWh)	
(i) Of and below 60,000 units	5.80
(ii) Above 60,000 units	6.80

RAILWAY TRACTION (110 kV)

Tariff applicable to Railway Traction

Railway Traction (110 kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	250
(b) Energy Charge (Rs/kWh)	5.10

Kochin Metro Rail Corporations

Tariff applicable to traction for KMRL

KMRL (110 kV)	
(a) Demand Charges (Rs./kVA of Billing Demand/Month)	250
(b) Energy Charge (Rs/kWh)	4.80

PART-C BULK SUPPLY TARIFF APPLICABLE TO SMALL LICENSEES

1. The tariff mentioned in this schedule shall apply to the Licensees who avail energy through High Tension or Extra High Tension systems at their terminal notwithstanding anything to the contrary contained in any agreement earlier entered into with any Licensee by Kerala State Electricity Board/Government or any of the Tariff Regulations and/or rules and/or orders previously issued.
2. The rates specified in this schedule are exclusive of Electricity Duty and/or surcharge, other cesses, taxes, minimum fees, duties and other impositions existing or that may be levied in future by the Government or the Commission which are payable in addition to the charges as per the tariff mentioned in this Schedule.
3. The tariff applicable will be two part tariff as under:--

Name of Licensees	Demand Charges (Rs/kVA of Billing Demand per month)	Energy Charges (Rs per unit)
KINESCO POWER & UTILITIES (P) LIMITED	300	5.60
COCHIN SPECIAL ECONOMIC ZONE	300	5.40
RUBBER PARK INDIA (P) LIMITED	300	4.55
TECHNOPARK	300	5.20
COCHIN PORT TRUST	300	6.00
THRISSUR CORPORATION	300	5.85
KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED	300	4.60
MILITARY ENGINEERING SERVICES	350	5.60
PONDICHERY ELECTRICITY DEPARTMENT	350	5.60
KARNATAKA ELECTRICITY DEPARTMENT	350	5.60
INFOPARK	300	5.50

Note: Billing Demand shall be the recorded Maximum Demand for the month in kVA or 75% of Contract Demand whichever is higher.

Special Conditions

1. The installations and maintenance of meters shall be strictly in accordance with the provisions of the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006.
2. For billing purpose each point of supply shall be treated as a separate consumer.
3. ToD tariff shall be applicable to HT, EHT and LT consumers of the respective licensees as per the terms and conditions mentioned in the respective schedule.

PART-D OTHER CHARGES

Summary of other charges approved by the Commission for the year 2017-18

1. The transmission charges - Rs 0.37/unit or Rs.8580/MW/day.
2. The wheeling charges - Rs 0.31/unit.
3. The cross subsidy surcharge.

Category	Cross subsidy surcharge (Rs/unit)	
	For embedded consumers	Other than embedded consumers
EHT-1	1.04	1.14
EHT-II	1.02	1.16
EHT-III	0.63	1.34
EHT-G	1.26	1.62
HT-1(A) Industry	0.91	1.28
HT-I(B) Industry	1.16	1.33
HT-II(A)	0.81	1.40
HT-II (B)	1.34	1.66
HT-III(A)	0.00	0.16
HT-III(B)	0.00	0.00
HT-IV	1.36	1.80
HT-V	0.91	1.53

4. Meter rent to be levied from the consumers

Sl No	Description	Meter rent approved (Rs/kWh)
1	Single phase static energy meters with LCD and ToD facility and with ISI certification	6
2	Three phase static meters with LCD and ToD facility with ISI certification	15
3	LT CT operated three phase four wire static energy meters (Class 0.5 accuracy) with LCD and ToD facility and ISI certification	30
4	3 phase AC static tri-vector energy meters with ABT, ToD facility and compliant to Device Language Message Specification (DLMS) protocol	1000

5. The average pooled power purchase cost for the payment for the net electricity banked by the eligible consumer in accordance with sub-regulation (9) of regulation 15 of KSERC (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014 - Rs 3.26/unit.
6. The transmission charges, wheeling charges, cross subsidy surcharge and average pooled power purchase cost approved in this order shall be applicable to KSEB Ltd and other licensees in the State.

Annexure- A

ToD Tariff applicable to EHT, HT and LT industrial consumers (with connected load of and above 20KW) Consumers

The ToD tariff applicable to EHT, HT and LT industrial consumers (with connected load of and above 20 kW) for energy consumption is given below:

	Rates		
	Normal period (6:00 hrs to 18:00 hrs)	Peak period (18:00 hrs to 22:00 Hrs)	Off peak (22:00 hrs to 6:00 hrs)
Energy Charges	100%	150%	75%

Billing of the demand charges:

Monthly Demand Charge shall be:

$$\text{Billing Demand during the month} \times \text{Demand Charge per kVA}$$

Billing of Energy charges:

The billing of the energy charge for HT&EHT consumers shall be done as follows

- Normal time: $\text{Consumption during normal time} \times \text{energy rate} / \text{unit}$.
- Peak time: $\text{Consumption during peak time} \times \text{energy rate} / \text{unit} \times 1.50$
- Off-peak time: $\text{Consumption during off-peak time} \times \text{energy rate/unit} \times 0.75$

$$\text{Total energy charge during a month} = (a) + (b) + (c)$$

Other conditions:

- Demand/energy charges shall be the demand/energy charges for normal period as per the tariff approved in this Schedule.
- Demand/energy charges for LT industrial consumers with a connected load of and above 20KW, shall be as per the tariff approved in this Schedule.
- Demand charges during a particular month shall be assessed based on the recorded maximum demand during that month or 75% of the contract demand whichever is higher.
- Excess demand charges: Additional demand charges shall be levied if the recorded maximum demand exceeds the contract demand during normal period and peak period, which shall be charged at 50% extra for the excess over the contract demand (ie., additional demand during normal/peak period \times ruling demand charges \times 0.5). Additional demand charges during off-peak period shall be levied only if the recorded maximum demand during off peak period is in excess of 130% of the contract demand.
- For the consumption of electricity during normal period ie 6.00 hours to 18.00 hours the demand/energy charges shall be at the notified rates applicable to the consumer category.

Annexure - B

Power factor incentive / disincentive

The following incentive and disincentive shall be applicable to LT industrial consumers with a connected load of and above 20 kW, HT&EHT Consumers for power factor improvement.

Power factor range	Incentive
Power factor between 0.9 to 1.00	0.50% of energy charges for each 0.01 unit increase in power factor from 0.9
Power factor range	Disincentive
Power factor below 0.90	1% energy charge for every 0.01 fall in power factor from 0.90

Annexure- C

Recommended values of Static capacitor in kVAR for power factor improvements

A. Induction Motors (LT)

Sl.No.	Total Motor Rating (HP)	KVAR rating of capacitors insisted	Sl.No.	Total Motor Rating (HP)	KVAR rating of capacitors insisted
1	Upto 3	1	8	Above 25 up to 30	10
2	Above 3 up to 5	2	9	Above 30 up to 40	12
3	Above 5 up to 7.5	3	10	Above 40 up to 50	14
4	Above 7.5 up to 10	4	11	Above 50 up to 60	18
5	Above 10 up to 15	5	12	Above 60 up to 80	22
6	Above 15 up to 20	6	13	Above 80 up to 100	25
7	Above 20 up to 25	7.5	14	Above 100 up to 130	35

B. WELDING TRANSFORMERS (LT)

Sl.No.	Rating of welding transformers in KVA	KVAR rating of capacitors insisted	Sl.No.	Rating of welding transformers in KVA	KVAR rating of capacitors insisted
1	1	1	16	16	12
2	2	2	17	17	13
3	3	2	18	18	13
4	4	3	19	19	14
5	5	4	20	20	15
6	6	4	21	Above 20 up to 22	16
7	7	5	22	Above 22 up to 24	17.5
8	8	6	23	Above 24 up to 26	18
9	9	7.5	24	Above 26 up to 28	20
10	10	7.5	25	Above 28 up to 30	21
11	11	8	26	Above 30 up to 35	24
12	12	9	27	Above 35 up to 40	27.5
13	13	10	28	Above 40 up to 45	32.5
14	14	10	29	Above 45 up to 50	35
15	15	11			

Annexure - D

ToD Tariff for Domestic Consumers

Applicable to domestic consumers who consume more than 500 Units / month.

	Normal Period (6 hrs to 18 hrs)	Peak Period (18 hrs to 22 hrs)	Off Peak Period (22hrs to 06 hrs)
Charges for consumption above 500 Units/Month	100% of the ruling tariff	120% of the ruling tariff	90% of the ruling tariff

Note

1. Six months consumption shall be monitored from normal bi-monthly readings during January / February and July / August every year. If the average monthly consumption for first or second half of the year is above 500 Units, the consumer will be brought under ToD system after installing ToD meter in the premises.
2. ToD based billing will be done whenever the monthly consumption exceeds 500 Units. If the consumption falls below 500 Units/month in any month, slab based billing shall be followed.

Annexure – E

Billing Procedures under ToD tariff system for LT -IV Industrial, HT & EHT consumers.

1. Demand Charges (DC)

- (i) The recorded maximum demand during normal time zone (T1) from 06.00 hrs to 18.00 hrs = RMD1
- (ii) The recorded maximum demand during peak time (T2) from 18.00 hrs to 22.00 hrs = RMD2
- (iii) The recorded maximum demand during off- peak time (T3) from 22.00 hrs to 06.00 hrs = RMD3
- (iv) Recorded Maximum demand during a billing period,
RMD= RMD1, RMD2 or RMD3 whichever is higher.
- (v) The Contract Demand (kVA) = CD
- (vi) The Ruling Demand Charge (Rs/kVA) = D
- (vii) Billing Demand, BMD = RMD or 75% of the CD whichever is higher.
- (viii) Demand Charge, DC = BMD x D
- (ix) Excess Demand for LT, HT& EHT consumers in each time zone shall be
 - (a) in Time Zone (T1), ED1 = (RMD1-CD)
 - (b) in Time Zone (T2), ED2 = (RMD2-CD)
 - (c) in Time Zone (T3), ED3 = {RMD3-(1.30x CD)}
- (x) Excess Demand Charge (ED) = Excess demand ED1, ED2 or ED3 whichever is higher x 0.50 X D
- (x) Total Demand Charge (TDC) = DC + ED

2. Energy Charges (EC)

- (i) The energy consumption in Time Zone (T1) = X1
- (ii) The energy consumption in Time Zone (T2) = X2
- (iii) The energy consumption in Time Zone (T3) = X3
- (iv) The Ruling Energy Charge (Rs/unit) = E
- (v) Energy Charges in each time zone shall be :
 - (a) in Time Zone (T1), Ec1 = X1 x E
 - (b) in Time Zone (T2), Ec2 = X2 x E x 1.5
 - (c) in Time Zone (T3), Ec3 = X3 x E x 0.75
- (vi) Total Energy Charge (EC) = Ec1+Ec2+Ec3

3 Total Monthly Charges

$$= \text{TDC} + \text{EC}$$

Annexure – F
OPTIONAL DEMAND BASED TARIFF

- Eligibility : Optional Scheme for LT VI General (A), LT VI General (B), LT VI General (C), LT VI General (E), LT VI General (F), LT VI General (G), LT-VII Commercial (A) and LT VII Commercial (C) having connected load equal or above 20 kW.
- Billing demand : Recorded maximum demand or 75% of the contract demand whichever is higher

Demand charges: Based on Rs./kVA of billing demand as per tariff mentioned in the table below.

Consumer Categories	Tariff
	<i>Rs./kVA of billing demand per month</i>
LT VI General (A), LT VI General (B), LT VI General (C), LT VI General (E), LT VI General (F), LT-VI General (G), LT-VII Commercial (A) and LT VII Commercial (C)	180

Energy Charges: Existing energy charges of respective categories shall apply.

Other conditions

- (1) Consumers who opt for maximum demand based tariff may, at their option, install ToD compliant meters at their cost. Meters may also be installed at the cost of KSEB Ltd. If the consumers provide meters, it has to be got tested at the laboratory of KSEB Ltd or of the Electrical Inspectorate. It will be the responsibility of KSEB Ltd or other licensees as the case may be to ensure the accuracy of the meters after proper testing.
- (2) For those who opt for maximum demand based tariff, the contract demand shall be treated as connected load.
- (3) The consumers who opt for maximum demand based tariff shall declare the contract demand in kVA by executing a supplementary agreement showing the contract demand and details of connected load in their premises.
- (4) The consumers who opt for the new system may be allowed to revise upwards or downwards the declared contract demand within six months from the date of option without any conditions or charges. After this, the usual terms and conditions shall be applicable for changing contract demand.
- (5) The Billing demand shall be the recorded maximum demand or 75% of the contract demand whichever is higher. In case the billing demand exceeds the contract demand during normal or peak hours or 130% of the contract demand during night off peak hours, the demand charges for the excess demand shall be charged 50% extra.
- (6) The above scheme (optional demand based tariff) shall be effective till ToD tariff is made compulsory.

CHAPTER-15 DIRECTIVES TO THE LICENSEES

A. Directives to KSEB Ltd and its Strategic Business Units

15.1 The Commission has given to KSEB Ltd, several directives in its various orders, with a view to improving its efficiency, standards of performance and financial stability. A review of the same has been incorporated in Chapter 3 of this order. Important directives given by the Commission in its earlier orders, which remain to be implemented, include the following,-

- a) KSEB Ltd shall submit the separate accounts and balance sheets of SBUs as per the provisions of Second Transfer Scheme issued vide G.O (P) No.46/2013/PD dated 31.10.2013 and published as SRO No.871/2013 in Kerala Gazette Extra Ordinary 3103 dated 31.10.2013.
- b) KSEB Ltd shall submit its detailed programme for capital investment for generation, transmission and distribution works with physical and financial targets as well as the appropriate funding plan. After the re-organization of the erstwhile KSEB into KSEB Ltd with SBUs, as per the Second Transfer Scheme, the SBU-G, the SBU-T and SBU-D shall submit the capital investment plan and obtain approval of the Commission.
- c) KSEB Ltd shall complete the formation of Master Trust and issue of bonds as required for the formation of Master Trust and the interest shall be credited to the fund on a monthly basis. The amount due from the government to be adjusted against the electricity duty shall also be adjusted and credited to the fund on a monthly basis. The payment of pension shall be effected from the Master Trust immediately and a monthly progress report on all the credits and debits to the fund shall be submitted to the Commission periodically.
- d) KSEB Ltd shall submit regularly, at the specified intervals, the application for approval of the fuel surcharge and also submit the proposals for passing on the impact of the change in hydro-thermal mix as per the provisions of the Tariff Regulations, 2014.
- e) KSEB Ltd shall meet the RPO including solar power purchase obligation and submit the periodic report on the compliance to the Commission.
- f) KSEB Ltd shall conduct appropriate studies and assess voltage wise cost of supply.

KSEB Ltd shall implement the above directions and submit on or before 30.09.2017, the report on implementation of the directives. (Action corporate office and SBUs)

15.2 KSEB Ltd and its SBUs have not submitted their capital investment plan for 2017-18 for the approval of the Commission. The SBU-G has to submit its capital investment plan for the new projects as well as for renovation,

modernization and uprating of the existing projects for prudence check by the Commission. In this regard attention is invited to regulation 37, 38 and 39 of the Tariff Regulations, 2014. The SBU-T has to submit capital investment plan in accordance with regulation 56, for the prudence check in accordance with regulation 57 of the Tariff Regulations, 2014. SBU-D has to submit capital investment plan in accordance with regulation 72 of the Tariff Regulations, 2014. Neither KSEB Ltd nor its SBUs have submitted the capital investment plans for 2017-18. KSEB Ltd and its SBUs are hereby directed to submit the capital investment plans in accordance with the regulations. It is also brought to the notice of KSEB Ltd and its SBUs that the capital investment, if any done, without the approval of the Commission will not qualify for depreciation, interest on capital liabilities, RoE and O&M expenses. (Action corporate office and SBUs)

- 15.3 Efficient management of human resources to increase productivity and to improve standards of performance is most inevitable for the financial stability and long term sustainability of KSEB Ltd and of other utilities. KSEB Ltd had entrusted with Indian Institute of Management, Kozhikode, a study to improve the management and utilization of its human resources. IIM, Kozhikode has submitted its report namely "Enhancing Service Quality and Organizational Effectiveness in KSEB" (hereinafter referred to as the IIM Report). The Commission is of the view that the recommendations in the IIM Report have to be implemented in a time bound manner. As a public utility, KSEB Ltd may face certain difficulties in implementing such recommendations. Such difficulties can be and shall be surmounted by judicious strategies and sustained efforts. Considering the larger issues, the Commission directs that:
- a) KSEB Ltd shall, on or before 31.07.2017, prepare and submit to the Commission, a scheme with time bound actions and deliverables on the implementation of the recommendations of IIM Report.
 - b) KSEB Ltd shall, based on the recommendation in the IIM Report, prepare scheme for de-layering the organization and re-deploying the under-utilized human resources.

(Action corporate office and SBUs)

- 15.4 KSEB Ltd shall prepare and implement schemes for utilizing the institutional knowledge and domain expertise for improving its financial stability, with special emphasis on the following,-
- (i) redeployment of the civil engineers for undertaking independent engineering contract assignments as is being done by public sector undertakings such as Bharathiya Sanchar Nigam Limited (BSNL) and Hindustan Lifecare Limited (HLL).
 - (ii) redeployment of qualified administrative staff to customer care and marketing activities.

- (iii) providing consultancy services / development services to other utilities in India and abroad.
- (iv) exploiting the commercial potentials of the software packages developed in-house.
- (v) increasing non-tariff income by developing and exploiting the potentials such as hydel tourism.

(Action corporate office and SBUs)

- 15.5 KSEB Ltd shall take special note of the remarks dated 19.02.2016, given by the Additional Chief Secretary (Finance) on the proposal to approve the long term agreement (LTA) for pay revision. The said remarks were on the Note to the Board of Directors (No.CMD/102/P.R-Workmen and Officers/2/2016 dated 15.02.2016) on the 'Revision of Pay and Allowances of Workmen and Officers of KSEB Ltd', which was taken as agenda item No.OA1/2-2016. The Note to Board of Directors was to approve the pay revision of workmen with effect from 01.08.2013 and of the officers with effect from 01.07.2013. The additional financial commitment as per the said note was Rs.19.83 crore per month with an annual commitment of Rs.237.96 crore. The remarks of the Additional Chief Secretary dated 19.02.2016 are quoted hereunder.

"The following objection to the LTA may be recorded.

The terms of the agreement were not discussed in the Board at sufficient length. The fact that the settlement was done at the Government level even before the Board was consulted and apprised is highly objectionable and militates against the very concept of the organizations autonomy.

While, it is important to reward employee with a good compensation package, there are components in the package that should have been curtailed to reasonable levels. Distributing largesse based on such an LTA comes at a cost – as this translates into an extra burden for the consumers.

It is understood that both for Non-Technical and Technical Staff the scale of pay in Electricity Board has been fixed at 2 to 4 stages above what is enjoyed by persons holding corresponding posts in government. There is absolutely no justification for doing this. If the idea is to provide compensation for the extra risk exposure of an employee, the correct approach should have been to compensate this extra risk through an additional risk allowance as is being done in Government.

These facts will be brought to the notice of the Kerala State Electricity Regulatory Commission so that the unnecessary part of the expenditure on account of pay revision will not be passed on to the consumers while tariff are re-fixed."

- 15.6 Further, in the matter of creation of new electrical sections with additional posts, the Additional Chief Secretary (Finance) had, on 19.02.2016, recorded his remarks as follows,-

“The creation of the 27 new Electrical Section Offices in Kerala State Electricity Board Limited is strongly objected to. At a time when the efforts should be to reduce manpower through modernization and computerization, the Board is proposing to open 27 new offices at an estimate total outlay of approximately Rs.29 core.

This financial burden will finally be passed on to the people of Kerala who are its consumers.

Finance Department intends to bring this avoidable wastage of resources to the notice of the Kerala State Electricity Regulatory Commission, so that this additional expenditure will not be passed on to the consumers of the Board.”.

The Additional Chief Secretary (Finance) has forwarded the above remarks for appropriate action by the Commission. KSEB Ltd shall take note of the above remarks of Additional Chief Secretary (Finance) and prepare and implement plans for optimizing the number of employees and the employee cost by improving efficiency. KSEB Ltd shall, on or before 30.09.2017, submit an action taken report on this issue.

- 15.7 KSEB Ltd shall improve and upgrade the skills/competencies of the workers and of the officers by implementing a well laid down training schedule with the latest state of art technological innovations in the sector and shall optimize the staff strength and employee cost, taking into consideration the recommendations of IIM Kozhikode and the concerns of Government as expressed by the Additional Chief Secretary (Finance). An action plan in this regard shall be submitted to the Commission on or before 30.09.2017.

(Action corporate office and SBUs)

- 15.8 (a) KSEB Ltd has joined the Ujwal DISCOM Assurance Yojana (UDAY scheme) and has signed the tripartite agreement with Government of India and Government of Kerala. The scheme envisages at reduction of distribution losses, faster completion of transmission lines, capacity building of employees, implementation of energy efficiency programmes, introduction of smart meters and of IT for billing and revenue collection, setting up of centralized customer call centres, procurement of power through transparent process of competitive bidding, metering of all distribution transformers, energy audit, 100% electrification including 24 x 7 power to all households, improved inventory management and such other measures to improve efficiency, economy and standards of performance. KSEB Ltd has undertaken to reduce the AT&C losses from 11.91% to 11% by 2018-19 and to reduce transmission losses from 4.45% to 4.40% by 2018-19. KSEB Ltd has further undertaken to eliminate the gap between the average cost of supply and the aggregate revenue realization by 2018-19. KSEB Ltd has to conduct monthly

review of the performance indicators as per UDAY scheme. KSEB Ltd shall submit to the Commission a monthly report on such reviews.

(b) If there is any adverse financial consequence on account of the failure of KSEB Ltd to complete in time, the targets agreed under UDAY scheme, the cost thereon will not be allowed to be passed on to the consumers by way of tariff.

- 15.9 KSEB Ltd shall take steps to properly maintain the cost accounting records and conduct the cost audit as mandated by the Companies Act and the relevant Cost Accounting Record Rules and submit the Cost Audit Reports to the Commission periodically in the intervals of three months starting from September 2017.

(Action corporate office and SBUs)

- 15.10 There are major qualifications in the Statutory Audit of the accounts of KSEB Ltd for the period ended on 31.03.2015 and 31.03.2016. KSEB Ltd shall take time bound actions to rectify the qualifications pointed out by the Auditors pertaining to fixed asset registers, security deposit registers, inter unit reconciliation and ageing schedule for receivables.

(Action corporate office and SBUs)

- 15.11 KSEB Ltd shall get audited by the statutory auditors, the amount booked under R&M expenses to know the extent of misclassification and shall submit to the Commission on or before 30.09.2017, a special report from the auditors for the accounting year 2016-17.

(Action corporate office and SBUs)

- 15.12 KSEB Ltd shall take necessary steps to legalise and document the land records of the property in the possession of licensee. The current status report shall be submitted by 30.09.2017 and thereafter once in every six months.

(Action corporate office and SBUs)

- 15.13 KSEB Ltd shall evaluate the supply chain management system and submit report on the implementation of the said system by 30.09.2017.

(Action corporate office and SBUs)

- 15.14 KSEB Ltd shall ensure proper maintenance of SBU wise accounting records, with proper accounting policies, enabling the Commission to evaluate the performance of each of the SBUs as separate independent units and shall put in place proper control mechanisms to ensure that all the account rendering units are following the accounting policies consistently.

(Action Corporate office and SBUs)

- 15.15 KSEB Ltd shall take steps to weed out obsolete, slow moving and non-moving capital inventories, with a view to releasing tied up funds and space, maintain proper accounts and registers for the same and carry out periodical checks.

(Action Corporate office and SBUs)

15.16 KSEB Ltd shall implement a scheme for ring fencing the SLDC to ensure its independent functioning and for separating its accounts and submit a report by 30.09.2017.

(Action corporate office and SLDC)

15.17 KSEB Ltd shall, as per Regulation 58 of Tariff Regulations 2014, submit the month wise details of availability of transmission system.

(Action Corporate office and SBU-T)

15.18 KSEB Ltd shall get the security deposit register audited by the Statutory Auditors and weed out defunct deposit accounts or duplicate accounts, if any, and submit a report on the same to the Commission on or before 30.09.2017.

(Action corporate office and SBU-D)

15.19 KSEB Ltd shall conduct age wise analysis of the receivables and shall liquidate the receivable due from the Government Departments as well as PSUs and expedite revenue recovery mechanism of the receivables. A detailed analysis shall be submitted to the Commission within three months.

(Action corporate office and SBU-D)

15.20 KSEB Ltd shall monitor and evaluate the performance of the implementation of part A and B of R-APDRP and shall submit to the Commission, monthly reports / quarterly reports on the following,-

- (i) the status of implementation of Part A & B of R-APDRP
- (ii) the ring fencing of distribution sections and loss estimation
- (iii) the segregation of technical and commercial losses
- (iv) the study of voltage wise loss, as per Para 5.4.6 of the National Electricity Policy
- (v) the measurement of distribution loss.
- (vi) the funds received so far and amount of interest paid and status of conversion of grants.

(Action Corporate office and SBU-D)

15.21 KSEB Ltd shall implement the scheme for meter reading using palm held devices and for transferring the meter reading data to the computers directly from the palm held devices, so that the man power required for meter reading can be optimized and the man power now being deployed in electrical sections for entering meter reading data manually can be efficiently utilized for other inevitable duties. The number of meter readers can also be reduced on introduction of palm held devices.

(Action Corporate office and SBU-D)

15.22 KSEB Ltd shall replace all the faulty meters in the system and shall submit a report on the existing number of faulty meters and the detailed action plan with specific time frame for the replacement of faulty meters.

(Action Corporate office and SBU-D)

15.23 KSEB Ltd shall implement time bound action plans for the efficient utilization of modern technologies in power sector with special reference to the modern trends in information technology and communication technology.

(Action Corporate office and SBU-D)

15.24 KSEB Ltd shall, on or before 30.09.2017 submit a plan for the introduction of smart meters for the consumers having monthly consumption of and above 500 units, in accordance with the guidelines in para 8.4(3) of Tariff Policy 2016.

(Action Corporate office and SBU-D)

15.25 KSEB Ltd shall submit on or before 30.06.2017, a detailed action plan to implement the following in a time bound manner,-

- (a) Speed up electronic mode for the collection of revenue, by encouraging e-payments with sufficient incentives.
- (b) Proper segregation of business process in section offices so as to effectively optimize the number of section offices.
- (c) Maintain all the sufficient registers to track the SOP parameters.

(Action Corporate office and SBU-D)

15.26 KSEB Ltd shall evaluate the implementation of the demand side management activities and submit report thereon, on or before 30.06.2017.

(Action Corporate office and SBU-D)

15.27 KSEB Ltd shall assess the subsidy extended to the consumers as per the directions given by the Government and shall submit a report on the status of payment of subsidy by the Government in compliance of the provisions of Section 65 of the Act.

(Action Corporate office and SBU-D)

15.28 KSEB Ltd shall, on or before 30.06.2017, submit a proposal for separation of accounts of the business of wires for determination of wheeling charges as per regulation 87 of the Tariff Regulations 2014.

(Action Corporate office and SBU-D)

15.29 KSEB Ltd shall, on or before 30.06.2017, submit a suitable proposal for introduction of kVAh billing for HT-EHT consumers

(Action Corporate office and SBU-D)

15.30 KSEB Ltd shall, as per Regulation 93 of Tariff Regulations, submit month wise details of availability of the electricity for supply.

(Action Corporate office and SBU-D)

15.31 KSEB Ltd shall comply with the RPO in accordance with the provisions in KSERC (Renewable Energy) Regulations, 2015 and the directives issued by Government of India and Government of Kerala in this regard.

B. Directives to the licensees other than KSEB Ltd.

15.32 The directives given at 15.7, 15.8, 15.9, 15.10, 15.11, 15.12, 15.13, 15.15, 15.18, 15.19, 15.21, 15.22, 15.23, 15.24, 15.25, 15.26, 15.29 and 15.31 to KSEB Ltd, shall be applicable to the licensees other than KSEB Ltd also, mutatis mutandis.

CHAPTER – 16

ORDERS OF THE COMMISSION

- 16.1 The Commission, in exercise of the powers vested in it under the provisions of the Electricity Act, 2003 and of the Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 and other regulations enabling it in this behalf, orders as follows,-
- (1) The Aggregate Revenue Requirement (ARR) of Strategic Business Unit (Generation) of KSEB Ltd for the financial year 2017-18 is approved at Rs.677.48 crore.
 - (2) The Aggregate Revenue Requirement (ARR) of Strategic Business Unit (Transmission) of KSEB Ltd for the financial year 2017-18 is approved at Rs.905.20 crore.
 - (3) The Aggregate Revenue Requirement (ARR), of Strategic Business Unit (Distribution) (SBU-D) of KSEB Ltd for the financial year 2017-18 is approved at Rs.11487.82 crore.
 - (4) The revenue of SBU-D of KSEB Ltd at the existing tariff for the financial year 2017-18 is approved at Rs.11529.74 crore.
 - (5) The non-tariff income of KSEB Ltd for the financial year 2017-18 is approved at Rs 449.00 crore.
 - (6) The revenue surplus of KSEB Ltd for the financial year 2017-18 is approved at Rs.490.92 crore.
- 16.2 An amount of Rs 1040.92 crore out of the total revenue gap of Rs.4944.05 crore outstanding as on 31.03.2013 is approved for recovery through tariff for the financial year 2017-18.
- 16.3 The net Aggregate Revenue Requirement (ARR) approved for recovery through tariff is approved at Rs 12079.74 crore. The Expected Revenue from Charges for the financial year 2017-18 is approved at Rs 11529.74 crore. The Commission does also approve to recover an additional amount of Rs 550.00 crore through revision for the year 2017-18.
- 16.4 The Commission orders that the retail tariff approved for KSEB Ltd and its consumers as detailed in Chapter 14 read with the Tariff Schedule approved as per this order shall come into force with effect from 18.04.2017 and shall continue to be in force up to 31.03.2018.
- 16.5 The Commission does also order that the transmission charges, the wheeling charges, the cross subsidy surcharge applicable to the open access consumers, the average pooled power purchase cost, the meter rent and the low voltage surcharge at the rates specified in Chapter 14 read with the Tariff

Schedule approved as per this order shall come into force with effect from 18.04.2017 and shall continue to be in force up to 31.03.2018.

- 16.6 The retail tariff, the transmission charges, the wheeling charges, the cross subsidy surcharge, the average pooled power purchase cost, the meter rent, the low voltage surcharge, etc., as approved in this order read with the Tariff Schedule, shall also be applicable to all the distribution licensees, other than KSEB Ltd, and to their consumers from 18.04.2017 to 31.03.2018.
- 16.7 The ToD tariff structure, incentive for power factor and such other charges and processes as approved in the following Annexures shall be in force with effect from 18.04.2017 and shall continue to be in force up to 31.03.2018.

Annexure	Particulars
Annexure A	ToD tariff applicable to EHT, HT and LT industrial consumers (with connected load of and above 20KW)
Annexure B	Power factor incentive / disincentive
Annexure C	Recommended values of static capacitor in kVAR for power factor improvements
Annexure D	ToD tariff for domestic consumers
Annexure E	Billing under ToD tariff system for LT-IV Industrial, HT and EHT consumers
Annexure F	Optional demand based tariff

- 16.8 Tariff Schedule shall be part and parcel of this Tariff Order.
- 16.9 If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, for reasons to be recorded in writing, issue orders necessary for removing such difficulty.
- 16.10 The licensee shall submit the application for truing up of accounts as per the provisions in the Tariff Regulations, 2014.
- 16.11 This order is issued subject to the judgments of the Hon'ble High Court in WP (C) No. 465/2015 and WP No. 2534/2017.

Dated this the seventeenth day of April, 2017.

Sd/-
K.Vikraman Nair
Member

Sd/-
S.Venugopal
Member

Sd/-
T.M.Manoharan
Chairman

Approved for issue,

Sd/-
Santhosh Kumar.K.B
Secretary

Annexure -1

Summary of the Submissions in the Public Hearings

The Commission conducted 7 public hearings on the proposed tariff revision. The date and venue of the public hearings are tabulated hereunder.

Details of venue and date of public hearing

Sl. No.	Name of the venue	Date of public hearing
1	Conference Hall, Collectorate, Kannur	27.12.2016
2	Conference Hall, Hotel Nalanda, Kozhikode	28.12.2016
3	Municipal Town Hall, Kalamassery, Ernakulam	03.01.2017
4	Town Hall, Thrissur	04.01.2017
5	Conference Hall, Vydyuthi Bhavanam, Pathanamthitta	12.01.2017
6	Municipal Conference Hall, Kattappana, Idukki	13.01.2017
7	Institution of Engineers Hall, Thiruvananthapuram	17.01.2017

The participants in the above public hearings, included individual consumers, representatives of the industries, representatives of other consumer groups and representatives of the employees of utilities. None other than the employees of utilities supported the proposed tariff revision. They have submitted reasons and facts in support of their views. Important submissions made by the participants in public hearings are briefly stated below.

Public Hearing at Kannur on 27.12.2016

Venue : Conference Hall, Collectorate, Kannur

Sri.Preman, SILK, Kannur & Sri. M.C Kannan, SILK Employees Union

Sri.Preman, representing SILK, mentioned that sufficient publicity was not given for the notice issued by the Commission. According to him, the industries in Kerala, especially SILK, are under financial loss and it is not possible for them to bear the proposed tariff increase. He suggested to popularise LED lights for reducing energy consumption. According to him meter rent is to be withdrawn as there is no relevance for such charges. Sri. M.C Kannan, Silk Employees Union, also requested for withdrawl of proposed tariff hike considering the present financial position of SILK.

Sri. A K Raveendran, representing RUBCO Employees Union, mentioned that Co-operative units like that of RUBCO are struggling for survival and increase in tariff would create substantial difficulties for the sector. He suggested that extravagant use of electricity should be controlled by introducing higher tariff.

Sri. K P Asokan, Kannur District Textile Union

Sri.K.P.Asokan submitted that about 15,000 persons are directly **and** about same number are indirectly depending on the textile sector in the State. In Kannur district alone, about 1000 workers are employed in the textile sector. The Government is trying to save the sector by introducing support schemes. In such a situation, the proposed tariff increase would cripple the functioning of the sector.

Sri. V Vijayan, Welding Units Association

Sri.Vijayan narrated the issues faced by the small scale welding units especially the intense competition from the mobile welding units. Such units can charge comparatively lower rates for the works executed by them due to low establishment costs. These units having no licence or other fixed costs for running the business. Hence, he suggested that licence schemes should be introduced by KSEB Ltd for the functioning of mobile units or while giving electricity connections licence from local self-governments should be insisted by KSEB Ltd. He also mentioned that no tariff increase should be imposed on the sector. Sri.Prakasan, Welding Industries Owners Association has also stated similar issues.

Shri. P Prasad, Library Council

According to him, the rural libraries provide much needed service and its existence is necessary for the Society. Hence, tariff increase should not be imposed on libraries. He also suggested that slab rates should be avoided for the libraries.

Sri.Vipin, Capitol Mall. He mentioned that tariff for commercial category is already very high and no increase should be proposed for the category.

KSEB OA

The main issues raised by representatives of KSEB OA at Kannur and Kozhikode:

- The power situation in 2016-17 is grim and there is a possibility of severe drought in the year. Hence while considering the power purchase, latest hydro generation availability should be considered.
- The average power purchase cost of Rs.4/kWh at present proposed for the purchase from traders and energy exchange is low. If reasonable price for the purchase from external sources such as traders and energy exchange is considered, the total allocation for power purchase proposed for 2016-17 is not enough. Hence power purchase cost should be determined realistically.
- The condition that all power purchase needs to be approved by the Commission before hand is to be changed as it is not possible in all circumstances, especially in contingency situations to seek prior approval
- Employee cost is not properly considered. The provisions for items such as DA increase for two times in a year, increase in no. of employees on account of opening of new section offices, implementation of SoP parameters etc are not considered for estimating the employee cost.

- The Commission should, while fixing the tariff, consider the directions of State Government and Government Policy
- In estimating cross subsidy surcharge, possibility of having two average cost of supply may be explored ; one based on cheaper internal generation sources for the use of poor consumers and other one based on purchase from outside for the purpose of other consumers.

Asst. Engineer, Kannur. He stated that in the present tariff, power factor is not properly considered. Introduction of peak load pricing for domestic consumers having more than 300 units may be thought of. If adequate budget for O&M is not provided, the quality of supply will be affected.

Sri.Biju, KSEB EA Kasaragod,

At present subsidy for the agriculture consumers are to be borne by the KSEB Ltd. This system has to be changed and a direct system of reimbursing the electricity charges through Krishi Bhavans needs to be implemented. In water scarce rural areas where water source for agriculture pumping and domestic use is same, water pumping for domestic purposes using agriculture connections may be allowed. Separate tariff for pumping water for commercial crops is necessary. Introduction of development charges may be considered for faster release of electricity connections.

Executive Engineer, Kasaragod mentioned that collection of electricity charges from Government departments, such as Police stations, Kerala Water Authority, Govt hospitals etc., are difficult and some action from the Regulatory Commission is necessary on this issue.

Shri. Khalid NP, KHIDMA Charitable Trust.

He submitted that lower electricity tariff for charitable organisation is necessary. The trust is undertaking many charitable works such as palliative care units, dialysis units etc., where treatment is free for poor patients. The trust is getting tax exemption from Income Tax Department for charitable works. At present tariff is under LT VI F category, which is very high and jeopardise the activities of the Trust. He requested to change the present tariff for LT VI(F) to LT VID category considering the charitable activities of the Trust. He also requested that a Commission of enquiry may be instituted for an inspection to Institution to ascertain the facts on charitable nature of activities of the trust.

Public Hearing at Kozhikode on 28.12.2016

Venue : Hotel Nalanda, Kozhikode

Sri Abdul Azeez, representing M/s. Peekay Steel Limited mentioned that industrial climate unfavourable in Kerala and hence there is no scope for increasing the tariff.

Sri.Saidutty Haji & SriMayankutty, representing the Flour& Oil Millers Association stated that the industry is facing stiff competition from large flour mills. The industry at present is survived by recovering only the labour cost and the increase in fixed charges proposed is not reasonable and shall not be resorted to.

Sri Prakasan V P also raised similar issues regarding the increase in fixed charges for LT IV consumers. He suggested that the tariff increase can be avoided by collecting the arrears from large consumers.

Dr. O G Augusty, Dr.T.V Joy and Dr. P.M. Mathai representing the Kerala Rural Private Hospital Association stated that the small scale private rural hospitals should not be treated and equated as a corporate commercial venture. The main objective of such small hospitals is to provide service in rural areas. These hospitals are mostly run on the basis of personal relationship and there is limited scope for charging exorbitant fees. The tariff at present is under LT VI F, where it is about Rs.9 per unit, which is exorbitant for such small hospitals. Since large rural population depend on these small hospitals, such hospitals deserve a lower tariff. Hence, such hospitals may be considered at par with government and charitable hospitals and tariff under LT VI A may be allowed.

Sri T. Sudhakaran, Chenaparambu submitted that the non-telescopic tariff for domestic consumers should be discontinued as one unit change in consumption leads to substantial change in the electricity bills. He stated that KSEB Ltd should not differentiate domestic consumers based on consumption. He further stated that it is fair that consumer should buy meters from KSEB Ltd offices located in towns for getting electricity connection. KSEB Ltd should address the low voltages in the system immediately as the tariff is fixed considering supply of electricity at rated voltage.

Sri.Musakoya, former member of Panchyath also shared the view on discontinuation of non-telescopic tariff. He stated that the bill issued by the KSEB Ltd is not at all comprehensible for common man and it should be made simple and easy to understand by general public.

Sri. K. Sami Master, District Consumer Protection Council mentioned that enough publicity should be given for tariff revision exercise. The LED bulbs issued by the KSEB Ltd is of poor quality and he insisted that level of interruptions in the system should be reduced. He also mentioned an instance of adjustment of bills on account of faulty meter, where the arrear was not promptly adjusted by the KSEB Ltd even after repeated requests.

Sri. Suresh Babu representing the Library Council requested for concessional tariff for rural libraries. He also requested for discontinuation of present non-telescopic tariff for libraries.

Sri Appukkuttan, Secretary State Library Council also made same request. He further stated that tariff of libraries may be changed from the present LT VI (E) category to a lower category.

Shri.Biju PK, an Electrical contractor stated that KSEB Ltd should replace the meter and consumer should not be burdened for replacement of meters.

Sri.Madavoor Sainudeen representing differently abled persons submitted that separate concessional tariff is to be allowed for differently abled people. He submitted that Government of Kerala has stopped the free electricity connection given to the different abled persons. He suggested that upto three electric posts should be given free of cost for providing connections to differently abled persons. He also requested for discontinuation of meter rent.

Sri.Sivadasan representing Taluk Sabha stated that RGGVY project is implemented through identification of beneficiaries by the representatives of local self-government. This task is now taken over by the Asst. Engineers in electrical sections by obtaining income certificate from Village offices. He requested that Commission should reinstate the original system of selection of beneficiaries by representative of people and strict direction should be issued on the persons surpassing the established system. He also pointed out that LED Bulbs are not distributed to the beneficiaries and now bulbs are not available in the KSEB Ltd offices.

Sri.Rajagopal K.K Chelannoor mentioned that the location of the public hearing was not properly informed. He suggested that there is no rationale for separate meter rent and the same is to be discontinued. According to him uncontrolled increase in establishment expenses of the KSEB Ltd is the reason for the present requirement of increase in tariff.

Sri. TKA Aziz is also shared the opinion of discontinuation of meter rent. He suggested that proper repair and maintenance work is to be undertaken for reducing the interruptions. He requested that tariff increase for domestic consumers should be avoided.

Public Hearing at Ernakulam on 03.01.2017**Venue : Municipal Town Hall, Kalamasserry**

Sri.DijoKappen stated that in the first notice issued by the Commission on the *suo motu* revision of tariff in the month of June, the revenue surplus was projected and everyone expected a reduction in tariff. Suddenly the said proposal was revised and now proposed a revenue gap of about Rs.4000 crore. It is not clear as to why commission has hurriedly included the revenue gap on account of truing up of past years in the present proceeding, even when such revenue gap is not finalised. In the last revision in 2014, the Commission has revised the tariff for domestic category substantially, and further non-telescopic system was also introduced. The public is also not clear on the issue of requirement of truing up petition when all the liabilities are taken over by the Government in the Transfer scheme. It is not fair to impose the burden of past liabilities on the present consumers. Citing the orders of Apex Court and APTEL, in the matter of UPPCL Vs NTPC he stated that the burden on belated filing of truing up petition by KSEB Ltd and retrospective revision of tariff shall not be imposed on the consumer.

He also pointed out that KSEB Ltd is not availing the benefits under the UDAY scheme of Government of India, so that the burden of the consumers is reduced. According to him, at present there is no approved tariff existing as the validity of the tariff is over by August 2015.

Sri.Kappen also stated that KSEB Ltd is not taking action on promotion of renewable energy, even though the Commission has specified minimum level of purchase of energy from renewable sources. The burden of delay in commissioning of projects is also loaded on to the consumers. It is also not clear why KSEB Ltd is resorting to high cost long term agreements when cheaper power is available in the short and medium term basis. He also stated that the Commission and KSEB Ltd has not made it clear how long the *suo motu* revision exercise continue in the case of KSEB Ltd is not filing the tariff in future. He insisted that following shall be ensured in the *suo motu* proceedings:

- excess power purchase cost for 2011-12 and 2012-13 shall not be allowed to recover through tariff
- excess claim in employee cost shall not be allowed
- RoE shall be allowed at 14% only.
- Tariff should be reduced considering the surplus in 2016 and 2017
- The Commission should monitor the progress of execution of capital projects and insist KSEB Ltd on renewable purchase obligation
- The project cost without the approval of the Commission shall not be allowed to pass on to the tariff.

Sri. K.N Gopinath, Standing Council of Trade Unions

Sri.Gopinath representing the Standing Council of Trade Unions, stated that it is not clear why the burden of seeking revision of tariff is shifted from KSEB Ltd to the Commission. It is also not clear, why the Commission is taking up the burden if KSEB Ltd is not required a tariff revision. Already an increase of 16% in tariff was given in the previous year. Now the power is available from the open market at cheaper rates. Hence, he stated that it is the general view of the Trade Unions that there is no necessity for increasing the tariff. According to him, if the ARR is considered after prudence check, there can be a surplus of about Rs.1500 crore and a reduction of tariff by about 35 paise per unit is possible.

He stated that truing up petitions should be filed in time bound manner. It is also not fair to load the present consumers with past losses of KSEB Ltd to the tune of Rs.4500 crore. There is already a Supreme Court order restraining recovery of past losses. It may also be noted that as per the Transfer scheme, the Government has taken over the liabilities of KSEB Ltd and in such case the past losses need not be passed on.

KSEB Ltd has not created the Master Trust and hence there is no need to provide for interest on bonds issued to the master trust. The long term power purchase agreement entered into by KSEB Ltd is at higher cost of Rs.4.50 per unit, whereas power is available at much cheaper rates in the open market.

The stand that PPA of internal generating stations such as BSES and RGCCPP is not renewed is not correct and internal generation needs to be promoted and steps to be taken to make such plants economically viable, by using LNG. Likewise, the stand taken against the public sector unit such as M/s TCC to deny open access on the ground that they have arrears is also not correct. The arrears pertains to the issues with Government and the same need not be a factor for denying open access.

BSES Employees Association

The Association demanded that the Commission should initiate steps to open the plant immediately and the PPA is to be extended by the KSEB Ltd

Father Simon Pallupetta, Executive Director, Catholic Mission Hospitals

Fr. Simon Pallupetta representing the hospitals run by Catholic Mission stated that in the present situation, corporate hospitals find it difficult to survive as the electricity bills are very high. At present, lower tariff is allowed for the organisations registered under charitable societies Act, whereas the same is not given for the Trusts, though same activities are being carried out in both institutions. He demanded that the concessional tariff is to be allowed to mission hospitals, like that of charitable and government hospitals as their moto is public service.

Sri. George Thomas, The Kerala HT & EHT Industrial Electricity Consumers' Association.

The Association submitted that there is a scope for reduction in tariff by 0.34/kWh on account of the surplus for the years 2016-17 and 2017-18 assessed by the Commission, whereas the real scope of reduction is by Rs.1.02/kWh based on the revised ARR proposed by the Association. According to the Association, there is no justification for delay in filing trueing up petition for 2011-12 and 2012-13 and the KSEB Ltd has lost its right to claim revenue gap as per the Orders of the Hon. Supreme Court (UPPCL Vs NTPC 2009 6 SCC 235) and APTEL. The Transfer scheme approved by the Government shows there is no regulatory assets and recovery of past losses in the form of regulatory assets will result in undue enrichment of KSEB Ltd as there is no corresponding unfunded expenses in the Balance sheet of KSEB Ltd. As per the Government of India report, the tariff revision effected in Kerala over the last 5 year period is the highest in the country. If the KSBEL had faced financial difficulties, it would have filed tariff petitions in timely manner. Non-filing of tariff petition by KSEB Ltd itself shows that there is no urgency for tariff revision.

There is a potential for reducing the cost by joining the Uday scheme by KSEB Ltd so that loans can be taken over by the State government under the scheme and also avail the opportunity of utilising the cheaper power available in the Country. According to the Association, the suo motu proceeding before finalising the revenue gap is not proper.

The Association has made following comments on ARR

- The rationale for fixing the Transmission loss at 4.5% is not clear as it cannot be more than 3% in Kerala. Only in Kerala the transmission loss is fixed as high as 4.5%.
- As per the orders of Hon, APTEL in appeal No. 247/2014, 14% of ROE can be allowed on the equity capital of Rs.283.91 crore
- The interest on master trust cannot be allowed on the reason that as per Regulation 31 and Orders of APTEL interest on bonds actually issued needs to be allowed. Since master trust is not formed, the same need not be allowed.
- The capital expenditure and interest thereon shall be disallowed since after the notification of the 2014 regulations prior approval has to be taken by KSEB Ltd for capital expenditure.
- Since the original capital cost of generation, transmission and distribution projects is not approved by the Commission and hence, O&M expenses for transmission and distribution shall be allowed considering the assets up to 2014-15 only.
- Considering the revenue surplus arrived at by the Association, the ACoS will decrease by 0.76 paise per unit in 2016-17 and 1.02 paise in 2017-18.

- The Commission has not applied the rationale that EHT and HT tariff should be below LT while computing voltage wise CoS. The ACoS will be Rs.5.57/kWh compared to Rs.5.60/kWh worked out by the Commission
- The ACoS will further decline considering the decline in ARR. As per the computation of the Association, cost per unit for EHT will be Rs.4.02/kWh, as that of HT will be Rs.4.25/kWh and of LT is 4.65/kWh.
- Since cross subsidy should be within +/-20% of ACoS, there is a need to revise the tariffs keeping the cross subsidiary reduction trajectory in mind.
- While determining ToD tariff, exclude the demand recorded during night off-peak hours for the recorded maximum demand
- The power factor incentive presently capped at 2.5%, is very low and it should be increased to 7%
- Introduce load factor incentive to encourage consumption of high load factor consumers
- To increase the prompt payment incentive to 2% from the present level of 0.3% and to clarify that no transaction charges shall be applicable in case of online payment.
- The cross subsidy surcharge may be recalculated considering the decrease in ACoS

Sri.Rangarajan, Ernakulam Apartments Apex Council.

Sri.Rangarajan submitted that non-submission of truing up and ARR petition by KSEB Ltd on time is not a justification for initiating suo-motu petition for revision of electricity tariff. The present suo-motu petition should be construed as a measure to make the public aware of the existence of the Commission. The arguments made by Dijo Kappen and HI-EHT Association are to be appreciated in this regard.

He further submitted that there is no rationale for charging meter rent from the consumers who have paid cost of meter. The arrears to be collected by the KSEB Ltd is about Rs.1000 crore and the same is to be collected for avoiding the tariff increase. According to him, only domestic consumers are promptly paying the electricity charges and the tariff increase is also loaded on to the domestic consumers.

Sri.Mohanan Pillai, Standing Counsel, Kochi Metro Rail Corporation

Adv.Mohanan Pillai representing KMRL stated that Kochi Metro is presently planned to operate on no profit and non-loss basis. The benefit of establishment of KMRL is for every public and not limited to the residents of Kochi alone, as the Kochi city has floating population. KMRL has no revenue other than from passenger traffic and it is accordingly distinguished from Railways. As per the DPR for Phase –I, cost of Electricity is about 30% of the total O&M cost. At present M/s KMRL is allowed provisionally the same tariff as that of Railway traction at 110 kV. However, it is requested that KMRL is to be allowed special tariff. It is to be noted that Government of Kerala has allowed concessional tariff for railways during the

inception of electrification for first five years. Similarly, for KMRL also a concessional tariff is required for initial years. The relief sought for by KMRL is on account of following factors:

- In comparison with Railways, KMRL is not having a freight tariff and hence the revenue generation is only from passenger traffic.
- Railways is working in single phase, which results in unbalanced load whereas in the case of KMRL, it is three phase which balances the load better.
- KSEB Ltd is not incurring any cost of arranging system for supply as the entire cost is met by KMRL
- DERC has allowed a separate tariff for DMRC in Delhi and the tariff is still continuing. Similarly in Karnataka and Tamil Nadu also concessional tariff and separate category are being offered for metro services.
- Since KMRL is being operated on VVVF electronic controls, the power factor can be maintained near to unity levels.
- KMRL is joint venture with State Government working at no profit no loss basis for providing cheaper transportation for the public

Based on the above, M/s.KMRL requested to allow a special category tariff at the cost of service at 110kV level and a tariff lesser than Railway traction.

Sri.K.A Joseph, KSSIA

The tariff for consumers having connected load more than 20kW has been increased earlier and the present proposal for increase in tariff is not justifiable. Further, small industrial consumers should be provided with concessional tariff

Sri.Pradeep, HINDALCO

HINDALCO was the largest consumer of electricity in State in the 1990es. However, due to high cost of electricity and other reasons, the operations were scaled down. All industries are working in competitive conditions and KSEB Ltd should also work in competitive manner. The increase in tariff proposed is not reasonable and KSEB Ltd should control the costs like other industries.

Aluminium Factory workers Union, Indal Workers Association, Aluminium Company workers Union

The representatives of Aluminium factory workers (HINDALCO) stated that the present rate increase will result in additional commitment of Rs.50 lakhs for the plant and hence it is requested that tariff increase should be withdrawn.

Sri.Ramdass, CUMI Employees Association.

KSEB Ltd is working in profit after the corporatisation and hence there is no need for increase in tariff. Suo-motu proceedings itself shows that there is no need for tariff revision.

Sri.Jayathilakan, Kerala Productivity Council.

Sri.Jayathilakan commenting on the suo moto proceedings of the Commission stated that **he endorses the views of HT- EHT Association and that** KSEB Ltd need not be given a tariff revision through a suo motu proceedings as it is the duty of the KSEB Ltd to file accounts and petitions in time bound manner.

Sri.Vinod, M/s TCC Limited.

Sri. Vinod, presenting the plight of the M/s TCC stated that it is the last chance to attend the public hearing on behalf of TCC as any further increase in tariff will result in closing down of the plant. It is not clear how long KSERC will continue with the process of suo motu proceedings in the situation of non-filing by KSEB Ltd. The proposal of 30 paise increase will results in Rs.40 to 45 lakhs additional burden to the Company which is not sustainable to the operations of TCC.

Mrs.PrasannaVasudevan, Islamic Learning Mission(ILM) Trust

Advocating for withdrawl of suo motu proceeding, Mrs.PrasannaVasudevan stated that the Commission should reject the suo motu proposal for revision of tariff in the light of cheaper power available in the market. The Commission should encourage renewable energy and also direct KSEB Ltd to follow the RPO Obligation. The consumers should be allowed to install solar energy systems and KSEB Ltd should purchase the excess energy.

At present Government, University and IHRD run self-financing engineering colleges as well as organisations run by charitable institutions are included under HT IIA / LT VI-A Tariff, whereas self-financing colleges run by NGOs are under HT II(B)/LT VI(F). Hence it is requested that engineering colleges having connected load upto 100kVA be included in HT IIA/LT VI(A).

Mrs.PrasannaVasudevan, All Kerala Renewable Energy Developers Association

Mrs.Prasanna Vasudevan, further representing the Renewable Energy Developers Association stated that, the time frame fixed for giving electricity connection may be extended for getting connectivity for renewable energy projects also. KSEB Ltd should purchase the REC from the renewable projects such as wind and solar or allow to sell the REC to open access consumers.

Sri.Sambasivan, HINDALCO

The KSEB Ltd should be exposed to competition like other industries. KSEB Ltd should manage the cost by using cheaper hydro energy and also energy from open market. Considering the present state of industrialisation, tariff increase shall not be allowed.

Sri.Satheesh: Kerala Engineering Workshop Association

The industry employees about 10 lakh workers and are mostly self-employment enterprises. The major competition is from mobile units having no licence. Hence, KSEB Ltd should insist on licence from local self-government to operate engineering units. At present the units in **Ernakulum** are facing frequent interruption, which is to be reduced. The Association also requested that there should not be any increase in tariff.

Sri.Krishnakumar, GTN Textiles.

At present the industry is facing severe recession and the exports are falling. The increase in tariff will further deteriorate the condition of the industry.

K. Rajagopal, Senior Manager, GTN Textiles Limited

The present proposal for increase in tariff to the tune of 30 paise per unit will create additional burden of about Rs. 1 crore per year for the unit. The company is not in a position to absorb such huge burden. At present company is implementing survival packages and it is hoped that the Commission will act positively so that the industries can survive longer. They have requested that the power factor and load factor incentives should be allowed.

Sri.Harish HOCL

M/s HOCL will have to shell out about Rs.2 crore additionally for meeting the tariff increase. Due to the increased loss, the industry is on the verge of closure. Already survival plans have been submitted before the Government. If there is any increase in tariff, the present plan will fail and it will jeopardise the programme of revival. The Commission should render justice to the Company in this regard. Since the KSEB Ltd is not proposing any tariff revision, the same need not be allowed.

Sri.Aneesh R, Apollo Tyres

Sri.Aneesh stated that Apollo Tyres is one of the oldest industry in the area. The plant has increased the efficiency and reduced the electricity consumption per unit of production to half. As suggested by the HT-EHT Association at present there is no necessity for a tariff increase. The proposal for increase in tariff will create an additional burden of about Rs. 1 crore per year for Apollo tyres.

Sri.Thomas Mathew, PTL Enterprises Limited/Apollo tyres

At present the industry able to survive the stiff competition only because of open access and availability of cheaper power. The proposal for increase in tariff is will severely affect the survival of the unit. Hence it is requested to maintain the tariff at present level.

Sri.P. Mohandas, General Manager, Cochin Minerals and Rutile limited.

The financial stability of the company will be severely affected if the electricity charges are increased as electricity constitute major share of the cost. Further

increase in tariff will result in increase in price of raw materials which will further accentuate the problem. Hence the proposal may be rejected.

Construction and Contract Workers Union, Udyodmandal Contract Workers Union, Udyogmandal Contract Workers Congress, General Workers Union.

The representatives of the Association stated that the PPA between BSES Kerala Power Ltd (BKPL) and KSEB Ltd should be renewed as the workers including contract employees are at present on the verge of losing their job.

Sri.H. Ananthkrishnan Apollo Tyres

Sri.Ananthkrishnan while presenting the efforts taken by the plant to increase efficiency stated that the plant has increased the efficiency and now the electricity consumption per unit of production has been reduced to half. As suggested by the HT-EHT Association, at present there is no necessity for a tariff increase. The load factor and power factor incentives as suggested by the HT-EHT Association may be introduced.

Public Hearing at Thrissur on 04.01.2017

Venue : Town Hall, Thrissur

Sri Sreedharan Therambil, Chief coordinator, Consumer Protection Council stated that every year, KSEB Ltd needs tariff revision and same should not be a ground for invoking suo motu proceedings for revision of tariff. Such measures will question the relevance of the regulatory Commissions in the State. At present it appears that, the Commission is existing for protecting the interest of KSEB Ltd. But it has to exist for the protection of interest of consumers also. The limit of 40 units now proposed for excluding the revision needs to be reviewed as the number of consumers in such category is very low and should be increased to at least 80 units per month. Hence, tariff revision shall not be effected to consumers having monthly consumption upto 80 units. He suggested that KSEB Ltd should promote renewable energy like the utilities in Tamil Nadu. He also opined that theft of energy is possible only with the connivance of the KSEB Ltd officials and it should be curtailed.

Sri.K. Narendran, Rice and Flour Mill owners association:

Sri.Narendran narrated the plight of small rice and flour mills in Palakkad. The rice mills are now operating only for few days in a year and it is mainly for own use of farmers. In most of the mills, the monthly bills are between Rs.200 to Rs.500 only. Even with present operating pattern, it is very difficult to sustain the mills. The tariff increase proposed now is very high and the previous level must be maintained.

Adv. V.N. Narayanan, President Consumers' Federation

Sri. Narayanan stated that the proposal for increase in tariff and the public hearing at various places are only eyewash for increasing the tariff. General public understands that in any case the tariff will be increased and that is the reason for low participation of public. The present proposal for increasing the tariff for consumers having consumption upto 100 units per month is very high and it is not fair to increase the tariff to such a high level. Those who consume less should be encouraged and those having higher level of consumption should be penalised. In the present proposal, tariff increase for those who consume more is low compared to those who consume less. The KSEB Ltd should intensify the collection of arrears and thereby tariff revision should be avoided. If the Government departments are not paying electricity charges, strict measures should be taken to realise the charges. He requested that tariff revision should be avoided for consumers having consumption upto 100 units per month.

Sri. Antony, Ollur Industrial Estate Association

Sri. Antony stated that the increase in tariff proposed should not be allowed and suggested that the LT industrial units should be allowed a lower tariff similar to the agriculture tariff. The electricity duty for HT industries is only 10 paise per unit, whereas for LT it is 10% on the bill. The meter rent should be discontinued and minimum guarantee system should be restored. He also suggested that LT industrial units should be given training for energy conservation.

Sri.Noby Jospeh, KSSIA

Sri.Noby suggested that it is good that tariff increase to recover the past losses. KSEB Ltd should recover the losses so that it can function on a sustainable basis. According to him, the delay in submitting accounts by KSEB Ltd for truing up, needs to be discouraged. He also opposed the tariff revision proposal for LT industrial consumers especially for increasing the fixed charges. He further stated that the present off peak rates under ToD system should be reduced so that it will incentivize shifting of load to off peak hours.

Sri. Prasad Mathew, InsDES.

The organisation is an institution under the Officers Association in KSEB Ltd promoting research in Power sector. Sri. Prasad stated that his organisation generally supports the proposal for tariff increase, as tariff increase is necessary for the sustained operations of KSEB Ltd. According to him, the existence of KSEB Ltd is necessary for the providing low cost power. Sri. Prasad further stated that PPA with RGCCPP, Kayamkulam is extended for having secured power during deficit conditions and hence the cost should be allowed. Required O&M cost should be allowed in full for smooth operation of the KSEB Ltd.

Sri.Ramakrishnan, CUMI.

Sri.Ramakrishnan stated that the Tariff increase is to be avoided as increase in tariff will hit the company very hard. The additional burden for the company will be about Rs.1.40 crore per year. Tariff increase for domestic consumers upto 200 units should be avoided. He further stated that the functioning of KSEB Ltd is not transparent as it is not filing the accounts on time. Past losses shall not be imposed on the present consumers.

Sri. Suresh, Textile Mill Workers Association

Sri. Suresh submitted that all textile mills in the State are closing down due to loss and in such situation increase in tariff will severely affect the existence of textile units. Hence he suggested that tariff revision need not be allowed.

Sri.Renjith, Appolo Tyres

Sri.Renjith submitted that in general he concurs with the argument of the HT-EHT Association. There is no justification for not filing the accounts for truing up. Voltage wise cost of supply should be resorted to for determining the tariff.

Sri.GijoAnto

Sri.Gijo pointed out that the T&D loss is on account of the employees only and the such loss if any should be recovered from the employees. He submitted that concessional tariff is to be allowed only for irrigating food crops and for cash crops no concession is necessary. According to him, for self-financing colleges and for charitable organisations no concession is necessary as their operations are not transparent. He stated that the street lights are properly switched off during day time and he suggested to install sensors instead of timers, for controlling street lights.

Sri.Shaji MA, Industrial owners Association

Till the establishment of the Commission, KSEB Ltd was a monopoly organisation and the rate revision was exercised without any public participation. He opined that if necessary, rate revision may be allowed. However, quality supply should be provided. No tariff increase shall be given to domestic consumers having consumption upto 100 units per month.

Sri.Jeeji Francis. He stated that KSEB Ltd should provide quality power and better service.

Sri Jose Paul, Nalappattu house

KSEB Ltd is purchasing low quality material, which is the main reason for higher R&M costs. Hydro generation can be increased by removing the silt in the reservoirs. The shifting of lines if alternate route is available should be carried out free of cost. Agriculture should be promoted with lower tariff. No new recruitment should be allowed in KSEB Ltd and for next 10 years, no increase in employee cost should be allowed.

In his letter dated 6-1-2017, he pointed that the electricity used for security lights in the farm should be given free. There shall not be any pay revision for next 10 years for KSEB Ltd employees. Private persons should be entrusted to construct lines for transferring power from open market. Privatisation should be encouraged. From February 2017 to June 2017 load shedding should be introduced as the extra cost of power purchase shall not be loaded on to the consumers. Consumer should be allowed to take electricity through underground cables.

Dr. E.V Manoharan, District Citizen Protection Council

Sri.Manoharan stated that KSEB Ltd should reduce the establishment charges. The electricity connection to small scale units should be given without delay in a time bound manner. KSEB Ltd should promote new sources of power such as solar and energy from ocean.

Federation of Consumer Organisations, Kerala

The representative of the Federation submitted that the tariff proposal is to be rejected on the ground that the details given in the proposals are against the facts and it is camouflaging the truth. The losses reported are not correct. The arrears of large consumers are not collected and the burden is placed on the small domestic consumers. Domestic consumers having consumption upto 250 units per month are to be exempted from the proposed increase in tariff. Meter rent of the domestic consumers should be withdrawn after 10 years of getting connection. The bulk supply rate for the Thrissur Corporation needs to be reduced. The PPA signed by KSEB Ltd for the Kayamkulam plant should be cancelled. The expenditure of KSEB Ltd and Thrissur Corporation needs to be curtailed and domestic consumers having consumption upto 250 units per month are to be spared from the tariff increase.

Sri.M.APraveen ,KSEB OA

Sri.M.A Praveen stated that the impact of low monsoon should be factored in while preparing the ARR. About 600 MU would be additionally required and the additional power purchase for the said quantity should be allowed. While determining the tariff cross subsidy should be maintained. While deciding employee costs, factors such as retirement benefits, DA increase, new employees, pay revision, increase in consumer strength etc. should be properly accounted. The standards of performance imposes additional burden on the KSEB Ltd and the same is to be considered while allowing costs. ToD tariff should be allowed to all consumers. O&M expenses as per the conditions existing in Kerala should be allowed. The cost of BKPL and RGCCPP should be allowed while approving the power purchase cost.

Sri. Jose, Thirssur Corporation

Sri. Jose stated that the increase in revenue due to the proposed increase in retail tariff will be about Rs.2.4 crore only for the Thrissur Corporation, whereas the additional burden on account of increase in BST is about Rs.9.4 Crore. The

corporation is undertaking modernisation measures and such increase in BST is very high.

Sri.H.Suresh, KSEB EA

Sri. Suresh stated that KSEB Ltd is not in a position to file petition as the Regulations are challenged before the High Court. The regulatory asset was on account of the additional liability incurred for meeting the power purchase. In this matter, APTEL order is to be followed and cost of supply should be the basis for determining tariff.

Sri. C.I Asokan, Thrissur

Sri.Asokan requested that agriculture connection should also be given for area less than 30 cents. He also requested to reasonably determine the meter rent.

Public Hearing at Pathanamthitta on 12.01.2017

Venue : Conference Hall, Vyduthi Bhavanam, Pathanamthitta

Sri.Vijayan Pillai, Engineering Workshops Association & Sri.Prasad, Iron Fabrication Units

Representatives of the Associations of the Engineering workshops and Fabricating units, stated that the engineering workshops are on the verge of closure due to the stiff competition from unlicensed operators and mobile welding units. Hence, KSEB Ltd should insist on licenses from local bodies while providing electricity connection to such engineering workshops.

Sri.Sasikumar.Pathanamthitta District Human Rights Mission

Sri.Sasikumar stated that, KSERC has not taken any measures to force the KSEB Ltd to file the petition for revision of tariff and hence it necessitated initiation of the suo motu proceedings. The accuracy of data needs to be verified as there may be inconsistency in the data used in the suo motu proceedings. It is necessary to improve the internal generation especially hydro generation to reduce the costs. Considering the lower cost of the power, the rate allowed for purchase from open market (Rs.4/unit) needs to be reduced. The increase in demand is considered as 5 to 6%, which needs to be verified. The arrears to be collected from consumers are estimated to be Rs.1300 crore and the same needs to be reduced. The loss reported by KSEB Ltd is on account of high employee costs, which needs to be reduced for improving financial viability. The increase in tariff proposed for domestic consumers need not be granted. Discount for prompt payment needs to be increased.

Public Hearing at Kattappana, Idukki on 13.01.2017**Venue : Municipal Conference Hall, Kattappana**

Sri. Kurian, Kisan Sabha.

Sri.Kurien stated that increase in tariff effected in the last year for agriculture connections was very high and is not fair. For cardamom cultivation irrigation is required. Hence lower tariff under LT V A needs to be allowed for cardamom farmers. Further there is no government subsidy for the present tariff as it is not treated as agriculture mainly on the ground that electricity tariff is under plantations.

Sri. M.R. Raghavan,Mandalam President, All India Kisan Sabha

Sri.Raghavan pointed out that though several representations given to the Commission for tariff change, no reply was given. He stated that for cardamom cultivation irrigation is required. Considering the terrain in the district, there is no possibility other than pumping water for the crops. Government is not allowing subsidy as the electricity charges are not billed under agriculture tariff. This needs to be corrected.

Sri.Jaison Sebastain, IHM Hospital

Sri.Jaison stated that the present HT tariff for the hospitals is very high and different tariff is being charged under ToD system which are not **comprehensible**. The response of KSEB Ltd on consumer complaints is very slow.

Sri. P M Joseph

Sri. PM Joseph stated that he holds a connection for agriculture purpose. Even though there is no use in the last several months, regularly about Rs.1000 is being charged in the Bill. Another complaint is that the bills are too technical and difficult to understand. Since the consumers find it difficult to understand the technical matters, KSEB Ltd should clarify their doubts. About 8 months irrigation is required for cardamom cultivation. Since the tariff is under LT IV, there is no subsidy available from Spices KSEB Ltd.

Sri.P.C Mathew, Cardamom Growers Association

Sri. Mathew opined that forests in Idukki exists because of cardamom cultivation as the cultivators protect the trees. Cardamom cultivation is the mainstay for the livelihood of many farmers in Idukki. Processing of cardamom is necessary after harvest. Hence for cultivation and processing of cardamom, electricity should be allowed at concessional tariff. He suggested that ToD tariff may be introduced for agriculture.

Sri. George Thomas, Pepper Valley Kurumulaku Samithy

According to Sri. George Thomas, Idukki needs special consideration as there are lot of issues faced by the farmers in the district. The climate has been changed

drastically. About 90% of the farmers are in debt trap. Supportive efforts from the government are necessary to save the agriculture sector in Idukki.

Sri.Reji Mathew, MRF Limited

Sri.Reji representing M/s. MRF limited, an EHT consumer stated that the proposed tariff would make survival of the Industry difficult. Especially the Kottayam unit is facing severe problems as the cost increase has left the management to move the unit outside Kerala. He further stated that the plant is surviving because of availability of cheaper power through open access. He requested not to increase the tariff any further.

Sri.Mohanan, STB, Vandanmedu

Sri.Mohanan stated that farmers will come forward for any representation only if there is no other alternative and the situation is unbearable. He pointed out the large outturn of farmers for the hearing and requested that lower tariff for agriculture needs to be allowed

Sri. P.K. Sabu, Padamughom

Sri.Sabu requested for concessional tariff for livestock farming.

Sri.Prasad Kumar

Sri. Prasad stated that the change in tariff in 2014 had made the condition of farmers pathetic. There is no subsidy for electricity charges as the support given by Spices KSEB Ltd had been withdrawn. Farmers are now finding it difficult to pay the electricity charges. The Electricity KSEB Ltd is charging penalty even for installments in electricity charges. The use of electricity is essential for cultivations as it not just for watering, but for processing and other activities also electricity is required.

Shri.Jayakumar, KSSIA

Sri.Jayakumar representing KSSIA stated that there is no need of tariff revision as the KSEB Ltd has not submitted accounts properly. He pointed out that the tariff for LT Industrial consumers are higher than HT consumers and this disparity needs to be corrected. He also demanded that the increase in fixed charges proposed should be withdrawn. According to him, the limit of conversion to HT connection should be increased to 160kVA from 100kVA. The electricity duty at present charged at the rate of 10% should be reduced to 10 paise per unit as in the case of HT consumers. The quality of power should be ensured and standards of performance needs to be properly ensured

Sri. M.C Biju

Sri.Biju stated that maintenance should be done sufficiently early giving notice to the consumers.

Sri.Jaimon Thomas

Sri.Jaimon stated that farmers are facing difficulty in paying electricity charges. A positive response is required from the Commission for reduction in charges

Sri. K.S Rajan, Kissansabha, CPI

Sri.Rajan complained that KSEB Ltd is not properly charging additional charges and requested that the increase in agriculture tariff may be withdrawn.

Sri. George Mathew, Cable TV Association

Sri. George Mathew stated that the public hearing was not informed early and much publicity was not given for the hearing. He further stated that the charges now billed under LT VII A needs to be reduced.

Sri.Kurien Sebastain, KSEB OA

According to the Association, the petition for determination of tariff was not filed by KSEB Ltd on the reason that the Tariff Regulation, 2014 was challenged before the Hon. High Court and an interim order was issued. Regarding power purchase, the Association stated that only the short term market price is low, but the cost of long term power is still high. The accumulated revenue gap up to 2014-15 comes to about Rs.5975 Crore and almost Rs.4000 crore is on account of uncontrollable item ie., power purchase. The growth of demand for electricity is estimated by the Commission is only at a rate of 5.7%, whereas the actual growth rate is 9.7%. Accordingly, the expected sale will be more by about 300 to 600MU. The T&D loss target proposed by the Commission is not a realistic considering the past performance of KSEB Ltd. The energy availability from central sector will be lower than that estimated by the Commission. Regarding O&M expenses, the proposed rates by the Commission are only 50% of the actual expenses. As per the CERC notification, the return on Equity should be at a rate of 15.5%, whereas the Commission is allowing only 14%. The Commission should also allow the fixed cost of RGCCP and already compensatory allocation of 180MW is available from Talcher Station. The Association requested to account all the above items for estimation of ARR as part of suo motu proceedings.

Sri.Nandakumar, InSEDES

Sri.Nandamumar representing InSEDS stated that, it is a Shornur based institution engaged in power sector studies. It is seen that the suo motu proceedings is not prepared based on the figures of KSEB Ltd and hence proper analysis is not possible. Though the increase in tariff is welcome, but increase in tariff for small consumers is not justifiable. While considering the expenses, the lower hydro generation is to be considered. The tariff increase should be spread to all consumer categories and it should be done in a scientific manner. KSEB Ltd should properly utilise the right of way available and mechanisation should be introduced so as to increase the productivity.

Sri. Jose Muthanattu, Karshaka Congress Idukki District Committee

The proposal to increase the electricity charges is a big blow to the farmers in the Idukki, who are suffering from ill-effects of climate change and other issues in the farm sector. As cultivation of cardamom has been converted as an industry, the life of farmers having less than 2 ha, of land are facing difficulty in meeting the electricity charges. Hence he requested to provide same tariff for cardamom cultivation as that is allowed for agriculture crops.

Sri.Biju Chooranoliyil& Sri. Prasad P. Panangad, small scale cardamom farmers association

They have also mentioned that tariff change to industry for the cultivation of cardamom has left the farmers in great difficulty, as the tariff was changed from about Rs.1.50/ unit to about Rs.6 per unit. The subsidy from Krishi bhavan was also stopped on account of this. Hence requested to allow tariff which was allowed earlier for cardamom farmers having less than 5 acres of land.

Director, High land Tea factory, Kattappana

The Director requested that HT tariff should not be increased as it will affect the tea factories adversely.

Public Hearing at Thiruvananthapuram on 17.01.2017

Venue : Conference Hall, Institution of Engineers, Thiruvananthapuram

Sri.Alexander, Nadackal House, Pulivanoor.P.O, Pala, Kottayam has pointed out that there are inordinate delays in implementation of the projects in KSEB Ltd and the consequent cost overrun and the financial impact of time over run should not be passed on to the consumers. He pointed out that the Pallivasal Extension project has been delayed more than 13 years and that only 63% of Thottiyar project work has been completed so far. Similar is the case of Barapole Small Hydro Project. KSEB Ltd has not been keen in getting grants from Central Government in comparison with other States. The details of arrear collection are not properly submitted by KSEB Ltd even after specific direction from the Commission. The Commission is also not taken such things seriously and properly following up these issues. Though KSEB Ltd has entrusted a study with IIM Kozhikode, with a view to improve efficiency in human resource management, the report submitted has not been implemented. The CAG report pointed out that, it is not proper to write off the revenue amounting to Rs.85 crore, mainly relating to the consumers with large consumption. But no action has been taken by the KSEB Ltd by on such reports. The Athirapally project is not yet started. But the office for the project has been functioning for past many years incurring considerable expenses continuously. Even the details of submergible area for the Athirapally project are not available in the said office. Under these conditions, he suggested that, it is better to install solar energy

projects in such lands, which does not need maintenance and will generate energy at low cost.

Shri.Unnikrishnan Nair, Ernakulam

Sri.Unnikrishnan stated that, as per Section 64 of the Act, application from KSEB Ltd is required for tariff revision. The Commission has, in the absence of such proposal initiated suo motu action for increasing the tariff. KSEB Ltd is not given the details of transmission loss and it has not been published. KSEB Ltd has also not given the details of own consumption of electricity. The provisions of Supply Code regarding contents of the bill are not being followed by the KSEB Ltd. Return on equity is to be given for investment in the KSEB Ltd. The Government or KSEB Ltd has not invested any money in the operations of the KSEB Ltd, and therefore they cannot claim return on equity. There is no effective forum for giving complaints though CGRF and Ombudsman are functioning. In spite of the fact that, CGRF is an independent body constituted by the KSEB Ltd, it is acting only as its subsidiary. If the tariff is increased for those paying 80% of cost of supply, then tariff of those paying more than 120% of cost of supply should be reduced correspondingly. He further accused that the KSEB Ltd is unnecessarily incurring expenditure for about 3000 temporary employees even though surplus permanent staff are available. He submitted that considering all the above factors, the proposed tariff increase should be withdrawn.

K.S Asokan

Sri.Asokan stated that if the expense of the KSEB Ltd is reduced, there is no requirement for tariff revision. There is lot of daily wage employees in the KSEB Ltd. These employees have no responsibility and accountability. He suggested that the KSEB Ltd should consult the public before drawing lines or placing posts or installing transformers in public places.

Sri.Rojith, Kannamoola

Sri.Rojith complained that there is substantial low voltage problem in Thiruvananthapuram Medical College area. Even after complaining at the local office, many times, no action is taken in time to rectify the problem.

Sri.Bijukumar, Thiruvananthapuram Committee, KSSIA.

Sri.Bijukumar suggested that the LT industrial consumers may be allowed to use electricity to the tune of fixed charges and energy charges may be imposed only above this limit ie., according to him up to free units should be given upto the level of fixed charges. He further stated that revision of fixed charges and energy charges shall not be resorted to. The Commission may recommend to the Government to reduce the electricity duty for the LT industrial consumers as in the case of HT consumers. He further stated that the proposed increase in fixed charges for the consumers with connected load upto 10kW, may be withdrawn as it amounts to 150% increase. He demanded that the financial deficit of KSEB Ltd for the previous

years may be made good by economy and efficiency measures and should not be passed on to the consumers.

Shri.Sreelal, Flour mills

Sri.Sreelal stated that fixed charges should be compulsorily avoided since the cost of lines and other equipments are met by the consumers.

Sri.Ajith R. M/s TCC limited

According to Sri.Ajith, the suo motu proceeding is not fair to the consumers. The claim for Rs. 814 crore for interest on bonds issued by the Master Trust, is not correct as no bonds has so far been issued on this account. The KSEB Ltd should, by proper studies, assess the voltage wise cost of supply, and if it is assessed properly, the tariff has to be reduced for HT and EHT consumers. The power factor incentive and load factor incentive should be increased. Under the ToD tariff, billing demand for off peak hours shall not considered for giving incentive for shifting of load.

Sri.Vani Prasad, Deputy Director, IHRD

Sri.Vani Prasad representing IHRD stated that it is a fully Government owned institution and up to the year 2010 tariff was under LT VI A. In the year 2010, after the observation of Audit Team of KSEB Ltd, the tariff was shifted to LT VIIA. Though it is running self-financing colleges, the admission is as per the government rules and is working on no-profit no-loss basis. At the present tariff, the viability of the institution is very much affected and he requested to include IHRD in the tariff category applicable to Government Colleges.

Sri Varghese P.K President of Industrial Estate Consumers Association

Sri. Varghese stated that KSEB Ltd should take necessary action for reducing the interruptions and attending to the interruption in supply without delay.

Sri.K.JScaria, General Secretary, KSSIA

The change in the limit of connected load of LT consumers from 150 kVA to 100kVA has resulted in substantial burden to the small scale industrial units. He demanded that at least in industrial estates, where dedicated feeders are drawn, the limit of 150 KVA should be retained. Electricity Duty for LT consumers should be made the same as that of HT consumers. The power factor incentive and disincentive should be in the same proportion. He further stated that proposed tariff increase should be withdrawn so as to promote the growth of LT industries in the State.

Sri.Arun A.R, Vice President HNLEA. Sri.Jojin Jose, Secretary, HPCEA-INTUC, K.S.Sandeep, Vice president, KNEU-CITU

The representatives of the employees association of HNL stated that proposed tariff increase will accelerate the process of privatisation of HNL. Even a small increase in

electricity tariff will lead to revenue loss for the company. They further stated that they are supporting the views of the HT-EHT Association in this regard. They requested that the proposed increase in tariff may be withdrawn.

Sri.U.Thomas, Sr. Plant Engineer, HNL

The Company is presently operating at loss and facing acute financial crisis mainly due to competition from imports. HNL secured several awards for energy conservation and KSERC should give incentive for energy conservation. The additional burden due to proposed tariff increase will be about Rs.2.5 crore for HNL and requested to withdraw the tariff increase.

HNL employees union represented by Sri. U Thomas and Sri Abdul Salam

The company is under loss and it is difficult to bear a tariff increase at present. The additional burden will be about Rs.2.5 crore per annum and at present such commitment is not possible to take as the company is in the verge of privatisation.

Sri.Peter, Small Industries Federation / Industrial Estate

The limit of LT IV industrial connection should be restored to 150kVA from the present limit of 100 kVA. At present lot of industries are thrown out of the limit of LT industries. At least in the industrial estate, the limit for LT connection should be fixed at 150 kVA. The proposed increase in fixed charges may be withdrawn.

Sri. T.K. Unnikrishna Prasad, Deputy General Manager, FACT

FACT is a 110kV industrial consumer operating at two locations viz., Udyogmandal and Ambalamedu. The annual electricity bill is to the tune of Rs.22 to Rs.25 crore. The proposed increase of 30 paise will lead to additional burden of about Rs.1.40crore to Rs.1.50 crore per year based on the consumption levels in 2014-15. Any increase in tariff will severely affect the financial viability of the units. The petro chemical division of FACT is under shutdown for the last four years and the proposed increase will badly affect the revival plans of the unit. Considering this, he requested that the Commission may not proceed with increase in tariff.

The President, Kerala HT&EHT Industrial Electricity Consumers Association,

In reply to the submissions made by KSEB Ltd in the Public hearing held on 17.1.2017, the Association stated that there is no need or justification for revising the tariff for the remaining part of 2016-17 and for 2017-18. When the all the companies in the country have to file audited accounts within 6 months, there is no justification for claiming truing up after 5 to 6 years. KSEB Ltd has lost its right to claim such revenue gap and expenses after inordinate delay. After the re-notified transfer scheme, there is no revenue gap or regulatory assets which were adjusted in the transfer scheme and recovering the revenue gap is undue enrichment for KSEB Ltd. As such there is no unfunded expense in the Balance sheet of KSEB Ltd. If the argument of KSEB Ltd that adjustments in the balance sheet has no cash infusion, then whole transfer scheme would become in fructuous. The average cumulative

increase in the past 5 years shows that increase is to the tune of 50 to 60%. Further, Govt of Kerala is likely to sign the UDAY scheme which will reduce the ARR of KSEB Ltd significantly and revenue surplus will further increase and hence such benefits should pass on to the consumers. It is also not correct for the KSERC to come up with preliminary true up or provisionally assessed cumulative revenue gap. Based on the above contentions, the Association reiterated the earlier comments on the suo motu proceedings and requested for reduction in tariff.

The Association in its letter dated 23-1-2017 had furnished additional submissions. They reiterated that the revenue gap on account of truing up of accounts for the year 2011-12 and 2012-13 and the unbridged revenue gap prior to 1-11-2013 cannot be considered as there is APTEL orders and Supreme Court judgments to this effect. Further, the liabilities of KSEB Ltd till the formation of KSEB Ltd have been taken over by the State Government. They further pointed out that it is a practice that KSEB Ltd is delaying the filing of truing up applications, and the Commission in an earlier occasion had to initiate action under Section 142 of the Act and imposed fine of Rs.1,00,000/-. In spite of such action, KSEB Ltd has not filed truing up petitions on time and hence the gaps of truing up which are not filed on time need not be considered.

Sri. A.R Satheesh, Carborandum Universal Limited

Sri Satheesh suggested that there is a scope for reduction in tariff considering the provisional assessment of revenue surplus for 2016-17 and 2017-18. According to him there is no justification for non-submission of truing up of accounts for 5 to 6 years and as per the judgment of Hon'ble Supreme Court and of the Hon'ble APTEL, KSEB Ltd has lost its right to claim revenue gap. The State Government notification dated January 2015 shows that there is no outstanding regulatory asset. In such a situation claiming the outstanding revenue gap will result in undue enrichment for KSEB Ltd. It may further be noted that KSEB Ltd in its prayer claimed that they have not proposed any tariff revision at present. Many ERCs of the States such as Punjab and Gujarat have reduced tariff for different consumer categories. Further Central Government has been proposing to change tariff structure for encouraging consumption of electricity by offering reduced tariff for higher consumption. He further reiterated the argument of HT EHT association. Kerala has been at the top for increasing the tariff for last four years. He further stated that there is no justification for claiming transmission loss of 4.5% for Kerala, which is the highest in the country. By revising the transmission loss, the distribution loss will also be revised appropriately. T&D loss can be reduced by appropriate initiatives such as compulsory feeder and DTR metering, consumer indexing and GIS, improvement of LT/HT ratio, conversion to UG cables etc. The Hon'ble APTEL has, in its order dated 18-11-2015, rightly decided that KSEB Ltd is eligible for equity capital of Rs.283.91 crore. The argument of KSEB Ltd that increased equity is on account of electricity duty retained is not tenable and KSERC should follow the orders of APTEL in this regard. The return on equity @ 14% shall be

given only on the reduced equity. Shri.Satheesh also suggested to increase the power factor incentives same as that of disincentives and also suggested to introduce load factor incentive and prompt payment incentive at the rate of 2%. The Cross subsidy surcharge is to be calculated by taking 3% transmission losses and only energy charges needs to be considered for estimation of surcharge considering the fact that open access consumers pay demand charges.

Sri Eiestein, Technopark

The increase in BST for Technopark will result in additional burden of Rs.4 crore per year. The corresponding increase in RST is not beneficial for Techopark as there is no increase proposed for such categories. The average realisation is about Rs.5.60/unit whereas the cost of power purchase is about Rs.5.67 per unit hence it is unviable.

Another major issue raised by M/s Technopark is that the present tariff of Deemed HT consumers, for which no specific increase is proposed. The Deemed HT consumers are LT consumers having connected load/contract demand above 100kVA, but connected at LT due to technical constraints. In the suo motu proceedings there is no proposal for revision of tariff for deemed HT category.

M/s Technopark has also raised the issue for tariff re-categorisation of call centres. Government of Kerala entrusted the Technopark to present the issue before the Commission. M/s Technopark mentioned that the present petition is on account of the direction of Hon. High Court on a petition filed by M/s Liscon Solutions for categorising call centres as IT & IT enabled services and to categorise under LT IV(B).

Sri.Sathyarajan, KSEB Officers Association (KSEBOA).

Sri.Sathyarajan, representing KSEBOA stated that if the surplus arrived at by the Commission is correct, it will be good for the organisation like KSEB Ltd. However he stated that the assessment of the Commission is not real and not in line with facts. In order to support his claim he mentioned that at first, the hydel generation is about 1400 MU short of the level approved by the Commission. Accordingly, there will be an additional cost of Rs.560 crore for purchase of power. Due to the drought situation, most of the constituents in Southern Regions have floated tenders for short term purchase and this may push up the price in future. The Commission should at least allow the fixed cost of Rs.237 crore, which was allowed during 2014-15 for the RGCCPP. The O&M norms fixed by the Commission are not correct and about Rs.1690 crore less than what is approved in the previous years. According to the Association, the cross subsidy should be retained for the small consumers. The increase in tariff proposed by the Commission for domestic category especially for small users is very high. Even in the situation of acute power shortage, the Government is moving towards an ambitious target of 100% electrification. Regulatory Commission should appreciate such efforts.

Sri. Suresh Kumar, Workers Association, CITU

The survival of KSEB Ltd is necessary for the state of Kerala. Though the suo motu proceedings shows that there is revenue surplus, the fact that the KSEB Ltd is under overdraft of Rs.2600 crore. The 2014 tariff regulation is not agreeable as it is not even in line with CERC norms, which is the reason for non-filing of petition by KSEB Ltd. The estimate of the Commission is not realistic and is against the orders of Hon'ble APTEL on employee costs. The cost of purchase of power from external sources should be allowed. The actual T&D loss and cross subsidy surcharge for open access should be allowed. Regarding manpower utilisation, according to him, lot of improvements are possible in KSEB Ltd. He stated that the tariff petition should not be processed in the present form as it may not do justice to KSEB Ltd.

Mr. C.P John, KSEB Engineers Association

Rationalisation of tariff helps considerable development for industry. According to him for providing continuous supply, considering the present growth rate, the electrical infrastructure should doubled in 12 years. As per section 62, tariff should be linked to cost of supply. The depreciated assets require higher O&M costs, which is to be allowed. Similarly, capital expenditure for new assets should also be allowed. At present there is no redundancy in the system and it should provided. For permitting open access, the additional fixed charges should be allowed for recovery of stranded costs. In order to estimate the T&D loss, real time synchronised metering is required. The lower limit of power factor should be 0.95, which is to be made mandatory. As per tariff policy, all power purchase is legitimate unless not in merit order and cost of such power purchase should be allowed.

Ms.Neenu Scaria, IECC

The KSEB Ltd should initiate tariff proceedings if they require a tariff revision and it should not be by the Commission. If KSEB Ltd is not filing the tariff petition, the existing tariff should be continued. KSEB Ltd should function commercially and earn reasonable profit. The revenue gap for 2011-12 and 2012-13 as per the notice is only estimates and it is not desirable that even the accounts pertaining to 5 years back are not available. Since power is available at Rs.2.50/kWh in the open market, the KSEB Ltd should purchase such power and supply it after realizing 60 paise more as transmission and distribution cost. If the KSEB Ltd is to allow tariff at this rate, the efficiency has to be increased many fold. In our country telephone and bank loans are now available easily and the KSEB Ltd should also follow such example for providing electricity connection. There is considerable delay in giving electricity connection by insisting on several clearances such as from Pollution Control Board, local self-government institutions, Factories and Boilers Department etc., though these departments themselves have power to order for disconnection of electricity, if rules are violated. Further, there is considerable delay in sanctioning power connection due to different levels in the procedure for sanctioning the power connection. Hence the Assistant Engineer in the section office should directly

forward the application to the Deputy Chief Engineer for sanctioning electricity connection by avoiding the intermediate sanctioning levels. KSEB Ltd should start a marketing division to ensure customer satisfaction. KSEB Ltd is incurring expenses for conduct of cases in different courts which is mainly due to unnecessary inspections against the provisions of the Supply Code. During the period from 1970 to 1980, the tariff for industrial consumers was same as that of agriculture connections. Now the tariff has been increased tremendously. Hence it is requested not to increase the fixed and energy charges for industries. The Commission should take up the difference in electricity duty between HT and LT industrial consumers with Government so as to rationalise the duty structure. Upto 150 kVA should be given at LT level for industrial consumers. The renewable energy producers are not able to implement projects. It is mainly due to the fact that no time frame is mentioned in the regulations and it is to be specified that whether a project is to be specified as CPP or IPP at the time of transfer of project to the investor by the developer.

Summary of representations received in the office of the Commission

Smt. Ajitha Jayarajan, Mayor, Thrissur Corporation

Smt. Ajitha Jayarajan, Worshipful Mayor of Thrissur Corporation, in letter dated 4-1-2017, stated that, as a representative of the domestic consumers her opinion is not to increase tariff especially to the domestic consumers in the State. She further stated that there will be substantial difference between the additional revenue from proposed increase in retail tariff and increase in power purchase cost on account of increase in BST for Thrissur Corporation. She mentioned that the revenue gap will jeopardise development activities of the Corporation and hence, the proposal to increase Bulk Supply tariff from Rs.5.40 per unit to Rs.5.85 per unit may be withdrawn.

Dr.V.K.Baby, Special Secretary to Government, Local Self Govt. Department, GoK.

The Special Secretary, in his D.O. letter dated 11-1-2017, while forwarding a representation from Nenmeni Community Water Supply Scheme, which is globally rated as best practice in participatory decentralised drinking water service delivery, pointed out that tariff for such schemes were increased to Rs.3.08 per unit from Rs.1.5 per unit after the same was shifted from LT 1 A to LT VI(E). Since the community water schemes are worked based on full cost recovery on sharing basis by the beneficiary households, there is no subsidy available from government unlike projects such as operated by KWA.

At present the participatory rural water supply schemes run by communities and Grama Panchayats are catering to about 15% of the total population and are being implemented by externally aided projects and with the financial support of local self-

governments. The O&M cost of Rs.150 crore is being met fully by the beneficiary households, majority of them are poor. Already such projects face issues of post implementation support and consequent slippage in water supply in water stressed areas. Hence it is requested to reconsider the revision of power tariff from LT VI(E) to LT 1A.

Managing Director, Kerala Water Authority

Managing Director, Kerala Water Authority, in letter dated 4.1.2017 submitted that, the Kerala Water Authority is being charged at HT 1 and LT 4 for pumping stations and for production and supply installations. The average water charge is Rs.4.5 per kilolitre and the production cost is about Rs.25.56 per kilo litre. Of this, Rs.4.97 is towards electricity charges. The drinking water schemes of Jalanidhi, Jaladhara and swajaladhara etc., have been given domestic tariff. Though Kerala water Authority represented before KSEB Ltd as well as KSERC for a separate tariff, the same was not addressed. Since KWA is facing serious financial stress, it is not able to pay the power charges since last few years. It is also pointed out that electricity charges for water supply in Kerala is comparatively higher than those in other States. Regulatory Commissions have been providing special consideration for drinking water supply and sewerage service sector by giving reasonable electricity charges. The Karnataka Electricity Regulatory Commission had taken a stand that the essential services and water supply/sewerage pumping should not cross subsidize other and only average cost of supply should be charged.

However in Kerala, there is a discriminatory treatment towards KWA and other schemes taken over and managed by three tier Panchayats. There is no justification for a discriminatory treatment based on institution that runs water supply scheme rather than the purpose for which water is used. As a largest water supply provider, KWA may be allowed the concessions that have been extended to other such agencies. Considering the fact that water supply is highly subsidized and sewerage service is offered at minimal cost, the sector deserves a holistic approach from KSEB Ltd. Full cost recovery of water charges and sewerage is near impossibility in near future. The only possibilities to reduce electricity charges, which is major component of cost, are concessional tariff, increasing energy efficiency and introducing economy measures. Energy conservation and cost saving measures are already taken up by KWA. At present there is mounting arrears on electricity charges by KWA and the penal interest charges also add to the woes. Considering the above, reduction in electricity charges be allowed by creating a separate lower tariff both under HT and LT for drinking water and sewerage service providers considering social and public health hazards and removal of discrimination among the service providers in the sector.

Executive Director, Jalanidhi, Thiruvananthapuram

Executive Director, Jalanidhi in the letter dated 3.1.2017 submitted that, the water supply schemes implemented by Jalanidhi are meant for domestic purpose and

hence power consumed by the schemes were charged under LT 1 domestic tariff up to 31-3-2013. Subsequently, the same was shifted to LT VI(E), thereby doubling the tariff in two years. The scheme cater to poor and deprived communities in remote, scattered and difficult terrains including that of tribal hamlets, managed by communities. Introduction of the scheme relive the pressure on the Government in providing water supply to such deprived and remote areas. In addition to the cost of power, the beneficiary communities have to bear the cost of maintenance also. Hence it is requested that tariff category for the community managed schemes be restored to LT 1 at the lowest tariff.

The Principal, Govt. Medical College, Ernakulam

The Principal, Govt. Medical College, Ernakulam, in letter dated 19-12-2017 submitted that the Government medical college is having own 110 kV substation and is a 110kV consumer. At present tariff is at EHT General which is higher than other government sector EHT consumers like Railways or EHT industrial category. Hence it requested to categorise the charitable Government Medical College as a separate category or include under a lower tariff category

Sri. M.G.Ramachandran, Secretary, AP Varkey Mission Hospital, in his representation dated 27.12.2017, submitted that the hospital is being managed by AP Varkey Mission registered under Travancore Cochin Literacy, Scientific and Charitable Societies Registration Act, 1955 and having exemption under section 12 A of Income Tax Act 1961. They have requested for a tariff change from HT II (B) to HT II(A), considering the charitable nature of the activities of the trust.

Dr. Mohan G Madhavamangalam, Qualified Private Medical Practitioners Association

Dr.Mohan in letter dated 3-1-2017, stated that the functioning of the ERCs should be streamlined. According to him Electricity Act is enacted for protection of consumer interests and ERCs are not following the preamble of the Act, but doing more harm than good. The phrases which are not defined in the Act, are interpreted differently for doing harm to the consumers. In the light of the provisions of the Electricity Act to differentiate consumers based on the 'purpose' and 'voltage', the Commission has created about 67 different rates. The energy charges and fixed charges not at all uniform for any of the categories. The term fixed charge is used to plunder the consumers. Similarly the terms such as connected load, domestic, industry and commerce etc., are also interpreted differently.

The Master Trust viz., KSEB Ltd employees Master Pension and Gratuity Trust registered as a charitable society, for processing pension and gratuity. The consumers have to pay interest to the tune of Rs.814 crore or Rs.814 per year per consumer or Rs.68 per month. Similarly, KSEB Ltd is keeping the employee numbers secret and made proportional to no. of transformers, consumes and length of electricity lines. The employee cost is about Rs.0.53 per unit. A driver is paid

about Rs.90,000 per month in KSEB Ltd. The KSEB Ltd should come out with total number of employees, their pay scale and other benefits. Without providing such details it is a crime to approve the employee cost. The tariff structure is also in violation of the Fundamental Rights under Article 14, 19 and 21. Collectively, KSEB Ltd and ERC have made the industries to suffer from higher tariff, and consequently the share of industrial consumption has reduced from 65% to 15% in the last 10 years. Higher average cost of supply is shown against HT industries to prove that they are given undue consideration. Fixed charges should be avoided and a minimum charge may be introduced at a rate of 10-25% of the average consumption. Private hospitals run by doctors and charitable institutions are different from corporate hospitals. Hence tariff for small and medium hospitals should be reduced to the original level at LT VI B level.

Dr. Kishore Kumar, Qualified Private Medical Practitioners Association

Dr. Kishore Kumar in the representation dated 20-1-2017, has stated that the present classification hospitals/health care institutions under general or commercial is irrational and it should be classified under Industries. In order to support the claim he stated that:

- a. as per Cambridge dictionary Health care industry is a service industry
- b. World bank BMI report classify Indian health care sector as Health Care industry
- c. in 1985 Central Government classified health care as industry and banks started providing long term loans to the sector
- d. Under industrial disputes Act hospitals are classified as industries and all labour laws applicable to industries are applicable to hospitals also.
- e. following judgments are also cited
 1. D.N. Banerji Vs P.R Mukherji (1952 Indlaw SC62 AIR 1953 SC58)
 2. State of Bombay Vs Hospital Mazdoorsabha (1960 INDLAW SC47, AIR 1960 SC 610)
 3. Corporation of city of Nagpur Vs its employees (1960 INDLAW SC 90, AIR 1960 SC 675)
 4. BWSSB Vs Rajappa (1978 INDLAW SC 260, AIR 1978 548)

Based on the above, it was requested that hospitals are treated as industries and be given industrial tariff.

Thrikkakara Municipal Co-operative Hospital Society Limited, Kakkanad, Kochi.

The Secretary of the hospital, in letter dated 3-1-2017, submitted that, the hospital is under the Thrikkakara Municipality and is managed with the funds from municipality, MLA/MP development funds, government grants, contribution of members, likeminded people etc. The hospital is functioning for giving low cost health care to the people. The hospital is providing free palliative care, organising medical camps, awareness campaigns, free vaccination, solid waste disposal, organic farming etc.,

Further, treatment for about 5000 society members are allowed at concessional rates. Initially the Tariff was under LT 6A and in 2012 tariff category was shifted from 6A. Though the hospital approached the CGRF the issue was not resolved. Hence it is requested to retain in LT 6A category considering the above aspects. Since Cooperative societies are exempted from payment of income tax, the concession allowed to the charitable societies is to be allowed to the Cooperative societies also.

The Director, Bishop Benziger Hospital, Kollam

The Director in letter dated 14-1-2017, submitted that, the hospital registered as charitable institution is having a history of 68 years with 600 beds with Multi and super speciality facilities and recognised by the Income Tax Department under section 80G. The hospital is running several chartable and social activities such as community health, education for children, women empowerment, social activities etc. The free treatment worth of Rs. 1.24 crore was undertaken in the last 5 years. The director requested that considering the above, the demand charges may be reduced to Rs.250/kVA and energy charges to Rs.4/unit in the present tariff proceedings.

Rose Vachaparambil, Administrator, Immaculate Heart of Mary Hospital, Bharanaganam.

In letter dated 30-12-2016, it is submitted that, as a HT consumer, the hospital has paid the cost of transformers, cables and other materials for getting connection and maintenance is also undertaken. Hence they have requested to avoid the demand charges. The average energy charge is about Rs.6.43 per unit and including fixed charges it comes to Rs.7.91 per unit. In addition, other charges such as service charge, duty etc., are also levied. As per the estimates of the Commission, the average tariff is only Rs.5.28 per unit. Hence the excess charges have to be reduced. They further demanded to exempt them from paying duty for self-generation and avoid other hidden charges. Instead of increasing the tariff, arrears from government establishments have to be collected to meet the deficit.

Sri. T.A Bijoy, Co-ordinator Kerala Television Federation, in letter dated 29-1-2017, pointed out the anomaly in the comparative tariff existing between Print and Visual Media. At present Print media is being considered under the category of HT –I Industrial, whereas electronic media is billed under HT –IV commercial category, though both function the same sphere. He also pointed the importance of visual media as a mode of mass communication. Hence, he requested to include the electronic media under HT Industrial category. It was further submitted that such relief may be granted at least to such visual media channels, which are exclusively engaged in telecasting news.

Cochin Special Economic Zone Authority, Cochin

CSEZA in letter dated 2-1-2017, submitted that, is facing revenue gap of more than Rs.1 crore for the MYT period 2015-18, as per the order dated 9-9-2015. Further, there is additional burden on account of RPO and payment of section 3 duty (Rs.34

lakhs), the same cannot be passed on to the consumers. Since, KSERC is not allowing RoE, CSEZA is facing severe revenue gap and negative cash flow in the coming years. Hence, the proposed revision of BST (fixed charges and energy charges) be dropped and demand charges of HT 1(A) and (B) consumers may be increased to Rs.360/kVA per month from the existing level of Rs.300/kVA per month.

M/s Rubber Park India Limited

According to M/s Rubber Park in letter dated 26-12-2016, submitted that, the proposed tariff increase will result in a loss of Rs36.75 lakhs. The licensee can work on no-profit no loss basis keeping present BST and proposed RST. Hence it is requested that the existing BST may be kept as such.

A.S Raju, GM (Projects), Electronics Technology parks – Kerala

M/s Technopark in letter dated 13-1-2017, submitted that, though the Commission has in the suo motu proceedings, proposed no revision for LT IV(B) and minimal increase for HTII(B), corresponding increase in the BST was substantial. As per the estimates of the licensee, the increase in power purchase cost is about 8.58%, hence the increase in BST may be avoided. A comparison of the revenue from retail supply tariff and cost of purchased energy for Technopark Phase I campus for 2016-17 shows a revenue deficit of Rs.351.44 lakhs. If the increase in O&M expenses is also considered, revenue will not be sufficient to cover the costs.

M/s Technopark has also pointed out the ambiguity in the existing tariff order, which was pointed out in the letter dated 24-8-2014, on deemed HT consumers. The limit for connected load/contract demand for deemed HT category is not specified in the existing tariff schedule. The same may be clarified while revising the tariff.

Assistant Secretary, Electricity Department, Thrissur Corporation

Thrissur Corporation has in letter dated 16-1-2017, submitted that, due to the increase in BST the additional commitment for the Corporation will be Rs.9.14 crore considering the annual consumption of 159.16 MU, whereas the additional income due to retail tariff increase will be about Rs.2.19 crore only. Since TCED is planning to incur expenses such as RPO (Rs.1.5 Crore), cost of allotment for small hydel projects (Rs.15lakh/MW), construction of 110kV substation (Rs.34 crore) and other capital expenditure such as UG cabling, e-governance, modernisation of distribution systems etc., increase in BST will derail the plans. TECD also stated that they are ready to pass on the additional income from tariff revision to KSEB Ltd, if the Commission allows to do so.

FA&CAO, Cochin Port Trust

M/s Cochin Port Trust in letter dated 5-1-2017, submitted that, the increase in BST is not commensurate with the increase in RST as the 77.5% of sales is to commercial consumers for which no major increase in tariff was proposed. CoPT has the highest BST considering the favourable consumer mix. But in the proposed tariff,

increase for commercial consumers was considered and hence revenue will not be sufficient to cover the increased BST.

M/s CoPT has pointed out that the present suo motu proceedings is for allowing the review of employee costs of KSEB Ltd based on APTEL Order, whereas the Commission is not allowing the employee cost of the CoPT fully. Further, the accumulated revenue gap arrived at by the Commission is by disallowing the interest and financing charges of CoPT, which is to be payable to Govt. of India. Government of India has approved a restructuring package in which penal interest will be waived and the repayment will start from 2018-19. CoPT is facing cash deficit of Rs.526.27 lakhs in electricity business. The licensee submitted that the surplus of Rs.3417.42 lakhs shown in the truing up orders is not actually available.

M/s CoPT further pointed out that after the determination of BST in 2014-15, major consumer M/s Cochin Shipyard has been shifted to HT I category from HT IV, resulting in dent in revenue. Considering all these factors, M/s CoPT requested that the Commission may please withdraw the proposal for revision of BST and reduce the BST if possible to Rs.300/kVA /month as fixed charges and Rs.5.71 per unit as energy charges for 2017-18.

CEO, Infopark

The CEO, Infopark in letter dated 13-1-2017, submitted that, in the suo motu proposal, demand charges in the BST has been increased by Rs.50/- per kVA whereas the tariff for HT I B(IT&ITES) consumers has not been increased correspondingly. This anomaly will result in heavy revenue loss as the demand charges for purchase is higher than demand charges of the consumer.

A.P Hamsa, President, the Kerala Industrial Engineering Workshops Federation in letter dated 3-1-2017, submitted that, there are about 30,000 steel fabrication units in Kerala lawfully operating with proper licences from Local Self Government Institutions. There are numerous un-licenced mobile units, the existence of which had become a threat to the survival of the units operating lawfully. Hence in order to stop such illegal operations, KSEB Ltd should make suitable changes in law so as to insist licences from Local Self Government Institutions for providing electricity supply.

Shri. K.K Vijayakumar, Executive Director, HOCL, Sri. M.N Divakaran, General Secretary, HOCL Staff and Workers Union, K.V Vinod Kumar, General Secretary, HOCL Workers Union in their letter submitted that, HOCL is a Central Government organisation and it is facing threat of closure. The daily consumption is about 1.6 lakh units. The company is facing financial difficulties and a tariff increase at this juncture will jeopardise the operations of the plant. The plant should be permitted to avail open access without any conditions to tide over the difficulties.

KSEB Ltd has not given any formal petition for revision tariff, hence the present suo motu proposal may be withdrawn.

Sri. K A Joseph, Vice President, KSSIA, in letter dated 3-1-2017, submitted that, the present proposal for increasing the fixed charges for connected above 20kW is very high and it is now more than HT tariff. The energy charge is also higher than HT rate. The electricity duty for LT industrial consumer is 10% of the electricity bill whereas it is only 10 paise for HT consumers. This disparity should be removed by reducing the duty for LT units to 10 paise per unit.

Managing Director, Logic Institute of Technology, Kaloor

Managing Director, Logic Institute of Technology, stated in his letter dated 17-1-2017 that they have submitted a petition for tariff change for computer training institutes from LT VIB to LT IV B. The petition was returned stating that the same can be presented during tariff revision exercise. Accordingly, he submitted same request before the Commission. According to him, the exclusion of computer training institutions from LT IV B tariff and its inclusion in L VI B is un-reasonable and irrational classification. There is nothing similar to that of computer training institutes in LT VI B, where as it is similar to LT IVB. The objectives envisaged through IT policy cannot be achieved without computer training institutes. Many computer training services are designed to help students to acquire certification in specific areas in order to attain placements or advancement in IT field. It is a basic human resource developer in IT industry. The IT policy envisages 5 lakh job creation in IT sector by 2020. In clause 11.2.1 of the IT Policy the Government has clearly stated that IT/ITES units, government parks, certified private IT parks and Akshya e commerce are entitled to power tariff under HT 1 or LT IV tariff. The present classification of IT training institutes under LT VI B is not in tune with IT policy of the State. Under any stretch of imagination, a computer training institutes cannot be equated to self-financing educational institute. The computer training institutes come under IT& IT enabled services, computer consultancy services, software services, data processing DTP, software development units and such other IT enabled services. Based on the above, they have requested to include computer training institutes under LT IV B.

President, Association of Approved and Classified Hotels of Kerala

The Association, submitted that, there are no circumstances warranting for a suo motu tariff revision as the KSEB Ltd has not filed any petition for revision of tariff. There is no reliable data before the Commission. Hence there can be no meaningful hearing in the matter. The proposal of the Commission to move ahead with the suo motu determination of tariff without proper details is serious violation of regulatory requirement and principles of natural justice. The Commission has enough powers to pull up the licensee to file adequate information for determination of tariff. In the absence of reliable information, consumers are unable to provide objections in a

meaningful manner. It is needless to point out that the statutory scheme is such that the adherence to the principles of natural justice is not a matter of mere formality.

The present proposal of tariff for HT IV commercial class is in violation of the Orders of Appellate Tribunal in Appeal No. 10/2013. The cross subsidy levels of consumers having monthly consumption more than 30,000 units is still worse. The Association prayed that the Commission may direct the licensee to file appropriate applications furnishing the relevant data as required under the regulations and thereafter proceed to determine tariff if found necessary.

M. Muhammed Master, Chairman (Consumer Protection Wing) Kerala Janavedi State Committee, has, in letter dated 29-12-2017 ,requested not to accept the proposals on the following grounds:

- Generation Capacity at the National level increased considerably, whereas in Kerala capacity addition is very low or stagnant. Further the existing capacity is also not properly utilised
- The present crisis is due to lack of vision and improper use of markets
- The price of crude oil is only 55 USD / barrel compared to 124 USD /barrel in 2012.
- There are no timely actions for replacement of faulty meters
- There is no rationale for charging meter rent
- Lack of proper management is the reason for fall in internal generation
- There is substantial arrears to be collected
- There is no proper control of employee expenses
- Unrestrained use of contract workers in place of permanent employees
- The accounts submitted by the KSEB Ltd are not proper and there should be a mechanism for scrutinizing the accounts of the KSEB Ltd.
- The quality of supply is poor especially in areas of Thiroorangadi, Venniyoor etc.,
- Based on the above reasons, the proposal needs to be rejected.

Sri.Dijo Kappen, Meenachil

Sri.Dijokappen in his letter dated 25-7-2016 stated he did not pay electricity charges on the presumption that the regulatory commission had decided on the tariff payable by the consumers and did not extend the validity of tariff order dated 14.08.2014. Since there was a communication dated 14-7-2016 for disconnection, bill was remitted with Rs.30 as fine. Since the Commission has not decided on the tariff from 2016 April, as a consumer he is not bound to pay the electricity charges as tariff was not decided. Accordingly, the disconnection fee charged was also not correct. The situation arose on the fact that the KSEB Ltd failed to apply for revision of tariff before the Electricity Regulatory Commission. Hence for the fault of KSEB Ltd, it is not proper to penalise the consumers. Hence, the Commission may examine whether the fine levied is correct and order to refund the excess charges.

Sri.Sreelal, General Secretary, Kerala Samsthana Cherukida Rice, Flour & Oil Millers Association (State Committee).

In letter dated 30-12-2016, Sri.Sreelal submitted that, there are about 50,000 small scale rice mills, flour mills and oil mills in the State and about one lakh households are earning livelihood out of this occupation. At present the sector is facing stiff competition from packed flour and curry power produced by different companies. Accordingly they have requested to review the proposal to increase the fixed charges and stated that any increase in charges will result in close down of many mills.

Sri. K. Narendran, General Secretary, Palakkad District Rice Flour & Oil Mini Millers Association

In letter dated 31-12-2016, Sri. K. Narendran submitted that, in Palakkad District, there are about 3500 mini rice mills functioning and about same number of families are depending on this occupation. The mills are surviving on grinding of grains and pulses from farmers and other small households. Now the mini mills are facing extinction due to competition and decline of farming. Any small increase in fixed or energy charges will render these units unviable leading to ultimate closedown. Hence they requested to exempt these mills from paying fixed charges.

Vasu Memorial Club and Library, Talassery

Vasu Memorial Club and Library in letter dated 25-1-2017, submitted that, most of the libraries are financially sick and increase in electricity tariff will make the things more difficult. Hence, the proposal for increasing the tariff may be withdrawn.

Sri. R Sajilal, All India Youth Federation

Sri.Sajilal, in his representation dated 18-1-2017 stated that the proposal for increasing Tariff for domestic consumers should be withdrawn.

Sri.Sajeev, V Korani P.O in letter dated 6-12-2016 generally supported the a reasonable tariff revision. According to him, electricity generation imposes serious impact on the environment and hence those who consume more should be charged high. Hence he opined that consumption upto 300units per month should be given at reasonable rates. Consumers having consumption more than 800 units per month should be charged very high as they tend to waste electricity. He suggested higher rates for such consumers.

Sri. P.K. Rajasekharan Nair, Vellayambalam, in letter dated 24-12-2017, mentioned that unlike traders and industries, the domestic consumers are not able to transfer the burden of increase in electricity charges. Hence he requested not to increase domestic tariff. However, he is of the opinion that tariff increase for consumers having monthly consumption more than 200 units may be resorted to, as they have adequate capacity to bear the burden of increase in tariff.

Sri.K.Shibu Jacob, Thrissur, in his representation dated 21-12-2016 requested that the minimum area limitation of 30 cents for availing concessional agricultural tariff has to be dispensed with. The present practice is that even if electricity is used for agricultural purposes, but the land area is less than 30 cents, the tariff allowed is commercial, and the benefit of lower agriculture tariff is not available. He submitted that such discrimination should be avoided

Shri.Gopinathan Pillai, Mavelikkara in his representation dated 12-12-2016 stated that KSEB Ltd should follow monthly billing procedure as present system of bi-monthly billing results in billing at higher rates.

Sri.Badaruddin M. Navaikulam

Sri.Badaruddin's letter dated 31-12-2016, submitted that one unit per day should be given free to the poor households and there should be a cess for those using electricity for extravagantly. The revenue from the cess may be used to subsidise those consuming less than 90 units per month. He also suggested to change the receipt and bill to the sample format provided by him.

Sri. C.T Abraham, Elanthur.

Sri. C.T Abraham, in letter dated 3-1-2017, submitted that the fixed charges introduced based on light points need to be withdrawn, as there may be unnecessary plug points installed in houses while constructing the house. There is no additional cost to the KSEB Ltd due to this and KSEB Ltd should end such 'nookukoolie' while fixing tariffs. If fixed charges are to be charged, equivalent consumption needs to be allowed free to the amount charged as fixed charges.

Shri. S.K. Unnikrishnan Nair, Vinayaka Business Centre, Elamakkara

Shri. S.K. Unnikrishnan Nair, in letter dated 25-1-2017, submitted that, Regulatory Commission should direct the licensee to file tariff petition and need not initiate suo motu proceedings for determination of tariff. The details of sales and total energy generation are also not properly given. There is no reason given for increasing the return on equity compared to previous years. The depreciation recovered by the KSEB Ltd in previous years is kept with the KSEB Ltd, which is earning interest. The grant given by the Government to the tune of Rs.1553 crore is not accounted towards the losses. When tariff of consumers paying less than 80% of cost of supply is increased, it is also necessary to reduce the tariff of those paying more than 120%. The KSEB Ltd is not taking any measures for reducing the cost such as introducing pre-paid meters etc., The employee cost projected is not inclusive of daily wage employees. The accountability for delay in completion of projects should be assigned to the concerned officers in charge of the Project. Even after 11 years from the enactment of the Electricity Act, 2003, an independent load dispatch centre is not formed. The software used by the KSEB Ltd is susceptible to manipulation and ACD

is collected without adhering to the rules. Though Kerala Service Rules are applicable to the KSEB Ltd, the same are not followed. CGRF and Ombudsman are subsidiaries of the KSEB Ltd. Even if facts are submitted, no action is taken against the KSEB Ltd. In short, unless the KSEB Ltd asks for tariff increase, there is no need to increase the tariff by the Commission.

Dr. Kishore Kumar, Lekshmi Mandiram, Narakathara

Dr. Kishore Kumar in letter dated 5-1-2017, submitted that, he was unable to understand the rationale of increasing the electricity charges when the licensee is silent on it. The objective of the Electricity Act is to protect the interest of consumers, whereas the SERCs are violating the provisions of the Act. Many terms in the Act is left to interpretation of various authorities and it will ultimately affect the interest consumers adversely. KSEB Ltd is not providing information on the amount required for providing electricity service and how much fixed charges required for providing the service. In the suo motu proposal, Average Cost of Supply is not considered while proposing the tariff for various consumer categories. The average tariff under LT VIF is between Rs.8.74 per unit for consumer in Kumbala to Rs. 15.75/unit in Thiruvalla. Similarly in the HT IIB also there is such variation. The concept of fixed charges may be amended and minimum charges may be introduced say based on 25% of the average consumption and the amount so collected must be adjusted in the energy charge. Under domestic category there are 32 categories and paying 67 different type of charges ie., under each slab, the average tariff is different, which is against the fundamental rights of consumers. There is also disparity in charging fixed charges among LT and HT categories. The irrational fixation of tariff has resulted in reducing the industrial consumption from 60% to 15% in the last 10 years. Similarly, the terms commerce and industry have also been interpreted differently and ERCs have clubbed consumers other than industry and commerce into different categories such as non-domestic, non-commercial non-agricultural, general etc.,

Another issue is meter rent. For new consumers, KSERC can direct that consumers to install meters as required so as to avoid meter rent. The employee cost should be published in the ARR& ERC of KSEB Ltd. The consumer have to pay for the Master Trust created by the Government for giving pension and it will work out to 40 paise per unit for the consumers. Pension of the employees should be paid through national contributory pension schemes. Employee cost must be based on actual employees and not on the number of consumers, length of lines etc., The tariff categories must be reduced and simplified. In his submission Dr. Kishore prayed that the Commission may reclassify both LT and HT consumers so as to follow the preamble of the Act and to give such other reliefs as deemed fit.

Sri.Sundaram, Valiyamala, Thiruvananthapuram

Sri.Sundaram in letter dated 3-1-2017, submitted that, the cost of borrowing can be reduced by taking fresh loans in the light of new environment created after

demonetisation. Pension requirements can be reduced by limiting the same. The consumption can be reduced using more LED lights.

Sri. Jose Paul, Koratty

Sri. Jose Paul in letter dated 1-1-2017, submitted that, the letter is in addition to the submission given in the public hearing at Thrissur. In the additional submission he requested to allow free electricity to agricultural activities carried out using machines after harvest.

Sri. P.K. Velayudhan, Chengalloor, Thiruvananthapuram

Sri. P.K. Velayudhan in letter dated 9-1-2017, submitted that, as per the provisions of Electricity Act 2003 to create competition, one more private agency should be allowed for distribution of electricity for the interest of the consumers. While protecting the interests of the KSEB Ltd, interests of the consumers too should be protected. The KSEB Ltd should reduce the expenses and the government should pay for the free electricity given by the KSEB Ltd. There should be redeployment of excess staff and should avoid promotion of officers and placing in the same position. The petty contract system now being followed by the KSEB Ltd in electrical sections should be reviewed. Tariff increase may be allowed with conditions only if there is revenue gap.

Dr. John Palakunnel, Karukachal

Dr. John Palakunnelin letter dated 2-1-2017, submitted that, it is not fair to collect meter rent once the cost of meters and its interest has been realised. The disconnection may be only after the security deposit has been exhausted and for those who find it difficult to pay the electricity charges may be charged a reduced re-connection fee. Since KSEB Ltd is doing a service, the revenue gap of KSEB Ltd should be met by the Government. KSEB Ltd should promote solar energy and also should take up solar projects and popularise the LED & CFL lamps. More hydro electric plants should be installed in the State as energy requirements have more priority over environment. There should be steps to cancel the Mullaperiyar agreement and water should be made available to Idukki for power generation.

Sri. Vinay Chettuva

Sri. Vinay Chettuva in his representation dated 24-1-2017, he reported that Dy. Chief Engineers are rarely present in the office and hence other officers and staff also follow the same. In the vacant positions, temporary staffs are employed. Even in the Regional Audit Offices, offices, officers are not present and audit work is being delayed. The salary levels of these officers range from Rs.75,000 to Rs.1,50,000/- KSEB Ltd should take up restructuring to reduce the staff at circle offices and redeploy them in the section offices. Only qualified staff may be employed in the section offices so as to provide quality service to the consumers. In electrical division offices also there are surplus staff in clerical cadre especially after computerisation.

Sri.Sasi B Mattom, Kudayathoor, Idukki

Sri.Sasi B mattom in his letter dated 19-7-2016 in reply to the notice issued by the Commission for inviting objections, detailed his suggestion for improving the efficiency of KSEB Ltd. According to him scientific human resource management study is to be conducted and unnecessary places should be scrapped. The offices having comparatively low workload and offices established for the projects should be stopped or combined to reduce the costs. He suggested that low quality menial works should not be entrusted with high paid employees. The present section office concept should be scrapped and navigator teams headed by a sub engineer may be created at the section level for maintenance work and other surplus staff may be re deployed. In order to manage public lighting properly switching system may be introduced at the transformer itself. The electric posts stranded on the roads, when road widening takes place, should be removed by the KSEB Ltd with the help of contractors of PWD. Effective material management system should be implemented and field staff and engineers should be given directions for reduction in costs.

A detailed study of the existing projects should be undertaken are to be carried out and consumers should be properly incentivised to reduce energy consumption so as to manage future demand. Solar energy may promoted in the case of consumers with excessive consumption. For LT industrial consumers peak load regulation should be strictly implemented which would reduce the energy loss by 3%. For domestic consumers load limiter MCB should be installed to control the load. A primary survey should be carried out to identify the faulty meters and it should be replaced on priority basis. The non-domestic consumers should be insisted to install their own meters. The programmes proposed in the Budget for popularising LED bulb should be used for reducing energy consumption. Those who use more than 100 units per month should be imposed higher tariff, which would reduce costly purchase of energy. Considering the increased demand for energy in the summer months, action should be initiated to reduce loses. The domestic consumers may be forced switch off inverters during day time and for charging batteries above 100AH should compulsorily though solar energy. A part of the solar energy may be insisted to be used during the peak load time. The unused articles, vehicles, scraps etc, with KSEB Ltd should be sold through bidding.

Sri. Sameer Shah, Gujarati Road, Mattancherry, Kochi

Sri. Sameer in letter dated 8-12-2016, submitted that, complained about the interruptions in supply in his area during the morning and evening hours for 3 to 10 minutes duration. He mentioned that the employees certainly demand for increase in their wages as their birth right, but the consumers who pay these exorbitant expenses are treated as vermin. Only KSERC can check these irregular practices. He demanded that new meters capable of recording interruptions and low voltage should be installed and in case of low voltage and interruptions, bill amount should be deducted at 25% or so. He requested that such practice may be introduced

before giving any tariff increase. The KSEB Ltd will collapse within 10 years if unfriendly policies and inefficient practices are continued.

Sri S.K. Unnikrishnan Nair, Vinayaka Buisness Centre, Kochi.

In his letter dated 25-1-2017, he pointed out that as per the press reports Commission is intending to increase the tariffs. He has attached press reports showing extravagant expenses of KSEB Ltd. He further mentioned that the Commission sittings should be same as a civil court and in a court only parties to the proceedings should participate. Allowing KSEB Ltd to participate in the proceedings is illegal and hence the arguments of KSEB Ltd should not be considered.

P.N. Sukumaran Nair, Patspin India Limited.

P.N. Sukumaran Nair, in letter dated 26-8-2016, submitted that, M/s Patspin India Limited is operating in the State for the last two decades and is running at a loss for the last three years. It has survived mainly by investing heavily in up-gradation of machinery to keep pace with changes in the textile sector in the country. However, due to high cost of transportation and other reasons the unit is finding it difficult to survive in Kerala. Since the power cost is about 12% of the cost of manufacturing, any increase will adversely affect the operations. Hence, they requested not to increase the tariff.

Anonymous (A)

The present proposal for increasing tariff is a joint action by KSERC and KSEB Ltd and the public hearing is only a veil for tariff increase. Increase in tariff is certain whatever the outcome in the public hearing as there is no union for the public to resist the increase. The employees of KSEB Ltd should not forget that along with their rights, they have responsibility also. The lack of responsibility may be because of the secure feeling that after retirement, pension and other benefits are guaranteed for their life. Some meter readers indulge in unethical practices which are not even caught by the vigilance wing of the KSEB Ltd. If such measures are curtailed and arrears are collected, KSEB Ltd may not require a tariff increase.

Anonymous (B)

The proposed increase in electricity charges will affect only a section of the people. In 90% of the Electrical Sections of KSEB Ltd about 40 to 50% of the meters are faulty or sluggish. The sluggish meters are not being replaced or checked. In case the meter is faulty or sluggish, the consumers will increase the consumption by adding more appliances, which ultimately result in losses for the KSEB Ltd. Even if the electricity charges are increased, these people are not affected by it. Hence, KSEB Ltd should be vigilant on replacing faulty meters.