KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Present : Shri. Preman Dinaraj, Chairman

Shri. A.J.Wilson, Member

OA.No.9/2020

In the matter of Petition for the Truing up of accounts of

M/s KSEB Ltd for the financial year 2017-18

Petitioner Kerala State Electricity Board Ltd

Vydhyuthi Bhavanam, Pattom

Thiruvananthapuram

Respondents As per the List Attached (Annexure)

ORDER DATED 25/06/2021

In compliance to Regulation 27(6) of KSERC (Conduct of Business) Regulations 2003, the Kerala State Electricity Regulatory Commission having considered the petition for approval of the Truing up of Accounts for the year 2017-18 filed by the Kerala State Electricity Board Limited vide letter No.KSEB/TRAC/FO/TU/2017-18/525 dated 06-12-2019, published a summary of this petition in the Malayalamanorama daily on 12-06-2020, Deshabhimani daily and Times of India daily on 13-06-2020. Thereafter, as per Regulation 32 of KSERC (Conduct of Business) Regulations, 2003 a public hearing on the petition was held at the Conference Hall, PWD Rest House, Pathadipalam, Ernakulam on 22-12-2020 wherein stakeholders presented their views and objections.

After having carefully considered the submissions and documents on record filed by KSEB Ltd, electricity consumers/general public and other stakeholders and in exercise of the powers vested in the Commission under Section 62 and 64 of the Electricity Act, 2003 (Central Act 36 of 2003) and KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, the Commission hereby pass the following Order.

Dated this the 25th day of June, 2021

Sd/-A.J.Wilson Member (Law) **Sd/-**Preman Dinaraj Chairman

CHAPTER -1 INTRODUCTION

Background

- 1.1. Kerala State Electricity Board Limited (hereinafter referred to as KSEB Ltd or licensee) filed the petition dated 06-12-2019 before the Commission for approval of truing up of accounts of their Three Strategic Business Units viz., SBU-G, SBU-T and SBU-D of KSEB Ltd for the year 2017-18, as per the provisions of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as the Regulations). Along with the petition, KSEB Ltd has filed a petition for condonation of delay for 339 days from 02-1-2019 to 05-12-2019 in filing the truing up accounts for 2017-18. In the said petition, KSEB Ltd stated that a series of important assignments that are to be attended to on priority basis, which caused the delay. The reasons mentioned are briefly given below:
 - a. The statutory auditors certified the Annual Financial Statements for the year 2017-18 on 29-09-2018 and comments of C&AG u/s 143(6) of the Companies Act 2013 obtained on 21-03-2019
 - b. The Commission notified MYT Regulations for control period 2018-19to 2021-22, and KSEB Ltd had to file the petition on short duration, and the works relating to public hearing, submission of clarification etc., were also attended to. The order was passed on 08-07-2019 and various aspects relating to its implementation were attended to
 - c. Further, Review petitions on truing up for 2015-16 & 2016-17 and separate petition for approval of GFA addition for the year 2016-17 were taken up. These unexpected works were taken up before the preparation of truing up for 2017-18.
 - d. In view of the above, petition for truing up for 2017-18 was delayed by 339 days.
- 1.2. The Commission examined the reasons furnished by KSEB Ltd and decided to condone the delay and admitted the petition as OA No. 9/2020.
- 1.3. The copy of the petition was placed in the website of the Commission for the information and comments of the public and stakeholders. Further, the Commission directed KSEB Ltd to publish the abstract of the petition for inviting comments from the public and other stakeholders and KSEB Ltd published the summary of the petition in the following dailies:

- Malayalamanorama daily dated 12-06-2020
- Deshabhimani daily dated 13-06-2020 and
- Times of India daily dated 13-06-2020.
- It is pertinent here to mention the facts and circumstances leading to 1.4. submission of the above petition. The Commission had, in exercise of its Section 61 of the Act. vide under issued. notification powers No.787/SEA/2011/KSERC dated 14.11.2014, the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. The said Regulation specifies in detail the principles and procedures for determination of tariff, applicable to the generation company, the transmission licensee, the distribution licensee and the State Load Dispatch Centre. As per the provisions of the Regulations, all the licensees are required to furnish petitions for approval of Aggregate Revenue Requirement and Expected Revenue from charges for the control period under the Regulations ie., from 2015-16 to 2017-18.
- 1.5. The Govt. of Kerala has, vide G.O.(P) No.46/2013/PD dated 31/10/2013, issued the Kerala Electricity Second Transfer Scheme (Re-vesting), 2013 for the re-vesting of all the functions, properties, interests in properties, rights and liabilities of the Kerala State Electricity Board vested in the State Government earlier, into three Strategic Business Unit -Generation (SBU-G), Strategic Business Unit -Transmission (SBU-T) and Strategic Business Unit -Distribution (SBU-D). As per Clause 5 of the said G.O, the transfer of the Departmental Undertaking by the State and its conversion into a Public Sector Undertaking namely KSEB Ltd is with decentralized functions as defined under Companies Act 2013. Clause 5(viii) of the said G.O further mentions that within the provisional period of one year from the date of re-vesting, the accounts of the three SBUs (Strategic Business Units) will be segregated by the KSEB Ltd so as to facilitate the evaluation of the financial performance of these units. Separate balance sheets shall be prepared for the three SBUs and suitable transfer pricing mechanism among the SBUs shall be worked out by the KSEB Ltd, keeping in mind the financial soundness of the three SBUs.
- 1.6. As per Tariff Regulations, 2014, KSEB Ltd is required to file on or before 30th of November of the respective financial year, the Petition for determination of tariff for the next financial year, separately for SBU-G, SBU-T and SBU-D under the multi-year tariff principles as specified in the Regulations. However, on 05-01-2015, KSEB Ltd challenged the validity of the Regulations before the Hon'ble High Court of Kerala in the Writ Petition WPC No.465/2015(G). KSEB

- Ltd's main contention in the petition was that the norms for determining the expenditure specified in the Regulations were inadequate and resulted in under recovery of its expenses.
- 1.7. While admitting the above Writ Petition (WPC No.465/2015) the Hon'ble High Court was pleased to issue an interim order on 07.01.2015 directing the Commission not to reject any tariff proposal, if submitted by KSEB Ltd based on the Regulations. However, the Hon'ble High Court did not declare any of the provision in the Regulations as invalid. On the strength of the interim direction, KSEB Ltd disregarding provisions of Tariff Regulations 2014 requiring the filing of Multi Year Tariff petition for the control period, filed a petition dated 30.03.2015 for approval of Aggregate Revenue Requirements and Expected Revenue from Tariffs for a single year ie., for 2015-16 for KSEB Ltd as a single entity, ignoring the provisions of the Regulations and Transfer Scheme notified by Government of Kerala.
- 1.8. The Commission examined in detail this petition, filed for a single year and as a composite entity which were against the provisions of the Regulations. In compliance to interim order of the Hon'ble High Court mentioned above, the Commission did not reject the Petition.
- 1.9. It is a settled legal position that once the notification of the Regulations is done, the petition for determination of tariff filed by any licensee including KSEB Ltd in the State can only be processed in accordance with the provisions of the Regulations. Since, the Hon'ble High Court did not invalidate or stay the operation of any of the provisions in the Regulations, KSEB Ltd was required to comply with the provisions of the Regulations and to file Petitions for determination of tariff in accordance with Regulation 11 for the Control Period 2015-16 to 2017-18.
- 1.10. The Commission in the mean time filed an Interlocutory Application before the Hon. High Court seeking direction for processing the petitions filed before the Commission as per law, since the petitions can be processed only as per the provisions of the Regulations and all other existing regulations had been repealed. In the mean time, the financial year 2015-16 got over and therefore, the above petition lost its relevance and became infructuous. Accordingly, the Commission on 01-03-2017 issued an Order directing KSEB Ltd to submit the Petition for truing up of accounts of SBU-G, SBU-T, SBU- D and SLDC for the financial year 2015-16 along with all necessary and sufficient particulars of the actual expenditure and revenue, in accordance with the Regulations.

1.11. KSEB Ltd submitted before the Hon. High Court in its petition WPC 465/2015 that while specifying the Tariff Regulations 2014, the Commission has not taken in to consideration judgment dated 10-11-2014 in Appeal No. 1 and 19 of 2013 of Hon. APTEL. In the said judgment, Hon APTEL has stated as follows regarding employee cost:

"8.5 We find that the State Commission has taken the actual expenses trued-up for FY 2008-09 as the base. The State Commission should have at least allowed the actual basic pay and DA increase, pay revision and terminal benefits over the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The gratuity directed to be paid as per the judgments of the High court dated 10.03.2003 as the Division bench of the High Court had dismissed the Appeal filed against this judgment, and which were disallowed by the State Commission by order in Appeal no. 1 of 2013 should also be allowed.

8.6 Accordingly, we direct the State Commission to true-up the employees cost from FY 2010-11 to FY 2012-13, as per the above directions."

Regarding R&M expenses & A& G expenses judgment reads as follows:

"iv) The State Commission also conducted examination of Repair and Maintenance expenses of one of the Divisions of the Board through its staff in order to understand the nature of increase in Repair and Maintenance expenses and found that 36% of the expenses booked as Repair and Maintenance expenses were misclassified as revenue expenses.

9.6 In view of above findings of the State Commission,	, we do not incline
to interfere with the findings of the State Commission	. Thus, this issue
is decided against the Appellant."	

"10.3 We find that the State Commission has allowed escalation on the basis of CPI & WPI indices with weightage of 70:30 over the actual A&G expenses for FY 2008-09. The Appellant Board has not been able to give a satisfactory reply to the substantial increase in A&G expenses.

10.4 We do not find any infirmity in the findings of the State Commission"

- 1.12. The Commission has issued consequential orders on truing up for the years 2009-10 to 2013-14 in 2017 considering the APTEL Judgment dated 10-11-2014. It was pointed out before the Hon. High Court that in case the Commission follows those revised orders, while taking up the petitions for truing up of accounts for the subsequent years also there will be substantial difference and the grievance of the petitioner would be redressed to some extent. The Commission submitted before the Hon. High Court that while taking up the truing up applications of petitioner for the year 2015-16 to 2017-18, the judgment of Hon. APTEL and the consequential orders passed thereafter shall be take into account.
- 1.13. Hon'ble High Court on 28-02-2018 issued the final judgment disposing of the petition and directed the Commission to pass Order on the application of the petitioner for truing up of accounts for the years 2015-16, 2016-17, 2017-18 with due regard to the findings in APTEL Judgments and consequential Orders passed by the Commission for 2010-11 onwards in the case of the petitioner, KSEB Ltd
- 1.14. In the mean time, the Commission in exercise of its powers under subregulation (5) of Regulation 11, read with Section 61, Section 62 and Section 64 of the Electricity Act, 2003 and in compliance of Para 8.1 (7) of 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 the 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. Thereafter on 17-04-2017, the Commission had issued a Suo motu Order determining the tariff for the year 2017-18 and also the ARR&ERC Order for 2016-17 and 2017-18. In this context, it is to be noted that the Commission had extended the period of validity of the Tariff Orders (OP No. 9/2014) dated 14.08.2014, 25.09.2014 and 30.09.2014 till 31.03.2016 in view of the pendency of the WP No. 465/2015 (G) filed by KSEB Ltd.
- 1.15. The events leading to issue of the Suo motu Order on ARR&ERC and tariff dated 17-4-2017 for the period 2016-17 and 2017-18 is briefly mentioned below: KSEB Ltd 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.
- 1.16. 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 petition for determination of tariff as per the provisions of Tariff Regulations, 2014. 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.
- 1.17. The Commission, vide letter No. 2329/F&T/2015/ KSERC/332 dated 31.03.2016, 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 Despatch 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 Despatch 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."
- 1.18. Kerala State Electricity Board Ltd has, consequent to the said letter of 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 then existing 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.
- 1.19. 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 subsection (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 1.20. 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. Subsection (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.
- 1.21. The Commission observed that 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.
- The Commission also noted that it is the prime and foremost duty of KSEB Ltd 1.22. 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. 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.
- 1.23. 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.
- 1.24. 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.

- 1.25. 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.
- 1.26. The Commission after examining the matter in detail in the light of various statutory provisions and circumstances, concluded that view of KSEB Ltd failing to file the petition for approval of ARR&ERC, the Commission is bound to determine tariff applicable for the year 2017-18 in accordance with the regulations and the orders issued by the Hon'ble APTEL. Accordingly, the Commission decided to determine tariff for the year 2017-18 on a 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.
- 1.27. Accordingly, the Commission had, vide notice No. 1007/F&T/Suo motu Tariff Revision / 2016-17 dated 22.06.2016 initiated *Suo motu* proceedings for

determination of tariff and accordingly issued public notice. In the said notice, the Commission proposed the 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 The Commission conducted public hearing on the said proposals at Thiruvananthapuram on 27-07-2016. 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. The Commission again conducted public hearings on the proposals contained in the notice dated 1-12-2016. 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 issued orders on 17-4-2017 in the Suo motu proceedings initiated as per the notice dated 22.06.2016 and 01.12.2016, approving the ARR&ERC for 2016-17 & 2017-18, and revising the tariff for 2017-18

1.28. The present truing up petition filed by KSEB Ltd is in compliance of with the *Suo motu* ARR&ERC Order issued by the Commission for the year 2017-18 as per the order dated 17-4-2017. A summary of the Truing up petition for the year 2017-18 of KSEB Ltd is given below:

Table 1
Summary of the Audited Accounts and Truing up the year 2017-18 of KSEB Ltd

Particulars	Approved in Suo motu Order (Rs.crore)	As per Accounts (Rs.crore)	As per Truing up petition (Rs.crore)	Difference
	Α	В	С	D=C-B
Revenue from sale of power	11,529.74	12,318.17	11,967.05	-351.12
Non-Tariff income	449.00	347.28	566.60	219.32
Total Revenue	11,978.74	12,665.45	12,533.65	-131.80
Generation Of Power		2.08	2.08	-
Purchase of power	7,339.34	7,526.03	7,398.67	-127.36
Interest & Finance Charges	1,506.55	1,814.69	2,000.05	185.36
Depreciation	414.80	803.71	536.62	-267.09
Employee Cost (excluding terminal benefits)	1,737.27	2,638.06	2,195.76	-442.30
Repair & Maintenance		277.35	277.35	-

Particulars	Approved in Suo motu Order (Rs.crore)	As per Accounts (Rs.crore)	As per Truing up petition (Rs.crore)	Difference
Administration & General Expenses		530.38	398.58	-131.80
Other Expenses		-142.76*	-14.17	128.59
Unfunded Actuarial liability			531.39	531.39
Over achievement on loss reduction			49.27	49.27
Net Expenditure (A)	10,997.96	13,449.54	13,375.60	-73.94
Statutory Surplus/ RoE (B)	489.86		489.86	489.86
ARR(C) = (A) + (B)	11,487.82	13,449.54	13,865.46	415.92
Revenue Surplus (Gap) (C-D)	490.92	(784.09)	(1,331.81)	547.72

^{*}including fairvalue adjustments

- 1.29. The revenue gap as per the Petition for truing up of accounts for the year 2017-18 is Rs 1331.81 crore and as per the audited accounts the revenue gap is Rs.784.09 crore. The difference between the audited accounts and the truing up petition is mainly on account of the Return on Equity (Rs.489.86 crore), and interest and financing charges (Rs.185.36 crore), purchase of power (Rs.127.36 crore), employee expenses (Rs.442.30 crore) depreciation (Rs.267.09 crore) on account of assets created out of contribution and grants, unfunded Actuarial liability (Rs.531.39 crore) and nontariff income (Rs.219.32 crore).
- 1.30. The SBU wise split up of ARR & ERC furnished in the petition is as shown below:

Table 2
SBU wise ARR&ERC for 2017-18 as per Petition

Particulars	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Cost of Generation (SBU-G)			581.91	581.91
Cost of Intra-State Transmission (SBU-T)			881.87	881.87
Cost of Power Purchase			6,856.15	6,856.15
Cost of Inter-State Transmission			542.52	542.52
Cost of generation of power	2.08			2.08
Total Interest & financing charges	146.71	204.75	1,648.59	2,000.05
Un funded Actuarial liability	27.99	52.56	450.84	531.39
Depreciation	143.48	156.36	236.78	536.62
Employee cost	116.77	247.47	1,831.53	2,195.76
R&M expenses	29.30	42.27	205.77	277.34
A&G expenses	25.11	82.70	290.77	398.58
O&M expenses for New stations				

Particulars	SBU G	SBU T	SBU D	Total
Return on equity (14%)	116.38	119.99	253.50	489.87
Other Expenses & Prior Period expenses	-0.92	3.84	-17.09	-14.17
Claim for over achievement of T&D loss reduction target			49.27	49.27
Aggregate Revenue Requirements	606.90	909.93	13,812.41	13,865.46
Revenue from Tariff			11,967.05	11,967.05
Non-Tariff Income	24.99	28.06	513.55	566.60
Total Revenue/ Transfer price	581.91	881.87	12,480.60	12,533.65
Net Revenue Gap			-1,331.81	-1,331.81

Indian Accounting Standards (Ind AS) compliance and its impact

- 1.31. KSEB Ltd had adopted the Ind AS for preparation of accounts from 2016-17 In the petition KSEB Ltd stated that Accounts till 31-3-2016 were prepared line with IGAAP accounting standards and applicable provisions of Companies Act and Electricity Act, 2003. However, the Annual Accounting statements for the year 2016-17 were prepared in compliance with Ind AS notified by the Ministry of Corporate Affairs on 16-2-2015. This standard converges with International Financial Reporting Standards (IFRS). The adoption of Ind AS entails a significant change in the financial reporting framework used by Indian companies to report their financial results.
- 1.32. According to KSEB Ltd adoption of Ind AS is on account of the fact that the net worth of Kerala State Electricity Board Limited is more than Rs.500 crore and hence KSEB Ltd has to mandatorily apply the provisions of Ind AS in the preparation of Financial Statements for accounting periods beginning on or after 1-4-2016. Ind AS has some significant business consequences and the change process was a major one.
- 1.33. The Statutory Auditors of KSEB Ltd has conducted audit and issued certificate for the year 2017-18 and a copy of the audited accounts is also furnished along with the petition. KSEB Ltd stated that there are some difference in the amounts as per the accounts and as per the petition. The summary of the audited Annual statement of Accounts of the KSEB Ltd for the year 2017-18 vis-à-vis the petition for truing up is given below:

Table 3
Summary of comparison of truing up petition and accounts of KSEB Ltd for the year 2017-18

No	Particulars	Approved in the Suo motu ARR order*	As per Audited accounts	As per Truing up petition	Difference
		(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)
		(A)	(B)	(C)	(D=C-A)
1	ARR	11487.82	13939.39**	13865.46	2377.64
2	ERC	11978.74	12665.45	12533.65	554.91
3	Revenue surplus/(gap)	490.92	(1273.94)	(1331.81)	1822.73

^{*}Approved Vide Tariff Order No.1007/F&T/2016/KSERC/dt.17-4—2017

1.34. According to KSEB Ltd, the difference between audited accounts and true-up values are mainly due to inclusion of Return on Equity, claw back depreciation, actuarial liability, IND AS adjustment impact, and undisbursed interest on security deposit in the truing-up values. The Function wise segregation of expenses, revenue and Profit / loss are summarized below.

Table-4
Strategic Business Unit wise ARR, ERC and Revenue Gap as per petition

No	Particulars	SBU-G	SBU-T	SBU-D
		Rs. Crore	Rs. Crore	Rs. Crore
1	ARR	581.91	881.87	13812.41
2	Revenue from charges / Transfer Value	581.91	881.87	12480.60
3	Revenue surplus/ (gap) (2-1)	0.00	0.00	(1331.81)

Public hearing on the petition

- 1.35. Public hearing on the petition was held at the Conference Hall, PWD Rest House, Pathadipalam, Ernakulam on 22-12-2020 at 1:30 PM. The list of participants is given in Annexure.
- 1.36. In the hearing, M/s KSEB Ltd was represented by a team of officers led by Sri. Namboothiri, Executive Engineer, TRAC,. Sri. Namboorthiri briefly presented the details of the petition before the Commission and responded to the queries of the Commission on the truing up of accounts for the year.

The main points made by KSEB Ltd are,-

^{**}inclusive of RoE Rs.489.87 crore. As per accounts revenue gap is Rs.784.09 crore

- The petition is prepared based on the Tariff Regulations 2014, ARR&ERC approved by the Commission vide order dated 17-4-2017, judgment of the Hon. High Court of Kerala in Civil Appeal No. 465/2015 dated 28-2-2018 and the annual accounts for the year 2017-18. Hon'ble High Court of Kerala ordered to true up the accounts of KSEB Ltd the control period from 2015-16 to 2017-18 in line with the procedure adopted for Truing up from Financial years 2010-11 onwards based on APTEL decision.
- The revenue gap as per accounts is Rs.1273.94 lakh (including RoE) whereas the as per the petition is Rs.1331.81 lakh.
- Under SBU-G, the hydro generation was lower than that anticipated due to low rainfall. The approved generation from hydro sources was 6500MU whereas the actual generation was 5489MU. Small quantity of generation from diesel station was also reported. The total internal generation including diesel, wind and solar stations is 5505.73MU. The auxiliary consumption for the internal generation was 31.27 MU as against the approved value of 26.38MU. The net internal generation was 5474.46MU against the approved quantity of 6473.62MU.
- The total ARR of SBU-G as per accounts is Rs.680.62 crore and Rs.581.91 crore as per the truing up petition.
- The total transfer cost of SBU-T is Rs.1003.83 crore as per the accounts and Rs.881.87 crore as per the truing up petition.
- The total energy sale for the year 2017-18 as per the application is 20880.7 MU and the total energy handled including open access drawal (269.9MU), energy availed by RGCCPP (8.63MU) and captive consumption (108.15MU) is 21267.34MU. The total energy input for the year 2017-18 is 24340.79MU.
- The actual transmission and Distribution loss reported by KSEB Ltd for the year is 13.07%. The loss reduction target approved for the year was 0.25%. Considering the approved loss of 13.98% for the previous year, the total loss reduction achieved for the year is 0.91%.
- Cost of power purchase and inter-state transmission charges as per petition by KSEB Ltd for 2017-18 amounts to Rs. 7398.67 crore as against Rs.7526.03 crore as per accounts.
- The actual expense incurred on Interest and finance charges for SBU-D is Rs.1406.89 crore which includes loan interest, security deposit interest,

- overdraft interest, PF interest etc. The interest charges claimed in the petition is Rs.1648.59 crore
- The total depreciation claimed is Rs.236.78 crore for SBU-D
- The O&M expenditure claimed for SBU-D is Rs.2328.07crore which includes the repair and maintenance expenses, employee cost, and administrative and general expenses of SBU D.
- Total return on equity claimed is 14% is Rs. 253.50 crore for SBU-D
- Revenue from tariff for the sale of power and the non-tariff income which includes meter rent/service line rental, miscellaneous charges from consumers, recoveries, income from sale of scrap etc sums to a total of Rs. 12480.60 crore
- Accordingly, the revenue gap as per the application for truing up of accounts for the year 2017-18 is Rs.1331.81 crore.
- 1.37. In the petition, KSEB Ltd has claimed that the Statutory Auditors have audited the accounts for the year 2017-18 and the truing up petition is prepared on the basis of the audited accounts. The details of accounts are furnished as per formats given in the Regulations. Based on the above, following prayers were made in the petition:
 - "(1) Truing up of Expenses and Revenue as per the Audited Accounts of KSEBL for the year 2017-18 and explained in this petition may kindly be approved, in view of the care and caution taken by the Board for carrying out the functions of the Board as a public utility as per the statutory provisions under the Electricity Act, 2003 and also as per the directions, orders and regulations issued by the Hon Commission, policies and directions issued by the State and Central Government and other statutory bodies within the provisions of the Electricity Act-2003.
 - (2) KSEBL may be permitted to explain variations if any consequent to the revision of norms by the Hon Commission in line with the judgment dated 28.02.2018 of Hon High Court of Kerala in WP(C) 465/2015.

(3) The revenue gap as per the petition may be accounted as regulatory asset or any other appropriate means deemed fit by the Hon Commission according to the provisions of law.."

Response of stakeholders

- 1.38. Sri. Dijo Kappan, representing the Consumer Education Trust presented the views and objections on the claims made by KSEB Ltd. He stated that the KSEB Ltd is spending more than what is allowed and creating continuous revenue gaps. The schemes like One Time settlement is used to write of huge bills of consumers and he cited the example of Punalur Paper Mills, where arrears to the tune of Rs.100 crore was settled after realizing less than one crore. The RGCCPP is closed down and nearly Rs.1000 crore has been given in the last five years, on the reason that KSEB Ltd extended the contract for further term fully knowing that the plant is not necessary. KSEB Ltd is also entered into contract for 350MW from IPPs for which no approval has been given yet. The arrears from the large consumers are mounting every year and KSEB Ltd is allowing to increase the arrears of large consumers. He also cited the purchase of low quality materials being purchased in KSEB Ltd.
- 1.39. Representatives of industrial employee associations and industrial consumers have also represented before the Commission. Shri. Krishnakumar, GTN Textiles stated that the truing up exercise should not lead to a situation of increase in tariff since the textile industry is already in difficult situation due to covid-19 pandemic. Shri. Sajeev, Travancore Cochin Chemicals, Shri Shivasankaran, FACT also expressed similar views. Shri. Saji stated that truing up shall not be approved in toto. Other industries are functioning in a competitive environment and KSEB Ltd should also try to be competitive. KSEB Ltd should survive only if other consumers survive and should function in competitive manner to reduce the costs.
- 1.40. In the written remarks, recognized trade unions in FACT stated that the divisions of FACT at Ambalamedu and Ugyogmandal draw power at 110kV from Bhramapuam and Kalamassery substations respectively and pays electricity bill to the tune of Rs.7.6 crore on a monthly basis. KSEB Ltd projected a revenue gap of Rs.1331 crore which translate to Rs.0.60 paise increase in tariff. Annual addition on this account to FACT alone is about Rs.9 crore as against the operational profit of Rs.3.35 crore in 2019-20. In the current situation, such huge financial burden cannot be handled by FACT and hence requests for avoidance of tariff shock.

- Shri. Nandakumar, Senior Associate Vice President, Carborandum Universal stated that the Commission should review critically the controllable elements of costs in the petition and instruct KSEB Ltd to look at cost reduction through efficiency improvements in its operations. Considering the major changes occurring in the renewable sector and drastic fall in price of electricity, KSEB Ltd should leverage on the favourable power scenario and benefit immensely from the long term power sourcing tie up at pre determined tariff. He also stated that KSEB Ltd can play state's economic recovery by maintaining interstate transmission charges without increase. Joint Trade Unions, Patspin India limited, Kanjikode and Joint council of Trade unions, GTN textiles stated the difficulties in the operation of textile units compared to other states where much more incentives are given for the textile sector. In Kerala, in addition to the inherent less industrial friendly situation, the survival of units are affected seriously. The substantial reduction in power factor incentive and open access charges also makes the operation of the sector difficult. Hence, they requested for orders denying any proposal which adds to the power cost of the industry.
- 1.42. The Kerala Electricity Employees Confederation has stated that the subsidy receivable from the Government for allowing subsidy for consumers using 120 units per month, so far not received. Further the subsidy extended during the lockdown amounting to Rs.500 crore also so far not received. Further, steps should be taken to get the losses suffered due to floods and amount receivable from KWA.
- 1.43. M/s.GTN textiles stated that they are already suffering from covid 19 related issues and any increase in power bills would lead to total closure of their units. Thus Commission should deny any proposal which adds to the cost of power industry. M/s Patspin India limited stated that energy cost in Kerala has increased about 70% over the last 4 year period. The unit is struggling even to discharge the statutory liabilities and payment of wages to workmen. Hence they requested that KSEB Ltd should curtail the operational expenses to reduce the power cost. M/s Premier Tyres, a unit of apollo tyres also expressed similar views. M/s FACT stated that the revenue gap for the year as per the petition is Rs.1331 crore, which translates to 60 paise per unit will lead to additional cost of Rs.9 crore per year. Hence the Commission should issue orders avoiding tariff hike, which would immensely help the company to the path of recovery.
- 1.44. The Kerala HT & EHT Industrial Electricity Consumers' Association (HT-EHT Association or Association for short) made detailed presentation on their

- views on the Petition for truing up. **Sri. A.R Satheesh**, presented the comments of the Association on the Petition filed by KSEB Ltd.
- 1.45. The Association pointed out that there is considerable delay in filing of the truing up petition for 2017-18. In this context, the Association pointed out that the Commission had initiated action against KSEB Ltd and vide order dated 17-8-2010, imposed penalty for not filing truing up petitions for the years 2007-08 and 2008-09. They have also pointed out the judgment of Hon. Supreme Court in UPPCL & other Vs NTPC Limited (2009) 6 SCC 235 where the Apex Court has ruled that 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 of expenses relating to previous years. They have further pointed out that as per the provisions of Companies Act 2013, annual accounts have to be filed within 7 months of closing of the financial years.
- 1.46. According to the Association there is a difference of 0.07% from the approved T&D loss for the year 2017-18 which resulted in the purchase of additional 19.99MU from the licensee's periphery and 20.75MU from ex-bus level. Further, while calculating the T&D loss, the Open access sales should not be considered. The Association further pointed out that since there is no over achievement of T&D loss the Commission should disallow an amount of Rs,49.27 crore gains due to loss reduction.
- 1.47. With regard to auxiliary consumption of hydro stations, the allowable auxiliary consumption is 20.20MU as against 29.93MU and hence excess auxiliary consumption is 9.73MU to be additionally considered as generation from Hydro electric plants. Regarding employee expenses for SBU-G, the objectors stated that Rs.90.79 crore only be allowed. Similarly, R&M expense and A&G expenses should also be limited as per the regulation in the case of SBU-T and SBU-G.
- 1.48. The Association also pointed out the difference in power purchase cost of CGS stations and requested that the Commission should examine the power purchase bills and blending ratio etc, before allowing the variable cost.
- 1.49. With regard to Power Purchase from DBFOO projects, the Association demanded that the purchase from the unapproved PPAs should be limited to the L1 rates and accordingly an amount of Rs.62 crore should be disallowed. Since there is no prior approval for the purchase from RGCCPP, the entire cost of Rs.200 cores should be disallowed. In the absence of details of claim of KPCL, the entire cost should be disallowed. Accordingly, the Association requested to allow only Rs.6835.89 crore towards power purchase cost.

- 1.50. The Association pointed out that the licensee has not taken the prior approval for capital expenditure and hence the same should be disallowed for 2017-18. The Association also stated that an amount of Rs.13.14 crore as interest on working capital and allowed as against the claim of Rs.24.30 crore.
- 1.51. The additional claim of KSEB Ltd on unfunded terminal liabilities to the tune of Rs.531.39 crore should be disallowed. The depreciation submitted by KSEB Ltd may be re-estimated as per the Regulations as the amount claimed is net of claw back depreciation. According to the Association, depreciation amount of Rs.369.87 crore only be allowed instead of Rs.536.62 crore sought in the petition.
- 1.52. The Association pointed out there is no need for carrying cost since there would be revenue surplus as per the estimates of the Association. The Association with the help of the Report of CAG on Public Sector Undertakings in Kerala for the year ended March 31,2018 pointed out several differences in the figures as per the report and the previous submissions of the petitioner. As per CAG Report several small hydro projects IRR should fall below the cost of capital if proper financial principles in assessing the financial viability is followed. The Association also pointed out several shortfalls with regard to UDAY scheme targets.
- 1.53. The Commission forwarded the written comments received during the public hearing to KSEB Ltd and instructed to furnish the reply if any on the same by giving time till 22-01-2021. KSEB Ltd furnished the reply on the objections of the stakeholders vide letter dated 08-04-2021.
- In the reply, KSEB Ltd stated that the Association is not a true representative 1.54. of HT-EHT consumers. Further, regarding the validity of the submission of the truing up petition and the comments of the Association regarding delay in filing the petition, KSEB Ltd stated that the Commission has already condoned the delay in filing the petition before the admission. Further, there is no intentional delay in filing the petition and delay was on account factors such as audited report for 2017-18 was obtained on 04-06-2019 and the petitions filed in December 2019. Further, according to KSEB Ltd the decision of Hon. Supreme Court cited by the petitioner is delivered on the exceptional circumstances and are not squarely applicable to the present filing. In the case of NTPC, the facts and circumstances are entirely different and it was not the first time delay, whereas the KSEB Ltd was first time delay and the delay was condoned by KSEB Ltd. Further in the case of APTEL decision in Appeal No.100 of 2007, KSEB Ltd stated that the objector selectively quoted from the judgment. KSEB Ltd further pointed out that in Appeal No. 70 of 2007, the APTEL held that the

- consumer has to pay for the cost of electricity supplied to him and therefore there is nothing unjust in recovering the cost of supply. The reference to carrying cost relating to deferred additional revenue on account of delay in coming into force of new retail tariff. Further APTEL has reiterated the above decision in Appeal No.147, 148 and 150 of 2013 dated 30-05-2014. In view of this, according to KSEB Ltd there is no legal inconformity as alleged in the filing and processing of the petition filed by KSEB Ltd.
- 1.55. The Commission has examined the decisions cited by the Association and KSEB Ltd. It is clear from the ratio in the judgment of Hon. Supreme Court is that it is not fair to charge the future consumers for the past burden. Accordingly it emphasizes the timely recovery of costs from the consumers. However, timely recovery is possible only if the licensees have to furnish the petition for recovery of cost on a time bound manner. Regarding the judgments of Hon. APTEL, it is categorically held in Appel No.100 of 2007 that it is not desirable to delay the truing up process and in Appeal No 70 of 2007 it is held that the consumer is liable to pay the cost of electricity, however, the consumer cannot be burdened with carrying cost because of the delay since the delay has not been caused on account of their default.
- KSEB Ltd has also given reply on the comments of the Association regarding 1.56. O&M expenses. According to KSEB Ltd, in respect of employee cost, para 8.4 to 8.6 of the judgment dated 10-11-2014, Hon. Tribunal has not fixed nay ceiling limit for the approval of employee cost but the minimum is prescribed. The submission of KSEB Ltd was to approve the actual employee cost since it is a reasonable view considering the business growth and infrastructure growth. KSEB Ltd also expressed concern in curtailing the employee cost at 2009 level for 9th successive year. Hence KSEB Ltd constrained to appeal against the decision of the Commission to disallow the cost. The objector has deducted Rs.421.44 crore from the employee cost, without considering the retirements during the period. Further, the increase in manpower from 2009 is only based on the filling up of vacancies subsequently by the PSC in the sanctioned places which s 34779 in 2009. Hence the approach of the objector is not correct. Hence there is no merit in the arguments of the objector. Regarding additional cost for news stations, the objector conveniently ignores the provision of the Regulation 44(2). KSEB Ltd has sought the actual O&M expenses in view of the second appeal pending before the Hon. Supreme Court of India. According to KSEB Ltd the argument of the Objector is for denying the genuine cost to KSEB Ltd.
- 1.57. Regarding return on equity, the objector failed consider the fact that truing up of accounts is as per the Tariff Regulations 2014. As per Regulation 35(d) RoE

on the equity of Govt of Kerala is to be allowed. The increase in equity is through infusion of cash and not through book adjustments. KSEB Ltd also objected to the argument that depreciation for asset addition shall not be approved. According to KSEB Ltd approval for the asset addition for 2016-17 has been granted by the Commission and hence the same is eligible for depreciation. Regarding other expenses, the income recognized in the previous years has been withdrawn in 2017-18. The provision for bad and doubtful debts is also approved after the prudence check. The objector seeks to approve the prior period income and object the prior period expenses, which is not correct. Regarding the contention that amortization of Rs.1040.92 crore the Suo motu order has not been materialized as detailed in the truing up petition. KSEB Ltd also objected to the per unit comparison of O&M expenses with other utilities as the same is not logical considering the specific situation in the State.

- 1.58. KSEB Ltd also objected to the contentions of the other stakeholders that there is a tariff increase if the revenue gap as proposed by KSEB Ltd is approved. KSEB Ltd submitted that there is no proposal for recovering the approved revenue gap for 2017-18 and hence there is no increase in tariff.
- 1.59. The Commission has also sought clarification on several issues as shown below:

SI.No	Reference No.	Date	Subject
1.	2019/OA-19/F&T/2020KSERC	28-05-2020	Publication and clarifications
2	2019/OA-19/F&T/2020KSERC/634	03-08-2020	Reminder for clarification
3	2019/OA-19/F&T/2020KSERC/928	9-11-2020	Hearing notice and additional
			details
4.	2019/OA-19/F&T/2020KSERC/30	7-1-2021	Seeking reply on comments of
			stakeholders

1.60. In compliance of the above, the details of the responses given by KSEB Ltd are shown below:

	SI.No	Reference No.	Date	Subject
Ī	1.	KSEB/TRAC/FO/TU/2017-18/1041	20-10-2020	Clarification on letter dated 28-5-
				2020
Ī	2	KSEB/TRAC/FO/TU/2017-18/1041	04-01-2021	Additional clarifications on letter
				dated 9-11-2020
Ī	3.	KSEB/TRAC/FO/TU/2017-18/11	08-04-2021	Reply of KSEB Ltd on the objections
				of stakeholders

1.61. The Commission after examining the petition and the clarifications furnished thereon in detail and the objections of the stakeholders, has arrived at the truing up of accounts of the KSEB Ltd for the year 2017-18 as detailed in the ensuing chapters.

CHAPTER-2

TRUING UP OF ACCOUNTS OF STRATEGIC BUSINESS UNIT GENERATION (SBU-G)

Introduction

- 2.1 In exercise of its powers under Section 131 of the Electricity Act 2003 the Government of Kerala vide G.O(P) No. 46/2013/PD dated 31-10-2013 had notified a transfer scheme, revesting the properties, liabilities, interests, rights and obligations of the erstwhile KSEB into KSEB Ltd, a Limited company incorporated under the provisions of the Companies Act, 1956. The three distinct functions of the erstwhile Board, i.e., generation, transmission and distribution were separated into three independent Strategic Business Units (SBUs) viz., SBU-Generation (SBU-G), SBU-Transmission (SBU-T), and SBU-Distribution (SBU-D). SBU-G is vested with the task of managing the generating stations of erstwhile KSEB and for establishing and managing new generating stations in the State.
- 2.2 As per the Annual Report for 2017-18, as on 31.05-2019, KSEB Ltd has 40 number of hydel, thermal and wind energy generating stations, with a total installed generation capacity of 2233MW including solar PV projects, the details of these generating stations with their installed capacities are given in the Table below:

Table 1
Installed capacity of Generating Stations

SI. No	Name of the Station	Installed Capacity (MW)
1	Pallivasal	37.50
2	Sengulam	51.20
3	Neriamangalam	52.65
4	Neriaangalam Extension	25.00
5	Panniar	32.40
6	Poringalkuthu	36.00
7	Sholayar	54.00
8	Sabarigiri	340.00
9	Kuttiyadi scheme	75.00
10	Kuttiadi Extensioon	50.00
11	Kuttiadi Additional Extension	100.00
12	Idukki	780.00
13	Idamalayar	75.00
14	Kallada	15.00
15	Peppara	3.00
16	Lower Periyar	180.00
17	Mattupetty	2.00
18	Poringalkutuy LBE	16.00
19.	Kakkad	50.00

SI. No	Name of the Station	Installed Capacity (MW)
20	Kuttiadi Tail race	3.75
21	Malampuzha	2.50
22	Chembukadavu Stage –I	2.70
23	Chembukadavu Stage-II	3.75
24	Urumi Stage-I	3.75
25	Urumi Stage-II	2.40
26	Malankara	10.50
27	Lower Meenmutty	3.50
28	Poozhithode	4.80
29	Ranni Perinad	4.00
30	Peechi	1.25
31	Vilangad	7.50
32	Chimony	2.50
33	Adyanpara	3.50
34	Barapole	15.00
35	Prongalkuthu micro	0.01
36	Vellathooval	3.6
37	Perumthenaruvi	6.0
	Total Hydel	2055.76
1	Kanjikode	2.025
	Total Wind	2.025
1	Brahmapuram Diesel Power Plant	63.96
2	Kozhikode Diesel Power Plant	96.00
	Total Thermal	159.96
1.	Kanjikode	1.00
2	Kollamkode	1.00
3	Chaliyoor Colony, Agali	0.096
4	Idayar S/s	1.25
5	Thalakulathoor, Kozhikode	0.65
6	Manjeswaram ground mounted	0.50
7	Kuttippuram	0.50
8	Pezhakkappally	1.25
9	Pothencode	2.00
10	Barapole canal top/bank	4.00
11	Poringalkuthu power house	0.05
12	Banasurasagar, Wyanad	0.51
13	Other roof tops	2.54
. •	Other roof tops	2.0 .
	Total Solar	15.25

2.3 An analysis of the Truing up petition for 2017-18 submitted by KSEB Ltd for SBU-G shows that the transfer cost of 'electricity sold' to SBU-D by SBU-G was Rs.581.91 crore. A summary of the ARR&ERC of SBU-G for the year 2017-18 approved by Order dated 17-4-2017 is shown below:

Table 2
Transfer Cost of SBU-G as per truing up petition

		2016-17	2017-18			
No	Particulars	Trued up	Approved in Suo motu ARR&ERC Order	As per Annual Accounts	As per Truing up petition	Difference over approval & petition
		Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
1	Cost of Generation of Power	23.45	-	2.08	2.08	2.08
2	Interest & Finance Charges	71.38	221.29	184.52	146.71	(-)74.58
3	Depreciation	124.59	172.43	180.01	143.48	(-)28.95
4	O&M Expenses (Excl terminal benefits)	112.61	80.13	194.70	171.18	91.05
5	RoE (14% of Rs 1454.53 Crore)	240.72	203.63	153.84	116.38	(-)87.25
6	Another debit and prior period income	41.16	-	-9.54	-0.92	0.92
7	Interest on unfunded liability				27.99	27.99
7	ARR	613.91	677.48	705.61	606.90	(-)70.58
8	Less Non-Tariff Income	22.23	-	24.99	24.99	24.99
9	Net ARR (Transfer cost to SBU-D)	591.68	677.48	680.62	581.91	(-)95.57

^{*(+)} Excess / (-) Less

2.4 Details of each of the items are given below:

Expenses of SBU-G

2.5 In their truing up petition for SBU-G, KSEB Ltd had indicated the summary of expenses including Return on Equity as shown below:

Table 3
Expenses of SBU-G as per the petition

		2016-17	2017-18			
No	Particulars	Trued up	Approved in Suo motu ARR&ERC Order	Actuals	As per Truing up petition	Difference over approval*
		Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
1	Cost of Generation of Power	23.45	•	2.08	2.08	-2.08
2	Interest & Finance Charges	71.38	221.29	184.52	146.71	74.58
3	Depreciation	124.59	172.43	180.01	143.48	28.95
4	O&M Expenses (Excl terminal benefits)	112.61	80.13	194.70	171.18	-91.05
5	RoE (14% of Rs 1454.53 Crore)	240.72	203.63	153.84	116.38	87.25
6	Other debit and prior period income	41.16		-9.54	-0.92	0.92
7	Interest on unfunded liability				27.99	-27.99
7	ARR	613.91	677.48	705.61	606.90	70.58

^{*}KSEB Ltd in the petition shown the difference over approval in case of excess as -ve and deficit as +ve figures.

2.6 Each of the items of the revenue requirement is examined in the subsequent sections.

Generation from internal generating stations

2.7 KSEB Ltd in their submission has indicated the total gross generation from internal generating stations for the year 2017-18 was 5505.73 MU. The total auxiliary consumption reported is 31.27MU and the net generation is 5474.47MU. The total gross hydro generation was 5488.94MU. The generation from BDPP and KDPP together was 1.86MU and the net generation after accounting for auxiliary consumption was 0.54MU only. The generation from renewable sources such as wind and solar was 1.48MU and 13.45MU respectively. The details are given below:

Table 4
Generation from internal generating stations for the year 2017-18

	ioranion non process government of the first point and p						
	As per Audited Accounts (MU)						
Source	Gross Generation	Aux consumption	Net Generation				
Hydro	5488.94	29.95	5458.99				
BDPP	0.46	0.65	-0.19				
KDPP	1.40	0.66	0.73				
Wind	1.48	0.000923	1.48				
Solar	13.45	0	13.45				
Subtotal	5505.73	31.27	5474.47				

Hydro generating stations

2.8 The total generation from all internal hydro generating stations for the year 2017-18 was 5488.94 MU in comparison with the approved quantity of 6500MU ie., a short fall of 1011.06MU. KSEB Ltd submitted that in 2017-18 the actual generation from hydro sources was lower due to factors such as below normal south-west monsoon during 2017, the drought situation which prevailed during 2016-17 and resulted in lower carry over storage for April 2017 thereby reducing the generation in the summer months of 2017. Further, the normal monsoon in March 2018 resulted in a fall in demand and consequent reduction in hydro generation.

Table 5
Hydro generation for the **year 2017-18**

riyare generalien for the year zerr is					
Source	Gross generation (MU)	Auxiliary consumption (MU)	Net Generation (MU)		
Approved in ARR	6500.00	26.38 (0.40%)	6473.62		
Audited Accounts	5488.94	29.95 (0.55%)	5458.99		

As indicated above, KSEB Ltd, mentioned that the gross hydel generation was 5488.94 MU, whereas the net generation after deducting auxiliary consumption of 29.95MU was **5458.99** MU. The auxiliary consumption as a percentage of the gross generation was 0.55%. The details of generation from hydro stations for the year 2017-18 as furnished by KSEB Ltd is given in the Table below:

Table 6
Station wise hydro generation as per the petition for 2017-18

	Station wise rigato generation as per the petition for 2017-10					
No	Hydro Electric Stations	Generation (MU)	No	Hydro Electric Stations	Generation (MU)	
1	Idukki	1609.11	19	Chembukadav I & II	10.64	
2	Sabarigiri	947.34	20	Kuttiady Tail Race	8.26	
3	Kuttiady (Units :1 - 6)	600.37	21	Ranni-Perinadu	6.31	
4	Lower Periyar	508.01	22	Addyanpara	3.74	
5	Neriamangalam+NES	308.28	23	Peppara	5.29	
6	Poringalkuthu + PLBE	233.70	24	Vellathuval SHEP	4.53	
7	Edamalayar	256.60	25	Lower Meenmutty	5.04	
8	Sholayar	204.25	26	Madupetty	3.15	
9	Pallivasal	188.45	27	Chimony	3.41	
10	Kakkad	159.97	28	Malampuzha	1.31	
11	Sengulam	144.91	29	Peechi	1.13	
12	Panniar	129.65	30	Perunthenaruvi	3.14	
13	Kallada	32.55	31	Poringalkuthu screw	0.05	
14	Malankara	31.17		KSEB Hydro (TOTAL)	5488.95	
15	Barapole	40.29		Aux Consumption (MU)	29.95	
16	Vilangad	15.32		Net Generation in MU	5459.02	
17	Poozhithode	11.64		Auxiliary consumption %	0.55	
18	Urumi	11.34				

Objections of the Stakeholders

- 2.10 In their submission, the High Tension and Extra High Tension (HT-EHT) Association stated that for hydro stations, the auxiliary consumption reported is 29.95MU. However, according to the Association, as per the plantwise auxiliary consumption given in the Tariff Regulation, an amount of 20.20MU alone can be approved and balance 9.73MU should be treated as energy available from hydro stations.
- 2.11 In reply to the comments, KSEB Ltd argued that in the case of new stations, provisions of Regulation 46(2) shall be applicable and the Auxiliary consumption provided in the said Regulation is higher than the actuals of KSEB Ltd.

Provisions in the Regulations

2.12 Regulation 46 specifies the norms of operation for hydro electric generating stations. Regulation 46(2)(a) specifies the normative auxiliary consumption

- of twelve existing hydro electric generating stations of KSEB Ltd including the transformation losses.
- 2.13 Regulation 46 (2) (a) provides the auxiliary consumption for the major stations as shown below:
 - "46 (2) Auxiliary Consumption for hydro-electric generating stations shall be as specified hereunder:
 - (a) Normative auxiliary consumption of the following existing hydroelectric generating stations of KSEB Limited, including transformation losses shall be as specified in the table below:

Table

			Auxiliary Consumption	
SI. No.	Station	Surface Hydro / Underground	Excitation system	(%)
1	Idamalayar	Surface Hydro	Static	0.10%
2	ldukki	Underground	Static	0.53%
3	Kakkad	Surface Hydro	Rotating	0.71%
4	Kuttiady	Surface Hydro	Rotating	0.24%
5	Lower Periyar	Surface Hydro	Static	0.13%
6	Neriamangalam	Surface Hydro	Static	0.18%
7	Pallivasal	Surface Hydro	Brushless	1.00%
8	Panniar	Surface Hydro	Static	0.53%
9	Poringalakuthu	Surface Hydro	Brushless	0.44%
10	Sabarigiri	Surface Hydro	Static	0.22%
11	Sengulam	Surface Hydro	Static	0.15%
12	Sholayar	Surface Hydro	Brushless	0.18%

- 2.14 In the case of SHPs and other Renewable projects, the following provision shall apply.
 - "36 Applicability. (1) The regulations specified in this chapter shall apply to determination of tariff for supply of electricity to the distribution business/licensee by a generating company from conventional sources of generation such as coal, gas, liquid fuel and medium as well as large scale hydro-electric plants:

Provided that determination of tariff for supply of electricity to the distribution business/licensee from cogeneration plants, solar plants, small hydro-electric projects, wind energy projects and other renewable energy sources of generation shall be governed by separate Regulations specified by the Commission from time to time:

2.15 Accordingly, the provisions of KSERC (Renewable Energy) Regulations 2015 shall apply to the other small hydro projects. Thus, as per Annexure G and H of the KSERC (Renewable Energy) Regulations, the auxiliary consumption for the small hydro projects is fixed at 1%.

Analysis and decision of the Commission

- 2.16 In their truing up petition, KSEB Ltd has stated that the gross hydro generation is 5488.94 MU and the auxiliary consumption is 29.95MU, which is 0.55% of the total hydro generation. The hydro generation considered in the Suo motu order was 6500MU. It is a fact that there was a slight short fall of monsoon in 2017-18.
- 2.17 In reply to the comments of the stakeholders, KSEB Ltd vide letter dated 08-04-2021 stated that auxiliary consumption of new stations is lower than the norms indicated under Regulation 46(2), which is applicable for large stations. According to KSEB Ltd, anticipated normal generation is to be considered for auxiliary consumption as per the percentage specified. When generation is lower, the percentage of auxiliary consumption will be on higher side. Considering the fact that generation was lower during the year and the norm for auxiliary consumption was revised in the ensuing control period, the objections of the petitioner is to be rejected.
- 2.18 The Commission examined the contentions of the parties. The Regulations provides for benchmark percentage of auxiliary consumption based on gross generation for the major stations. However, for small hydro projects, the respective Regulations shall be applicable for determination of allowable auxiliary consumption. Since the new stations commissioned by KSEB Ltd fall in the category of SHPs, the norms applicable will be as per Regulation 36 of SHPs. Accordingly, as per KSERC (Renewable Energy) Regulations 2015, the auxiliary consumption for SHPs is 1%. Based on these provisions, the auxiliary consumption allowable for 2017-18 is as shown below:

Table 7
Allowable auxiliary consumption for 2017-18 as per norms

No	Hydro Electric Stations	Generation (MU)	Actual Auxiliary consumption (MU)	Actual Auxiliary consumption (%)	Aux Con (%) as per Norms	Aux Con (MU) as per Norms	Savings(-) / Excess(+) (MU)
1	Idukki	1609.11	8.13	0.51%	0.53%	8.53	-0.40
2	Sabarigiri	947.34	3.33	0.35%	0.22%	2.08	1.25
3	Kuttiady (Units :1 - 6)	600.37	2.13	0.35%	0.24%	1.44	0.69
4	Lower Periyar	508.01	1.86	0.37%	0.13%	0.66	1.20
5	Neriamangalam+NES	308.28	0.86	0.28%	0.18%	0.55	0.31
6	Poringalkuthu + PLBE	233.7	1.16	0.50%	0.44%	1.03	0.13
7	Edamalayar	256.6	0.31	0.12%	0.10%	0.26	0.05
8	Sholayar	204.25	0.80	0.39%	0.18%	0.37	0.43
9	Pallivasal	188.45	0.51	0.27%	1.00%	1.88	-1.37
10	Kakkad	159.97	0.71	0.45%	0.71%	1.14	-0.43

11	Sengulam	144.91	7.93	5.47%	0.15%	0.22	7.71
12	Panniar	129.65	0.68	0.52%	0.53%	0.69	-0.01
	Sub Total	5290.64	28.43	0.54%		18.87	9.56
	Other SHEP	198.31	1.52	0.77%	1.00%	1.98	-0.46
	Total	5488.95	29.95	0.55%		20.85	9.10

- 2.19 As shown above, the actual auxiliary consumption for a generation of 5488.95 MU and auxiliary consumption of 29.95 MU the year 2017-18 was 0.55%. As per the Regulations, the allowable auxiliary consumption for the large stations is specified. Based on that, the allowable auxiliary consumption as per norms works out to be 18.85 MU as against the actual auxiliary consumption of 28.41MU ie., an excess of 9.56MU.
- In the case of small hydro projects, as per the Renewable Energy Regulations, auxiliary consumption allowed is 1%. Hence, for a gross generation of 198.31 MU, the auxiliary consumption shall be 1.98MU as against the claim of 1.52MU. Thus, as per Regulations, the allowable aux. consumption works out to be 20.85MU compared to 29.95MU reported by KSEB Ltd. The excess auxiliary consumption is 9.10 MU as shown in the Table. The Commission has consistently been disallowing this excess cost of additional auxiliary consumption from the allowable expenses of SBU-G. The Commission has followed the same principle in 2017-18 also. The excess of cost of auxiliary consumption is worked out as shown below:

Table 8
Excess cost of Auxiliary Consumption approved for 2017-18

Excess aux. consumption	MU	9.10
Cost of hydro generation (approved ARR less cost of fuel)	Rs.crore	496.25
Net Hydro Generation (5488.95 MU-20.83MU)	MU	5,468.12
Per unit cost (496.25/5468.12/10)	Rs./kWh	0.91
Cost of excess aux. Consumption	Rs. crore	0.83

Accordingly, the excess cost of auxiliary consumption of Rs.0.83 Crore is deducted from the allowable expenses of SBU-G.

Diesel Stations

2.21 The Commission in the *Suo motu* Order has not approved any generation from the diesel stations. In their truing up petition, KSEB Ltd has submitted the gross generation of power from diesel power generating stations of SBU-G ie., BDPP and KDPP at a low quantity of about 1.86MU and net energy after deducting the auxiliary consumption was 0.54MU only. The cost for this power generation is shown as Rs.2.08 crore.

- 2.22 KSEB Ltd stated they had scheduled 150MW on 12-08-2017 and on 13-08-2017 from RGCCPP due to combination of factors viz., reduction in availability fo CGS power, high rates in power exchanges, non-availability of corridor, high demand, annual maintenance of Idukki HEP. Further the injection from BSES plant on UI basis was also allowed based on the direction of Hon. High Court of Kerala (WPC No.540/2017) and subsequent orders of the Commission on 27-4-2018.
- 2.23 As per the details furnished by KSEB Ltd the generation from the diesel stations is as given below:

Table 9
Generation from BDPP and KDPP

	BDPP (MU)			KDPF	KDPP (MU)		
Month	Generation	Aux. Consumption	Month	Generation	Aux. Consumption		
Apr-17	0	0.063272	Apr-17	0.1310	0.0662		
May-17	0	0.047471	May-17	0.1760	0.0684		
Jun-17	0	0.041785	Jun-17	0	0.0616		
Jul-17	0	0.046551	Jul-17	0	0.0638		
Aug-17	0.3149	0.066800	Aug-17	0.0890	0.061		
Sep-17	0	0.054038	Sep-17	0	0.0418		
Oct-17	0	0.053599	Oct-17	0	0.0544		
Nov-17	0	0.053938	Nov-17	0	0.0534		
Dec-17	0	0.055915	Dec-17	0	0.0432		
Jan-18	0	0.059396	Jan-18	0	0.0494		
Feb-18	0	0.048402	Feb-18	0.0870	0.0384		
Mar-18	0.1418	0.062348	Mar-18	0.9090	0.0566		
Total	0.4567	0.65	Total	1.3920	0.66		
Net generation	(-) 0.19			(+)0.73			

2.24 As shown above, the net generation from BDPP is negative 0.19 MU and that of KDPP is about 0.73MU only. KSEB Ltd has claimed a total of Rs.2.08 crore as the total fuel cost of diesel stations. In total, the net generation from these plants is 0.54 MU and the average cost works out to Rs.38.52/kWh.

Objection of the Stakeholders

2.25 Stakeholders have not commented on the issue.

Provisions in the Regulation

2.26 Regulations 47(5) and 47(8) indicating the normative gross station heat rate and the normative auxiliary consumption fixed for the liquid fuel based generating stations are given in the Table below:

Table 10
Normative gross station heat rate and auxiliary consumption

		<i></i>
Station	Gross Heat rate	Auxiliary Energy
	(kcal/kWh)	Consumption (%)
BDPP	2000	3.87%
KDPP	2100	1.99%

Analysis and decision of the Commission

- 2.27 The Commission notes that in the Suo motu Order dated 17-04-2017 scheduling of generation from the internal liquid fuel stations was not allowed. However, it can be inferred from the generation pattern of the two LSHS Stations that, the stations were used sparingly and mostly for keeping the machinery in a working condition. Hence the Commission approves the fuel cost of these two plants at actual for the purpose of truing up.
- 2.28 Thus, the Commission approves fuel cost of Rs.2.08 crore for the year 2017-18 as per the truing up petition.

O&M expenses

2.29 KSEB Ltd in their truing up petition has claimed Rs.171.18 crore as the O&M expenditure for SBU-G for the existing stations. The apportioned value as per audited accounts is Rs.194.70 crore. The component wise expenditure claimed by KSEB Ltd is shown in Table below;

Table 11
Components of O&M cost of SBU-G

Particulars	Approved in Suo	As per audited	As per petition
	motu order	accounts	Rs. Crore
	Rs. Crore	Rs. Crore	
Employee Cost	NA	140.29	116.77
A&G Expenses	NA	25.11	25.11
R&M Expenses	NA	29.30	29.30
Sub total	80.13	194.70	171.18
Terminal benefits	NA	NA	
Total	80.13	194.70	171.18

2.30 KSEB Ltd in their Truing up petition also submitted that after the notification of the Regulations six new small hydro generating stations having an aggregate installed capacity of 38.1MW have been commissioned. Out of this, Perunthenaruvi SHP was commissioned on 24-10-2017. KSEB Ltd stated that O& M expenditure of these stations may be allowed in addition to the normative O&M charges as per Regulations. Accordingly, KSEB Ltd has claimed Rs.7.08 crore as the O&M expenses for new SHP stations as shown below:

Table 12

O&M costs claimed in the petition for new SHPs commissioned after 31-3-2014

Project	CoD	Capacity- MW	Energy- MU	Capital cost (RS Crore)	Addl. O&M cost (Crore)
Vilangad	26-07-2014	7.50	22.53	75.83	1.80
Chimmony	22-05-2015	2.50	6.7	14.58	0.33
Adyanpara	03-09-2015	3.50	9.01	34.38	0.77
Barapole	29-02-2016	15.00	36.00	127.5	2.86
Vellathuval	08-09-2016	3.60	12.17	39.67	0.84
Perunthenaruvi	24.10.2017	6.00	25.77	58.80	0.49
Total		38.10	112.18	351.76*	7.08

^{.*}Total capital cost works out by KSEB Ltd is incorrect. It is Rs.350.76 crore only instead of Rs.351.76 crore mentioned in the petition

- 2.31 In addition to SHPs, KSEB Ltd has also sought O&M expenses for solar generating stations with aggregate capacity of 11.885 MW commissioned after 31-3-2014. The total capital cost was Rs.87.4278 crore and the O&M cost is estimated by KSEB Ltd is Rs 1.12 crore. Thus, the total O&M cost sought in the petition for new stations is Rs.8.20 crore. However, KSEB Ltd has not included this amount in their revenue gap.
- 2.32 Based on the above submissions, each of the components of O&M costs such as employee cost, R&M expenses and A&G expense are analysed separately in the following sections.

Employee Cost

2.33 KSEB Ltd in their truing up petition has claimed the employee expenses of SBU-G as Rs.116.77 crore for 2017-18, whereas the same for 2016-17 was Rs.91.16 crore excluding terminal benefits. Terminal benefits has not been claimed since the same is claimed as part of expenses towards Master Trust. The split-up details of employee expenses submitted by KSEB Ltd is given below:

Table 13
Split up details of employee cost and provisions for 2017-18

	2016-17		2017-18	
Particulars	As per	As per	As per	As per
1 artiodiars	Audited	Truing Up	Audited	Truing Up
	accounts	petition	accounts	petition
	Rs. Crore	Rs. crore	Rs. Crore	Rs. crore
Basic Salary	123.48	123.48	152.77	118.77
Dearness Allowance (DA)	26.59	26.59	31.41	31.41
House Rent Allowance	1.82	1.82	1.78	1.78
Conveyance Allowance	0	0	-	-
Leave Travel Allowance	0.02	0.02	0.03	0.03
Earned Leave Encashment	9.70	9.70	10.20	10.2
Other Allowances	4.28	4.28	4.17	4.17

Medical Reimbursement	0.61	0.61	0.85	0.85
Overtime Payment	0.37	0.37	0.29	0.29
Bonus/Ex-Gratia Payments	0.42	0.42	0.45	0.45
Interim Relief / Wage Revision	0	0	-	-
Staff welfare expenses	0.14	0.14	0.14	0.14
VRS Expenses/Retrenchment Compensation	0	0	1	-
Commission to Directors	0	0	-	-
Training Expenses	0	0	-	-
Payment under Workmen's Compensation Act	0	0	-	-
Net Employee Costs	167.44	167.44	202.08	168.08
Terminal Benefits	80.86	80.86	-	-
Provident Fund Contribution			-	-
Provision for PF Fund				-
Pension Payments			-	-
Gratuity Payment			-	-
Annual Contribution for Terminal Liabilities based on actuarial valuation			-	-
Others	0.97	0.97	0.73	0.73
Gross Employee Expenses	249.27	249.27	202.82	168.82
Less: Expenses Capitalised	76.28	76.28	62.53	52.05
Net Employee Expenses	172.99	172.99	140.29	116.77

- 2.34 The net employee expenses excluding expense capitalized as per the petition is Rs.116.77 crore as against the approved cost of Rs.50.43 crore.
- 2.35 In order to elaborate the employee costs sought for in the petition, in Chapter 5 of the petition, KSEB Ltd has explained the methodology of calculating the cost. In the petition KSEB Limited stated that actuarial liability for 2017-18 was ascertained at Rs.1584.88 crore. In the accounts, out of this assessed liability, Rs.509.42 crore was booked under employee cost for 2017-18 and the balance amount pertaining to earlier years of Rs.1075.46 crore was booked under other comprehensive income in the P&L account. KSEB Ltd further stated that, the actuarial liability from 01-11-2013 to 31-03-2017 amounting to Rs.3728.98 crore has not been claimed in the truing up till 31-03-2017. Hence, the same was excluded in the truing up petition for 2017-18 as shown below:

Table 14
SBU wise Employee cost booked as per petition and Accounts for 2017-18

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Employee cost	202.82	346.81	2488.78	3038.41
2	Capitalized portion of expenses	62.53	49.49	288.32	400.35

3=1-2	Net employee cost as per trifurcated				
	accounts	140.29	297.31	2200.46	2638.06
4	Proportion among SBU (%)	6.675	11.414	81.911	100
5	Actuarial liability included in employee cost	34.00	58.15	417.27	509.42
6=1-5	Employee cost net of actuarial valuation	168.82	288.66	2071.51	2528.99
7	Less: pro rata capitalization (based on 2				
	above)	52.05	41.19	239.98	333.23
8=6-7	Employee cost claimed in TU petition	116.77	247.47	1831.53	2195.76

2.36 The details of the claim as per the Accounts is shown in the table below:

Table 15
Details of employee cost booked and claimed for 2017-18

SI.				
No	Particulars	2015-16	2016-17	2017-18
		Rs.crore	Rs.crore	Rs.crore
1	Basic Pay	811.43	1755.52	1806.86
	Pension fund -Actuarial valuation			509.42
	Add: Provision for pay revision	339.00	0.00	0.00
2	Overtime / Holiday wages	0.20	0.41	0.34
3	D.A.	930.41	378.10	443.35
	Add: Provision for pay revision			0.00
	Add: Provision for DA revision	0.00	0.00	9.00
		2081.04	2134.03	2768.97
4	Other Allowances			
	a) HRA	18.71	44.75	44.72
	b) Spread over allowances	3.66	4.88	4.98
	c) Incentive allowances	0.34	0.30	0.27
	d) Local and other allowances	18.88	28.76	27.67
5	Bonus	8.25	9.10	9.83
6	Medical Reimbursement	8.52	10.35	10.83
7	a) Earned Leave encashment	124.15	145.67	153.10
	b) Terminal Surrender	22.61		
	LTA			0.21
8	Payment under workmen compensation Act	0.08	0.50	0.14
9	Leave Salary and Pension Contribution	0.18	13.78	13.28
	NPS Contribution			
10	Staff welfare expenses			0.11
	a) Uniform & Livery expenses	1.82	4.28	4.24
	b) Cash award for meritorious service etc	0.07	0.05	
	Funeral allowance			0.05
		207.27	262.42	269.43
	Gross employee cost (before capitalization)-As			
11	per accounts	2288.32	2396.47	3038.40
	Less: Actuarial liability	0.00	0.00	509.42
12	Employee Cost for the year as per TU petition	2288.32	2396.47	2528.98

- 2.37 KSEB Ltd claimed that the year to year increase in employee cost is only 5.53%, which is meagre.
- 2.38 In order to comply with the Hon'ble High Court direction in WPC 465/2015, the Commission sought clarifications dated 28-05-2020 from KSEB Ltd for

implementing the judgment of Hon. High Court. KSEB Ltd in their submission dated 20-10-2020 furnished the following details.

The salaries and allowances actually disbursed in 2017-18 to employees recruited after 01-04-2009 (11519 nos in total as on March 2018) works out to Rs.421.18 crore. The employee strength in 2018 was 33542 and has increased by 6367 nos over the 2009 (33542-27175) as part of Government's resolve to fill all vacancies through PSC. As per the methodology adopted by the Commission on truing up till 2013-14, the employee cost attributable to 6367 employees ie., over and above the APTEL Judgment is Rs.232.76 crore. The additional financial commitment on account of increased number of employees works out to 9.2% only and considering the business growth over 9 year period it is reasonable.

- 2.39 Based on the above, KSEB Ltd stated that Commission may approve the employee cost in full in light of the following:
 - (i) The expenses towards the enhanced strength as a percentage of total employee cost is reasonable and much below in comparison with business growth
 - (ii) There has been considerable growth in business over 9 years from 2009 to 2018 and the additional cost is very much comparable to the actual business growth over 2009.
 - (iii) The number of sanctioned places as on 31-03-2009 was 30978 and the Commission considered only 27175. The gap between working strength and sanctioned strength is due to administrative delay in Public Service Commission giving advice memo after due process. The Vacant places are to be invariably filled up in due process.
 - (iv) Hon'ble APTEL as per judgment dated 10-11-2014 has not fixed any ceiling limit to determine the allowable employee cost
 - (v) Maximum MYT time frame is for 5 years. Revision in expenses in consideration of actual expenses during the control period is provided in CERC and State Regulations. 2017-18 is the 9th year in succession from 2008-09.
- 2.40 Since KSEB Ltd has sought for approval of the entire employee cost, the Commission vide letter dated 28-05-2020 had sought from KSEB Ltd the following:
 - (1) Copy of the Government of Kerala Orders sanctioning posts in KSEB from 1-4-2009 to 31-10-2013 ie., when KSEB Ltd was a departmental undertaking under the Power Department. This is also the period prior to revesting of the Board under Section 131 of the Electricity Act and

- (2) Full Board resolutions of KSEB Ltd sanctioning new posts in KSEB Ltd from 01-11-2013 to 31-03-2018.
- 2.41 In reply to the same KSEB Ltd vide letter dated 20-10-2020 has furnished the following reply:

"KSEB L submits the following for the kind consideration of the Hon'ble Commission:

- 1. Government of Kerala, as per G.O(MS) No. 10/2000/PD dated 27.04.2000 had sanctioned reorganization of erstwhile KSEB into three Profit Centers to manage Generation, Transmission and Distribution activities and a Corporate office at Head Quarters. KSEB ordered the implementation of the reorganisation wef 01.04.2002. Separate Task Forces headed by the Member of respective profit centre were formed to finalise the detailed structure of the profit centres. Sanctioned strength of Generation Profit centre was not revised as these posts were very much essential for the smooth functioning of the wing. The Need Based staff Strength (NBS) for Generation, Transmission, Distribution profit centres and various offices of the Head office was fixed active 30442 Nos. A summary of office wise category wise abstract of NBS is attached as Annexure 1 for easy comprehension. Board orders issued (21 Nos.) in this regard are also attached there with.
- 2. It may please be seen that the staff strength of different categories were streamlined as per requirement and 2722 surplus places identified and shelved (BO 1573/2005 dated 10.05.2005) to arrive at the need based strength of 30442 Nos. As the consumer strength in KSEBL increased day by day KSEBL issued various orders for the formation of 108 new section offices in the distribution wing till 2010 by reviving certain shelved places.
- 3. Hon'ble Commission may kindly note that even though Need Based Strength was fixed at 30442 in 2002, actual staffing against the approved places could not be fully filled up through recruitment mainly due to procedural delays occurring at a Public Service Commission in any of the years from 2002 to 2009.
- 4. From 2000 to 2009, KSEB had sanctioned / modified the need based staff strength. Officials of Civil wing were also reviewed as per B.O(FM) No. 3256/2006(Estt.III/7451/2006) dated 29.12.2006 and approved 437 Nos over 2002 level considering implementation of new projects during 5 years from 2006 and during the period from 2011 to 2016. When these places are also taken into account, the Need Based Strength as on 31.3.2009 will be 30978 against which actual working strength was 27175.16 Board Orders issued in this regard are attached along with Annexure 1.
- Actual working strength as on 31.03.2009 of 27175 considered by the Hon'ble Commission for approving employee cost was less by 3803 Nos. when compared with the need based staff strength fixed as per

- norms in 2000 (30978-27175). Shortfall in working strength was primarily due to the delay in filling up of vacancies through PSC. These places were filled later on. It is respectfully submitted that the Hon'ble Commission should have considered the Need Based Staff strength instead of actual working strength for approving employee cost.
- 6. The norm fixed for various category of employees as per Long Term Settlement (LTS) 2000 entered into with the Trade Unions were based on number of consumers. The norms for various categories in Distribution wing were as follows.

Table: 2Norms for different category of workmen				
	As per LTS 2000			
Sub Engineer(Ele)	1 place in DB, ES			
Cashier	120 consumers per day			
SA-Billing for	2250Consumers per month			
	400 – LT 4 bills per month			
	50 HT bills per month			
SA-Spot billing	120 bills per day			
Meter Reader	1500 readings per month			
Line Man	One line man per 1000 consumers in Urban areas and one per 900 consumers in semi urban / remote areas			
Overseer	1500 Consumers per month			

7. It may kindly be noted that the consumer strength as on 31.3.2009 as increased by 27.02 lacs (40.56%) to 93.63 lacs from 66.61 lacs as on 31.3.2002. The staff strength under distribution wing in these categories of employees ought to have revised upwardly as below in view of the provisions in the LTS 2000.

Table 3: IMPACT ON STAFF STRENGTH – AFTER THE IMPLEMENTATION OF MODEL SECTION IN DISTRIBUTION WING – ON MAJOR CATEGORIES OF EMPLOYEES						
	No. of		No. of Em	• •		
Particulars	consumers (lacs)	Lineman	Mazdoor (EW)	Overseer Electrical	Total	Remarks
NBS as on 31.03.2002	66.61	7436	3378	2192	13006	
NBS- Projection	93.63	10452	4748	3081	18281	Projection based on
as on 31.03.2009						consumer strength
Increase	27.02	3016	1370	889	5275	

8. As part of efforts to make the Board more customer oriented and to rationalise the employee strength in Distribution sector, after due consultation with the Trade Unions, Board had ordered to implement Model Sections in the State on pilot basis. KSEB, as per order No.

- B.O(FB) No. 1460/2009(CP/R&P/Plg.1/Model Section/2009-10) dated 04.06.2009 implemented the concept of model sections to facilitate improvement in the working of electrical section offices. Initially 75 Section Offices were converted as Model Sections with effect from 1st June 2009. After reviewing the functioning of these Model Sections by collecting the feedback of various stakeholders by conducting a questionnaire survey and after discussions with the recognised trade unions, the Board decided to extend Model Sections to another 155 Section and further decided to convert all the electrical sections to Model Sections with effect from 1/1/2011. Later on all section offices of KSEB were converted into model sections.
- 9. The staff pattern for each section were redefined as 6 Mazdoor (EW), 12 Line men, 6 Overseers, 3 Sub Engineers, 1 each SS and AE without direct linking to the number of consumers served along with the required number of Senior Assistant, Cashier and Meter Reader. There were 665 section offices, 65 Divisions and 23 Circles at that time.
- 10. Thus, the restructuring of staff strength through model sections could rationalize the staff requirement under Mazdoor, Line man and Oversees as 15960 nos in place of 18281 nos required as per the norms prescribed. The change in staff strength is provided in the consolidation sheet placed as Annexure 1. The Board orders relating to Model sections are appended thereto.
- 11. For providing adequate staff to newly formed number of 108 section offices to cater the increasing number of consumers as well as to extent better services to remote and rural areas, 153 places of AE, 152 places of SS. 602 places of Line men and 784 places of Mazdoors were revived as per order B.O (FM) No. 2544(EB7/Gnl/Staff Strength/2010) 29.09.2010. As per order 3170/2010/(EB7/SE(E)/CE(HRM)/2010) dated 04.12.2010, 591 places of Sub Engineers were revived. As per B.O (FB) No. 85/2011 (DPC III/Model Sections - Additional Lineman/10-11) dated 06.01.2011, it was decided to post one line man additionally in section offices where radial distance is greater than 10km from the HQ for effectively attending break down works. Accordingly, 243 places were revived / created. 1827 places of Overseer were sanctioned as per BO FB No. 1460/2009(CP/R&P/Plg.1/Model Section/2009-10) dt 04.06.2009 and BO 2854/2010 (EB 4(b)/HRM/Ovr/2010 dated 03.11.2010.
- 12. It may kindly be seen that the concept of Model Sections under Distribution wing was aimed for providing better services to the consumers at the same time ensuring optimum utilization of man power. It may also be noted that the actual working strength was 28007 in 2010 against the sanctioned strength of 35259 nos. The consumer strength has increased to 97.43 lakhs in 2010 in comparison to 66.62 lacs in 2002. It may kindly be seen that the additional strength of 4281

sanctioned in 2010 under Distribution sections was not at all proportional to the increase in consumer strength and distribution network over the period as submitted in the table below.

1	

Year	No. of	Connecte	SOP-	Substatio	EHT	HT	LT lines	Dist.	No of
	consum	d load MW	MKwh	ns (Nos)	lines	lines	(Km)	Transform	consumer
	ers			, ,	(Km)	(Km)	, ,	ers (Nos)	s per
	(lakh)					, ,		, ,	employee
2001-02	66.61	9197	8667	192	8506	30372	194678	31767	276
2009-10	97.43	15867	14048	336	10403	44839	249687	52149	348
increase	30.82	6670	5381	144	1897	14467	55009	20382	72
Increase %	46.27	72.52	62.09	75.00	22.30	47.63	28.26	64.16	26.09

- 14. In order to cater to the ever growing business and consumers of KSEBL, more distribution section offices were needed during the period from 2010 to 2016. 32 new Electrical sections were formed as per BO (FB) No. 2824/2014 dated 31.12.2013 and B.O.(FB) No. 836/2013 dated 08.10.2012. Since consensus was not reached for the creation of places at Board level, Government sanction was obtained to create 1248 places of overseers, Line men and Electricity workers for the above 32 sections and for another 20 sections in advance was obtained vide GO (MS) No. 14/12/PD dated 16.07.2012. Another 28 new sections were created as per BO (FB) No.1810/2012 dated 08.10.2012. After that sanction was accorded to create 23 sections (one dropped later on) as per BO (FB) No. 1599/2012 dated 25.08.2012, BO (FB) No. 1359/2012 dated 28.05.2011 and BO(FB) No. 669/2011 dated 01.03.2011.
- 15. The requirement of staff for the above offices was accommodated to an extent by reviving certain categories shelved during the re organization done in 2002, in lieu of other categories. Thus 750 places of Senior Assistant, 62 places of SS, and 42 places of AE (Civil) shelved during 2002 were revived and converted to equivalent (financially) places viz 180 Electricity worker (30x6) 360 Line men (30x12) 180 Overseer (30*6) 246 Sub Engineers (83x3) and 30 each of AE, SS and Cashiers for the newly formed sections. The overall sanctioned staff strength in 2016 has revised to 38805 nos in 2016 and the rise in comparison to 2010 amounts to 3573 nos. The growth of business and infrastructure during the period is summarized below:

Year	No. of	No. of	Connected	SOP-	Substat	EHT	HT Lines	LT line	Dist.	No of
	employe	consumers	load MW	MKwh	ions	lines	(Km)	(Km)	Transform	consumer
	es	(lakh)			(Nos)	(Km)			ers (Nos)	s per
										employee
2009-10	28007	97.43	15867	14048	336	10403	44839	249687	52149	348
2010-11	29864	102	16682	14548	349	10500	48503	256449	57954	342
2011-12	31113	105	17518	19521	359	10582	51489	260554	62329	337
2012-13	31783	108	18523	16779	370	10706	53068	263620	64972	340
2013-14	31983	112	19684	17454	377	10947	53740	264117	67546	350
2014-15	33041	114	20391	18426	378	11065	55547	268753	71195	345
2015-16	32440	117	20981	19325	387	11195	57650	285970	73460	361
Increase	44.33	19.57	5114	5277	51	792	12811	36283	21311	13
Increase	15.83	20.09	32.23	37.57	15.18	7.61	28.57	14.53	40.87	3.68
%										

- 16. It may please be seen that the consumer base increased by more than 46% and increase in NBS over 2002 in 2016 is just 27%. Reduction in NBS was primarily due to the change in norms adopted in 2010 through the introduction of Model sections. An abstract containing sanctioning of posts through various Board Orders starting from 2002 to 2016 is placed at Annexure 1 for easy comprehension. Copies of 12 Board orders inclusive of those referred to in para 11 and 13 above are attached along with Annexure 1.
- 17. Even though the required staff strength was fixed at 38805, staffing in places like Meter Reader, Driver, Cashier etc has not been done for the above strength keeping in view the directions of the directions of the Hon'ble Commission and to probe the possibility to further streamline the same in line with technological advancement etc in view of the IIM Report and the deliberations thereon. For Recruitments/ promotions, a strength of 34779 nos as detailed in Annexure 2 is being followed. It may kindly be noted that the employees in position as on 31.03.2018 had been 33542 nos.
- 18. In compliance of the direction of the Hon'ble Commission to conduct a study by an outside agency for rationalisation of man power to ensure efficiency in various spheres of activities of the Company, KSEBL has engaged IIM Kozhikode for the same and after detailed study they have submitted a report with recommendations. The report has already been examined in detail and the ideal staff strength of KSEBL taking in to consideration technological advancement; operational requirement etc is in the final stage of consideration. The matter once approved by the Board will be subjected to consultation with the Trade Unions before implementation. It is expected that the ideal staff strength could well be less than the posting strength (34779 nos) being considered at this point of time.
- 19. It is respectfully submitted that the predecessor entity of KSEBL viz. KSEB was not required to obtain sanction from the Government for the creation of posts. KSEB was established as a statutory body as per the Section 5 of the Electricity (Supply) Act 1948."
- 2.42 The Commission examined details furnished by KSEB Ltd and notes that it is partial, did not consider the effect of computerization, introduction of new technology or its upgradation, staff rationalization or even the recommendations of IIM Study commissioned by KSEB Ltd themselves. Further the reply furnished were not fully in line with the details sought by the Commission. Hence, the Commission could not consider the details furnished by KSEB Ltd as required. Hence, the Commission proceeds to approve the employee cost as per the directions of Hon. High Court of Kerala as has been done in 2015-16 and 2016-17.

Objection of the Stakeholders

2.43 The HT-EHT Association in their submission, stated that the employee cost of the KSEB Ltd is to be curtailed as per the judgment of the Hon., APTEL. According to the Association, the excess employees as per the petition is 6367 nos. The cost pertaining to these excess employees works out to be Rs.421.44 crore and accordingly the allowable cost to SBU-G will be Rs.90.79 crore instead of Rs.116.77 crore as proposed by the petitioner. Hence, an amount of Rs.25.98 crore is to be deducted from the employee cost claimed by KSEB Ltd for SBU-G.

Provisions in the Regulations

- 2.44 The provisions regarding O&M expenses given under Regulations 44 are as shown below:
 - **44. Operation and maintenance expenses.** (1) (a) In the case of existing generating stations, the generation business of KSEB Limited shall be allowed to recover operation and maintenance expenses for each financial year of the first control period, as per the norms specified in Annexure-VII to these Regulations:
 - (b) The generation business of KSEB Limited shall, subject to prudence check by the Commission, be allowed to recover, in addition to the above specified normative operation and maintenance expenses, the annual pension contribution to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.

<u>Annexure-VII</u>

<u>O&M norms for existing generating stations of generation business of KSEB Limited</u>

Particulars (Rs. crore)	FY 2015-16	FY 2016-17	FY 2017-18
Employee expenses	45.01	47.65	50.43

Analysis and decision of the Commission

2.45 KSEB Ltd in their truing up petition has sought Rs.116.77 crore towards employee expenses of SBU-G, which is 5.32% of the Rs.2195.76 crore claimed as total employee expenses excluding terminal benefits. The total employee cost as per Accounts was Rs.3038.41 crore, after deducting the capitalized portion of Rs.400.35 crore, the net employee cost was Rs.2638.06 crore. The cost for truing up has been arrived at in the petition after deducting the actuarial liability of Rs.509.42 crore included in the employee cost as per Accounts, and after deducting the capitalized portion of employee cost. However, while deducting the capitalized portion, only proportionate portion

(Rs.383.23 crore out of Rs.400.35 crore capitalization) was deducted, thereby showing that a portion of the actuarial liability of Rs.509.42 crore was also capitalised as per accounts.

- 2.46 The Commission has examined the contentions of KSEB Ltd given in the petition and in the letter dated 20-10-2020 and have the following comments: KSEB Ltd while claiming employee expenses as per the Accounts, has present several arguments in support of the claim. The major contentions of KSEB Ltd in the petition as well as in the reply dated 20-10-2020 are that, in the APTEL order there is no ceiling of employee cost is and the increase in staff in KSEB Ltd is in the essential categories such as lineman, mazdoor, etc., Further, KSEB Ltd has to honour the wage settlement with unions and accordingly, KSEB Ltd is not in a position to reduce the costs. The letter dated 28-07-2010 of the Commission states that KSEB Ltd may release DA without reference from the Commission.
- 2.47 In support of the same, KSEB Ltd stated that there is increase in number of consumers, sales and fixed Assets over the last few years. KSEB Ltd also furnished the comparative data from All India Electricity Statistics to show that indicators such as employees/1000 consumers. No. of consumers, per capita consumption, employee strength per Km of line etc of KSEB Ltd are better compared to other States. The employees per 1000 consumers in Kerala is 2.8, whereas the National average is 3.17, the per capital consumption is low and Kerala is 24th out of 36 States/UTs. No. of employee/km line is 0.0.096 in Kerala and 0.095 for India. Hence, according to KSEB Ltd, considering all these aspects, cost per unit of sale is not comparable since Kerala is having predemoninance of LT consumers with low per capita consumption and high O&M costs.
- 2.48 The Commission has examined the contentions of KSEB Ltd. At the outset, the allowable employee cost for the year is to be determined as per the judgment of Hon. High Court of Kerala and APTEL. Hence, a deviation from the directions of above Courts is not possible. Regarding the Judgment of Hon. APTEL on the employee costs, the Commission has already taken a decision in line with said judgment for the years from 2009-10 onwards and these Orders have become final. KSEB Ltd also stated before the Hon. High Court that the "in case the truing up of Accounts for the year 2014-15 onwards are also considered in the light of the revised Orders passed for the year 2010-11 onwards in tune with the judgments of the APTEL, the difficulties faced by the petitioner on account of the Regulations would be addressed to some extent", thereby concurring the methodology adopted by the Commission for determining the employee cost based on the APTEL Judgment.

- 2.49 Regarding the benchmarks and comparisons given by KSEB Ltd, the Commission is of the view that the given data is incomplete as per the submissions of KSEB Ltd. Accordingly, drawing conclusion from such comparison is also not meaningful. Further, the presented data also does not convincingly provide any realistic justification for KSEB Ltd in support of the claim. The employee per 1000 consumers presented is not inclusive of the temporary/contract staff employed by KSEB Ltd and hence the ratio does not reveal the full picture. While comparing the number of consumers exclusion of agricultural pumpsets is not justifiable since the said category accounts for a substantial share of total consumers in other States. Regarding employees per circuit km, the ratio of KSEB Ltd is high and is not comparable with other similarly placed States. Thus, the Commission is not in a position accept the contentions raised by KSEB Ltd.
- 2.50 As per the provisions of the Regulations, the generation business (SBU-G) was entitled for employee expenses as per norms for 2017-18 for the existing stations. However, as mentioned earlier, after the notification of the Regulations, KSEB Ltd challenged the validity of the said Regulations before the Hon'ble High Court of Kerala in the Writ Petition WPC No.465/2015(G). The details of the matter are given below:

Judgment of High Court in Writ Petition WPC No.465/2015(G)

2.51 As mentioned in Chapter 1, the main contention of KSEB Ltd was that the O&M norms for determining the expenditure specified in the Regulations are inadequate, resulting in under recovery of its expenses. Thereafter, KSEB Ltd submitted before the Hon'ble High Court that:

"in case the truing up of Accounts for the year 2014-15 onwards are also considered in the light of the revised Orders passed for the year 2010-11 onwards in tune with the judgments of the APTEL, the difficulties faced by the petitioner on account of the Regulations would be addressed to some extent".

The Commission also submitted before the Hon. High Court that while considering the truing up applications of the petitioner for the year 2015-16, 2016-17 and 2017-18, the Commission would take into account the judgment of APTEL and the consequential orders passed thereafter, Hon'ble High Court on 28-02-2018 issued the final judgment and disposed off the petition WP(C) 465/2015, without going into the broad contentions raised in the writ petition as the Regulation under challenge, which is a sub-ordinate legislation issued under the Section 181(2)(d) of the Electricity Act 2003. The Hon. High Court in the judgment, directed the Commission to pass order on the application of

the petitioner KSEB Ltd for truing up of accounts for the years 2015-16, 2016-17, 2017-18 with due regards to the findings in APTEL Judgments in Appeal Nos. 1 and 19 of 2013 and consequential orders passed by the Commission for 2010-11 onwards, in the case of KSEB Ltd. The relevant portion of the judgment of the Hon. High Court is quoted below:

"In view of the submission made by learned senior counsel that the Commission would take into account Ext.P6 judgment of the APTEL while taking up the applications for truing up of accounts, I direct the 1st respondent to pass orders on the applications of the petitioner for truing up of accounts for the year 2015-16, 2016-17, and in 2017-18 with due regard to the findings in Ext.P6 judgment and the consequential orders passed by the commission for the year 2010-11 onwards in the case of petitioner."

- 2.52 Thus, the Commission is required to comply with the direction of the Hon. High Court of Kerala, with reference to the Order of APTEL in Appeal Nos. 1 and 19 of 2013, while considering the approval of employee cost of KSEB Ltd in the truing up petitions.
- 2.53 The Commission further notes that the Hon'ble APTEL vide the common judgment dated 10-11-2014 had decided on the issues raised in the Appeal Nos. 1 of 2013 and 19 of 2013. In their appeal before the Hon'ble APTEL, against the Commission's Order dated 30-10-2012 on the truing up of accounts of KSEB for the year 2010-11 and the Order dated 28-04-2012 on the ARR&ERC of KSEB for the year 2012-13 KSEB Ltd had raised a number of common issues including i) Employees cost ii) Repair and Maintenance Expenses iii) Administrative and General Expenses iv) Return on Equity v) Depreciation vi) Capitalization of Expenses.
- 2.54 Paragraph 8.3 to 8.6 of judgment of Hon'ble APTEL in Appeal No.1 and 19 of 2013 pertains to the observation and directions regarding the employee cost and related matters, which are extracted below.
 - "8.3 We find that the State Commission in the impugned order dated 28.04.2012 has shown concern about the high employees cost and non-compliance of the directions given by the State Commission in this regard. The State Commission has noted that without a scientific study on manpower requirements, the recruitments are continuing and about 1000 persons are added every year. The State Commission has decided to benchmark employees expenses based on the base year expenses escalated at price indices. The State Commission has used FY 2008-09 as the base year since latest true-up was carried out for 2008-09. The State Commission provided 3% increase in basic pay for accounting for increments. The other components are benchmarked based on CPI/WPI indices with weightage of 70:30 for estimating the

increase in employees cost. Thus, while basic pay was increased by 3% the other components of employees expenses viz. DA allowances, terminal benefits, pay revision, etc., were increased as per CPI/WPI indices with weightage of 70:30 (CPI:WPI)

.

- 8.4 The State Commission has rightly shown concern about the high employees cost but we are not able to appreciate magnitude in the absence of a specific finding about the excess manpower and non-availability of Regulations. We feel that DA increase which is effected as per the Government orders have to be accounted for and allowed in the ARR as it compensates the employees for the inflation. The pay revision as per the agreements reached between the management and the unions have also to be honoured. The terminal benefits have also to be provided for.
- 8.5 We find that the State Commission has taken the actual expenses trued-up for FY 2008-09 as the base. The State Commission should have at least allowed the actual basic pay and DA increase, pay revision and terminal benefits over the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The gratuity directed to be paid as per the judgments of the High court dated 10.03.2003 as the Division bench of the High Court had dismissed the Appeal filed against this judgment, and which were disallowed by the State Commission by order in Appeal no. 1 of 2013 should also be allowed.
- 8.6 Accordingly, we direct the State Commission to true-up the employees cost from FY 2010-11 to FY 2012-13, as per the above directions.
- 2.55 It is clear from the above judgment of Hon'ble APTEL, that as far as employee cost is concerned, the Commission shall at least allow the actual basic pay and DA increase, pay revision and terminal benefits over the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The same was made applicable to the truing up of accounts for 2013-14 also.
- 2.56 The Commission further notes that the Commission in their submission before the Hon. High Court of Kerala on the same issue had stated:

"while taking up the truing up applications of KSEB Ltd for the year 2015-16, 2016-17 and 2017-18 the Commission would take into account the judgment of APTEL and the consequent orders passed thereafter."

The Commission had agreed before the Hon. High Court and consequently Hon. High court had passed Order dated 28-02-2018 directing the Commission to pass orders on the applications of KSEB Ltd for truing up of

- accounts for the year 2015-16 to 2017-18 with due regard to the finding of the judgment of APTEL and consequent orders passed by the Commission for the year 2010-11 onwards in the case of KSEB Ltd.
- 2.57 Thus, based on the submission of KSEB Ltd and submissions of the Commission to consider the request of KSEB Ltd, the Hon. High Court was pleased to pass Orders on the said Writ Petition. Hence, it is clear that the methodology adopted by the Commission in compliance to Hon. APTEL Orders was acceptable to KSEB Ltd as per their submissions before Hon. High Court of Kerala. This submission and acceptance by KSEB Ltd of the Commission's methodology in calculating employee cost is accepted by both sides and hence continued in this year of truing up also as per the submissions before the Hon. High Court.
- 2.58 From a combined reading of the Judgment of the Hon.High Court and Hon. APTEL, it is very clear that in the case of employee costs, the actual basic pay and DA thereon, pay revision and terminal benefits over the actual base year expenses for the level of employees during the year 2008-09, should be provided for. Further, the terminal benefit paid is also required to be allowed. Hence, based on this judgment of Hon. APTEL, the Regulations' provisions regarding employee costs are to be in fact modified to this effect. However, in the case of R&M and A&G expenses, since the decision of the Commission has been upheld in the Judgment dated 10-11-2014, the provisions of the Regulations will stay.
- 2.59 In compliance to the Orders of the APTEL in Appeal Nos 1 and 19 of 2013 and the consequential petitions for truing up for 2009-10 and 2010-11 and truing up for the years 2011-12, 2012-13 and 2013-14, the Commission has approved the employee cost of KSEB Ltd allowing the actual basic pay and DA therein, impact of pay revision as applicable and terminal benefits over the actual base year expenses. Since the Hon. APTEL has in their judgment specifically stated without "accounting for increase in man power from 2008-09 to 2012-13" the Commission has strictly complied with this direction also and considered the manpower level at 2008-09. Based on the details furnished by KSEB Ltd, the Commission has approved the employee cost for the respective year after deducting the cost of additional employees from 2008-09 level for the years from 2009-10 to 2013-14. The same methodology was made applicable for 2015-16 and 2016-17
- 2.60 KSEB Ltd vide letter dated 20-10-2020 has furnished the actual disbursement of pay and allowances and pay revision expenses of the employees recruited after 2009. The total addition to the employees from 2009 was 11519. KSEB Ltd has also stated that the strength of employees in 2018 was 33542 and that in 2009 was 27175. Thus the net increase in employee strength is 6367,

considering the retirements. As per the details furnished by KSEB Ltd, the total amount disbursed for 2017-18 for the net increase in employees (6367 nos) from 2009 (33542-27175) is Rs.232.76 crore.

2.61 In compliance to the Orders of Hon. High Court of Kerala and Hon. APTEL, the employee expenses without accounting for the increase in manpower from 2008-09 can be arrived at by deducting the additional employee expenses net from the 2009 level, from the total employee cost for the year. Thus, as mentioned in the petition, the total employee cost excluding actuarial liability and capitalization for the year 2017-18 is Rs.2195.76 crore. KSEB Ltd has submitted that the excess cost of additional employees is Rs.232.76 crore. Hence, the allowable expenses excluding terminal benefits for KSEB Ltd is Rs.1963.00 crore (Rs.2195.76 crore – 232.76 crore). On a pro-rata basis, the employee cost for SBU-G as per the truing up petition is 5.32% (116.77/2195.76*100) ie., Rs. 104.43 crore if determined as per the directions of the Hon APTEL and judgment of Hon. High Court of Kerala as shown below:

Table 16
Employee cost approved for SBU-G for 2017-18

	SBU-G	KSEB Ltd
	(Rs. crore)	(Rs. crore)
Net Employee costs as per petition	116.77	2195.76
Net employee cost of SBU-G as a percentage of KSEB Ltd	5.32%	
Net cost of additional employees as per the letter dated 20-10-2020		232.76
Balance Employee cost		1963.00
Employee cost attributable to SBU-G (1963.00 crore x 5.32%)	104.43	

2.62 The employee cost approved for SBU-G is as shown below:

Table 17
Employee Cost approved for SBU-G for 2017-18

Employed deat approved for dBC & for Zeff for					
	As per Petition (Rs. crore)	Approved in the truing up (Rs. crore)			
Employee Costs (excluding terminal benefits)	116.77	104.43			

2.63 The total employee cost excluding terminal benefits approved for SBU-G for 2017-18 is Rs.104.43 crore.

Repair & Maintenance Expenses (R&M)

2.64 KSEB Ltd in their truing up petition has claimed the R&M expenses of SBU-G as Rs.29.30 crore. Split up details of R&M expenses of SBU-G as furnished by KSEB Ltd in their petition are given below:

Table 18
Split up details of R&M expenses for SBU-G for 2017-18 as per petition

Particulars	Approved in the Suo motu ARR order (Rs. crore)	As per Audited Accounts (Rs.crore)	As per Truing Up petition (Rs. crore)
Plant & Machinery		15.97	15.97
Buildings		2.88	2.88
Civil Works		6.10	6.10
Hydraulic Works		3.10	3.10
Lines & Cable Networks		0.36	0.36
Vehicles		0.61	0.61
Furniture & Fixtures		0.04	0.04
Office Equipment		0.25	0.25
Gross R&M Expenses		29.30	29.30
Less: Expenses Capitalized		0	0
Net R&M Expenses	20.99	29.30	29.30

- 2.65 KSEB Ltd in their truing up petition stated that the business activity of KSEB Ltd has been continuously increasing over several decades. The average growth in respect of the number of consumers, their electricity requirement and fixed assets during the last 10 years has been 35.95%, 73.29% and 108.631% respectively. Correspondingly the physical assets of KSEB Ltd have also increased substantially.
- 2.66 KSEB Ltd further stated that the total actual R&M expenses increased by just 4.60% over 2016-17 level of expenses (Rs.265.13crore) and which corresponds to the inflationary trends. The physical addition to major fixed assets during the period from 2006-07 to 2016-17 clearly reveals that there has been substantial addition over the period. Ten new hydroelectric stations were commissioned between FY 2009-10 and FY 2015-16. Thus, KSEB Ltd in their truing up petition claimed Rs.29.30 crore as R&M expenses towards SBU-G.

Objections of Stakeholders

2.67 The HT-EHT Association stated that regarding R&M expenses the judgment dated 10-11-2014 of APTEL in Appeal No. 1 and 19 is clear and it has been ruled in favour of the Commission. Hence there is no alteration required in the methodology for determining the R&M expenses and R&M expenses for SBU-G shall be as per the provisions of the Regulations ie., Rs.20.99 crore only.

Provisions in the Regulations

2.68 As per Regulation 44, O&M expenses of existing generating stations of SBU-G are to be determined as shown below:

- 44. **Operation and maintenance expenses.** (1) (a)In the case of existing generating stations, the generation business of KSEB Limited shall be allowed to recover operation and maintenance expenses for each financial year of the first control period, as per the norms specified in Annexure-VII to these Regulations:
- (b) The generation business of KSEB Limited shall, subject to prudence check by the Commission, be allowed to recover, in addition to the above specified normative operation and maintenance expenses, the annual pension contribution to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.
- 2.69 As per Annexure VII of the Regulations, the norms for allowing R&M expenses for the control period have been specified as shown below:

Annexure-VII O&M norms for existing generating stations of generation business of KSEB Limited

Particulars (Rs. crore)	FY 2015-16	FY 2016-17	FY 2017-18
Repair & maintenance expenses	18.73	19.83	20.99

Judgment of Hon. APTEL

2.70	The relevant portion of judgment of Hon'ble APTEL in Appeal No. 1 and 19 2013 pertains to the R&M expenses is extracted below.
	iv) The State Commission also conducted examination of Repair and Maintenance expenses of one of the Divisions of the Board through its staff in order to understand the nature of increase in Repair and Maintenance expenses and found that 36% of the expenses booked as Repair and Maintenance expenses were misclassified as revenue expenses.
	9.6 In view of above findings of the State Commission, we do not incline to interfere with the findings of the State Commission. Thus, this issue is decided against the Appellant.

Analysis and findings of the Commission

2.71 KSEB Ltd had claimed Rs.29.30crore towards R&M expenses. As per the provisions of the Regulations, the allowable R&M expenses for SBU-G for the existing generating stations is Rs.20.99 crore as against the claim of Rs.29.30 crore.

of

2.72 Regarding R&M expenses, Hon'ble APTEL has remarked that

"in view of above findings of the State Commission, we do not incline to interfere with the findings of the State Commission. Thus, this issue is decided against the appellant".

As seen from the above judgment, there is no adjustment required in the case of R&M expenses in light of the judgment of Hon. High Court of Kerala as well as Hon APTEL. The Commission notes that R&M expense is a controllable item as per Regulations, and the licensee is required to adhered to the amount is specified in the Regulations. However, the Commission also notes that KSEB Ltd is eligible for the O&M expenses for new Small Hydro stations and solar generating stations having installed capacity of 49.99MW stations, which are dealt with separately in the subsequent sections.

2.73 Thus, the R&M expenses approved for the year 2017-18 for SBU-G is as shown below:

Table 19
Approved R&M Expenses for SBU-G **2017-18**

7 (5 p) (5 (5 d) (1 d) (1 d) (2 d) (2 d) (2 d) (1 d)				
	As per truing up	Approved in		
	petition	the truing up		
	(Rs.crore)	(Rs. crore)		
R&M Expenses	29.30	20.99		

2.74 Hence, the Commission approves the R&M expenses of Rs.20.99 crore as per the provisions of the Regulations for the purpose of Truing up for the year 2017-18 for the existing stations of SBU-G in line with the Judgment of Hon High Court of Kerala and the Orders of APTEL in 1 and 19 of 2013.

Administration and General (A&G) expenses

2.75 KSEB Ltd in their truing up petition had claimed A&G expense of Rs.25.11 crore. The split up details of A&G expenses as submitted by KSEB Ltd is shown below:

Table 20 A&G expenses under SBU-G for 2017-18

S		2017-18			
S. No.	Particulars	As per Audited Accounts (Rs. Crore)	Truing Up Petition (Rs.crore)		
1	Rent Rates & Taxes	1.01	1.01		
2	Insurance	0.04	0.04		
3	Telephone & Postage, etc.	0.25	0.25		

4	Legal charges	0.37	0.37
5	Audit Fees	0.02	0.02
6	Consultancy charges	0.08	0.08
7	Other Professional charges	1.67	1.67
8	Conveyance	4.32	4.32
9	Vehicle Running Expenses Truck / Delivery Van	0.03	0.03
10	Vehicle Hiring Expenses Truck / Delivery Van	-0.06	-0.06
11	Electricity charges	0.08	0.08
12	Water charges	0.01	0.01
13	Entertainment	0.11	0.11
14	Fees & subscription	0.40	0.40
15	Printing & Stationery	0.32	0.32
16	Advertisements, exhibition publicity	1.20	1.20
17	Contribution/Donations	0.07	0.07
18	Training expenses	1.19	1.19
19	Miscellaneous Expenses	0.33	0.33
20	DSM activities	-	-
21	SRPC expenses	0.20	0.20
22	Sports and related activities	0.12	0.12
23	Freight	2.40	2.40
24	Purchase Related Advertisement Expenses	1.11	1.11
25	Bank Charges	-0.02	-0.02
26	Office Expenses	10.57	10.57
27	License Fee and other related fee	1.25	1.25
28	Cost of services procured	-	-
29	Outsourcing of metering and billing system	-	-
30	V-sat, Internet and related charges	0.01	0.01
31	Security arrangements	-	-
32	Books & periodicals	0.02	0.02
33	Computer Stationery	-	-
34	Others	0.79	0.79
	Others- Other Purchase related Expenses	0.64	0.64
35	Gross A&G Expenses	28.56	28.56
36	Ele. Duty u/s 3(I), KED Act	-	
37	Less: Expenses Capitalised	3.45	3.45
38	Net A&G Expenses	25.11	25.11

Objections of Stakeholders

2.76 The HT-EHT Association stated that applicable A&G expenses as per the Regulations shall be considered ie., Rs.4.86 crore for generation business.

Thus after considering the expenses capitalization of Rs.3.44 crore, only Rs.1.42 crore is to be approved for the year 2017-18 as A&G expenses.

Provisions in the Regulation

- 2.77 As per Regulation 44, O&M expenses of existing generating stations of SBU-G are to be determined as shown below:
 - 44. **Operation and maintenance expenses.** (1) (a)In the case of existing generating stations, the generation business of KSEB Limited shall be allowed to recover operation and maintenance expenses for each financial year of the first control period, as per the norms specified in Annexure-VIIto these Regulations:
 - (b) The generation business of KSEB Limited shall, subject to prudence check by the Commission, be allowed to recover, in addition to the above specified normative operation and maintenance expenses, the annual pension contribution to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.
- 2.78 As per Annexure VII of the Regulations, the norms for allowing A&G expenses for the control period have been specified as shown below:

Annexure-VII O&M norms for existing generating stations of generation business of KSEBL

Particulars (Rs. crore)	FY 2015-16	FY 2016-17	FY 2017-18
Administrative & general expenses	4.34	<i>4.5</i> 9	4.86

Judgment of Hon. APTEL

- 2.79 Hon. APTEL in appeal No. 1 & 19 of 2013 had decided regarding the A&G expenses as given below:
 - 10.3 We find that the State Commission has allowed escalation on the basis of CPI & WPI indices with weightage of 70:30 over the actual A&G expenses for FY 2008-09. The Appellant Board has not been able to give a satisfactory reply to the substantial increase in A&G expenses.
 - 10.4 We do not find any infirmity in the findings of the State Commission."

Analysis and decision of the Commission

2.80 As per the provisions of the Regulations, the allowable A&G expenses for SBU-G for the existing generating stations for 2017-18 is Rs.4.86 crore against the claim of Rs.25.11 crore. As mentioned above, though KSEB Ltd

had filed a petition before Hon. APTEL challenging this norm, Hon. APTEL had stated that:

"the Appellant Board has not been able to give a satisfactory reply to the substantial increase in A&G expenses. We do not find any infirmity in the findings of the State Commission".

The Commission is also aware of the fact that apart from the excess employees employed by KSEB Ltd, the licensee has also engaged substantial number of contract workers for regular maintenance jobs such as manning substations, line maintenance etc., Though the Commission in previous occasions sought KSEB Ltd for the complete details of these contract workers, no reply has been furnished by KSEB Ltd till date.

2.81 The Commission notes that the A&G expense before capitalization for the previous year was Rs.22.70 crore and the expenses capitalized was Rs.13.00 core resulting in net expense of Rs.9.69 crore. In 2017-18, the expenses before capitalization was Rs.28.56 crore and the expenses capitalized was Rs. 3.45 crore resulting in net A&G expenses as per accounts Rs.25.11 crore. Hence the substantial increase in A&G expenses over previous year is mainly on apportionment of expenses and capitalization.

Table 21
Comparison of A&G expenses 2016-17 and 2017-18

	2016-17			2017-18	
Particulars	As per As per truing up Appro		Approved	As per Accounts	As per truing up petition
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Rent Rates & Taxes	6.12	6.12		1.01	1.01
Insurance	0.09	0.09		0.04	0.04
Telephone & Postage, etc.	0.18	0.18		0.25	0.25
Legal charges	0.44	0.44		0.37	0.37
Audit Fees	0.11	0.11		0.02	0.02
Consultancy charges	0.07	0.07		0.08	0.08
Other Professional charges	0.46	0.46		1.67	1.67
Conveyance	3.33	3.33		4.32	4.32
Vehicle Running Expenses Truck / Delivery	0.04	0.04		0.03	0.03
Vehicle Hiring Expenses Truck / Delivery	0.01	0.01		-0.06	-0.06
Electricity charges	0.06	0.06		0.08	0.08
Water charges	0.01	0.01		0.01	0.01
Entertainment	0.07	0.07		0.11	0.11
Fees & subscription	0.32	0.32		0.40	0.40
Printing & Stationery	0.33	0.33		0.32	0.32
Advertisements, exhibition publicity	0.55	0.55		1.20	1.20
Contribution/Donations	0.32	0.32		0.07	0.07

	1	1		1	1
Training expenses	0.76	0.76		1.19	1.19
Miscellaneous Expenses	-0.25	-0.25		0.33	0.33
DSM activities	-	-		-	-
SRPC expenses	0.11	0.11		0.20	0.20
Sports and related activities	0.13	0.13		0.12	0.12
Freight	0.88	0.88		2.40	2.40
Purchase Related Advertisement Expenses	0.45	0.45		1.11	1.11
Bank Charges	-	-		-0.02	-0.02
Office Expenses	7.92	7.92		10.57	10.57
License Fee and other related fee	2.33	2.33		1.25	1.25
Cost of services procured				-	-
Outsourcing of metering and			7		
billing system				_	-
V-sat, Internet and related charges				0.01	0.01
Security arrangements				-	-
Books & periodicals	0.02	0.02		0.02	0.02
Computer Stationery				-	-
Others	0.33	0.33	7	0.79	0.79
Others- Other Purchase related Expenses	0.49	0.49	7	0.64	0.64
Others - Expenditure in distribution of LED	-2.99	-2.99	7	-	-
Gross A&G Expenses	22.70	22.70		28.56	28.56
Ele. Duty u/s 3(I), KED Act	-	-		-	
Less: Expenses Capitalised	13.00	13.00		3.45	3.45
Net A&G Expenses	9.69	9.69	4.59	25.11	25.11
	•			•	

2.82 As explained above, there is no adjustment required in the case of A&G expenses in light of the judgment of Hon. High Court of Kerala as well as Hon APTEL. Since A&G expense is a controllable item and the amount is specified in the Regulations, the same only can be allowed. The A&G expenses approved is as shown below:

Table 22 A&G Expenses for SBU-G for 2017-18

	As per truing up	Approved in
	petition	the truing up
	(Rs.crore)	(Rs. crore)
A&G expenses	25.11	4.86

2.83 Hence, the Commission approves the A&G expenses of Rs.4.86 crore as per the provisions of the Regulations for the purpose of Truing up for the existing generations of SBU-G for the year 2017-18.

O&M expenses for new Generating Stations

2.84 KSEB Ltd had sought allowing O&M expenses of new generating stations in the truing up petition. The Commission noted that the new SHPs and solar generating stations were commissioned after the notification of the Regulations. It is examined separately

O&M costs for new Small Hydro Generating Stations

2.85 KSEB Ltd in their truing up petition stated that six hydro stations were commissioned after the 31-3-2014 and requested to allow the O&M costs of these six plants in addition to the normative O&M cost considered in the regulations. The details of new hydro stations commissioned as per the petition are shown below:

Table: 23

Details of new small hydro stations commissioned after 31-3-2014 as per petition

Project	CoD	Capacity-MW	Energy-MU	Capital cost	Addl. O&M cost
				(Rs. Crore)	(Rs.Crore)
Vilangad	26-07-2014	7.50	22.53	75.83	1.798637
Chimmony	22-05-2015	2.50	6.70	14.58	0.326715
Adyanpara	03-09-2015	3.50	9.01	34.38	0.770402
Barapole	29-02-2016	15.00	36.00	127.50	2.857077
Vellathuval	08-09-2016	3.60	12.17	39.67	0.839814
Perunthenaruvi	24.10.2017	6.00	25.77	58.80	0.49
Total		38.10	112.18	351.76*	7.082646

^{.*}Total capital cost works out to be Rs.350.76 crore only instead of Rs.351.76 crore mentioned in the petition

- 2.86 As shown above, the KSEB Ltd has claimed Rs.7.08 crore towards the O&M expenses for new SHPs commissioned after 31-3-2014.
- 2.87 Apart from this, KSEB Ltd had installed and commissioned solar generating plants with aggregate capacity of 11.885 MW after 31-3-2014. Design energy of these plants comes to 12.83MU. Capital cost for these installations is Rs 87.43 crore and the additional O&M cost sought by KSEB Ltd for such plants is Rs.1.12crore. The details furnished by KSEB Ltd in the petition are given below:

.Table 24

Details of O&M costs for solar energy stations commissioned after 1-4-2014 as per petition

Project	CoD	Capacity (MW)	Design Energy (MU)	Capital cost (Rs.Crore)	Addl. O&M cost claimed
					(Rs.Crore)
Thalakulathur	22.04.2017	0.65	0.881	4.5	0.0825
Vaidyuthi bhavanam-RT	13.06.2017	0.03	0.039	0.228	0.0038
Manjeshwaram	24.05.2017	0.5	0.647	3.693	0.06155
Moovattupuzha	Jan-18	1.25	0.394	7.72	0.0386
Pothencode	Feb-18	2	0.475	11.79	0.0393
Kanjikode	28.08.2015	1	1.4016	6.99	0.156635
Chaliyar	31.08.2015	0.096	0.1346	1.0946	0.024528
Peringalkuthu	10.09.2015	0.05	0.07008	0.4375	0.009804
Banasurasagar Floating	21.01.2016	0.50	0.7008	9.25	0.207278
Banasurasagar solar tree, flower	21.01.2016	0.0034	0.00473	0.2517	
etc					0.00564
Kollamcode	08.082016	1.00	1.4016	6.75	0.142898
Padinjarethara	29.08.2016	0.44	0.56064	4.293	0.090883
Edayar	05.09.2016	1.25	1.752	8	0.16936
Palakkad Adivasi colony (5)	30.11.2016	0.047	0.06588	1.08	0.022864
Barapole Canal Bank	07.11.2016	1.00	1.4016	6.75	0.142898
Palakkad Adivasi colony (2)	30.11.2016	0.018	0.02523	0.7608	0.016106
Barapole canal top	17.11.2016	3.00	4.2048	25.983	0.55006
Roof Top various locations	By Mar 2017	0.70	0.9811	5.88	0.0588
Total		11.885*	12.8289*	87.4278*	1.123817*

^{*}The total capacity works out to be 13.534MW instead of 11.885MW given in the petition, total design energy is 15.141MU instead of 12.8289MU, total capital cost is Rs.105.452 crore instead of Rs.87.4278 crore and additional O&M expenses is Rs.1.824 crore instead of Rs.1.123817 crore mentioned in the petition

Objections of Stakeholders

2.88 None of the stakeholders raised any objections on this item.

Provisions in the Regulations

- 2.89 Regulation 44(2) provides for O&M expenses of new generating stations:
 - "44 (2) 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."
- 2.90 Proviso to Regulation 36(1) of the Renewable Energy Regulations 2015 states as shown below:

36. Applicability. – (1) The regulations specified in this chapter shall apply to determination of tariff for supply of electricity to the distribution business/licensee by a generating company from conventional sources of generation such as coal, gas, liquid fuel and medium as well as large scale hydro-electric plants:

Provided that determination of tariff for supply of electricity to the distribution business/licensee from cogeneration plants, solar plants, small hydro-electric projects, wind energy projects and other renewable energy sources of generation shall be governed by separate Regulations specified by the Commission from time to time:"

Analysis and decision of the Commission

- 2.91 In their truing up petition, KSEB Ltd has stated that new generating stations have been commissioned after the notification of the Regulations. According to KSEB Ltd, in addition to the existing stations O&M expenses have to be allowed for new generating stations which were commissioned after coming into force of the Regulations.
- 2.92 As mentioned above, Regulation 44(2) permits the O&M expenses of new generating stations at 2% of the original capital costs, excluding the cost of rehabilitation and resettlement works. In the case of SHPs, Regulation 36(1) shall apply. The Commission examined the details furnished by KSEB Ltd for SHPs. The capital cost per MW ranges from Rs.5.82 crore to Rs.11.20 crore. The O&M cost sought is about 2.01% of capital cost.

Table 25
O&M costs for 2017-18 of New SHPs sought as percentage of capital costs

Project	CoD	Capacity- MW	Capital cost (RS Crore)	Capital cost/MW (Rs./MW)	Addl. O&M cost (Crore)	O&M cost sought as % of capital cost
Vilangad	26-07-2014	7.50	75.83	10.11	1.80	2.37%
Chimmony	22-05-2015	2.50	14.58	5.83	0.33	2.24%
Adyanpara	03-09-2015	3.50	34.38	9.82	0.77	2.24%
Barapole	29-02-2016	15.00	127.50	8.50	2.86	2.24%
Vellathuval	08-09-2016	3.60	39.67	11.02	0.84	2.12%
Perunthenaruvi	24.10.2017	6.00	58.80	9.80	0.49	0.83%
Total		38.10	351.76		7.08	2.01%

2.93 Similarly, for solar projects also, the O&M costs sought is about 2.24% of the capital cost as shown below:

Table 26

O&M costs claimed for 2017-18 as percentage of capital cost for new solar projects

Project	CoD	Capacity (MW)	Capital cost (Rs.Crore)	Cost/MW (Rs./MW)	Addl. O&M cost(Rs.Crore)	O&M cost sought as % of capital cost
Thalakulathur	22.04.2017	0.65	4.5	6.92	0.08	1.83%
Vaidyuthi bhavanam-RT	13.06.2017	0.03	0.228	7.60	0.00	1.67%
Manjeshwaram	24.05.2017	0.5	3.693	7.39	0.06	1.67%
Moovattupuzha	Jan-18	1.25	7.72	6.18	0.04	0.50%
Pothencode	Feb-18	2.00	11.79	5.90	0.04	0.33%
Kanjikode	28.08.2015	1.00	6.99	6.99	0.16	2.24%
Chaliyar	31.08.2015	0.096	1.0946	11.40	0.02	2.24%
Peringalkuthu	10.09.2015	0.05	0.4375	8.75	0.01	2.24%
Banasurasagar Floating	21.01.2016	0.50	9.25	18.50	0.21	2.24%
Banasurasagar solar tree, flower etc	21.01.2016	0.0034	0.2517	74.03	0.01	2.24%
Kollamcode	08.082016	1.00	6.75	6.75	0.14	2.12%
Padinjarethara	29.08.2016	0.44	4.293	9.76	0.09	2.12%
Edayar	05.09.2016	1.25	8	6.40	0.17	2.12%
Palakkad Adivasi colony (5)	30.11.2016	0.047	1.08	22.98	0.02	2.12%
Barapole Canal Bank	07.11.2016	1.00	6.75	6.75	0.14	2.12%
Palakkad Adivasi colony (2)	30.11.2016	0.018	0.7608	42.27	0.02	2.12%
Barapole canal top	17.11.2016	3.00	25.983	8.66	0.55	2.12%
Roof Top various locations	By Mar 2017	0.70	5.88	8.40	0.06	1.00%
Total		11.885	87.4278		1.12	

- 2.94 As shown above, the O&M expenses claimed by KSEB Ltd is uniformly about 2% with escalation considering the date of commissioning. Since the O&M expenses are benchmarked against the capital cost, Regulation 44 (2) (a) shall govern the calculation of this cost. Since as per Regulation 36, the provisions of the Regulations are applicable to the conventional generation projects and and in the case of Renewable energy projects, the provisions of the Renewable Energy Regulations, 2015 shall apply. Hence, as per proviso to Regulation 36, the provisions of KSERC (Renewable Energy) Regulations 2015 govern the tariff determination for new projects. Since the new projects are under small hydro and solar PV category, the benchmark O&M expense as per the KSERC (Renewable Energy) Regulations 2015 along with its amendments is used for allowing O&M expenses for new generating stations.
- 2.95 As per Annexure H of KSERC (Renewable Energy) Regulations 2015 and Annexure -1 of The KSERC (Renewable Energy) Amendment Regulations, 2017, the O&M expenses for SHPs having installed capacity below 5MW is

specified as Rs.23.63 lakh per MW for the projects commissioned in 2015-16 and Rs.24.98 lakhs per MW as projects commissioned in 2016-17. In the case of projects of and above 5MW and upto and including 25 MW, O&M expenses for the projects commissioned in 2015-16 is specified as Rs.16.54 lakh/MW. The annual escalation rate provided is 5.72%. Based on the above provision the O&M expenses (on pro rata basis) for the new SHP stations are approved as shown below:

Table 27
O&M expenses approved for new SHP Stations for 2017-18

Project	CoD	Capacity- MW	Capital cost (RS Crore)	O&M costs for 2017-18 as per Regulations (Rs. lakh/MW)	O&M charges for 2017-18 (Rs. Crore)
Vilangad	26-07-2014	7.50	75.83	18.49	1.39
Chimmony	22-05-2015	2.50	14.58	26.41	0.66
Adyanpara	03-09-2015	3.50	34.38	26.41	0.92
Barapole	29-02-2016	15.00	127.50	18.49	2.77
Vellathuval	08-09-2016	3.60	39.67	26.41	0.95
Perunthenaruvi	24.10.2017	6.00	58.80	18.49	0.48
Total		38.10	351.76		7.17

- 2.96 Based on the above, the O&M costs for SHPs commissioned after the notification of the Regulations is Rs.7.17 crore as against Rs.7.08 crore sought by KSEB Ltd.
- 2.97 In the case of solar energy projects, KSEB Ltd had sought Rs.1.12 crore as O&M expenses. As in the case of SHPs, for solar energy plants, benchmark O&M expenses specified as per the respective Regulations, is Rs.12.30 lakhs per MW for the plants commissioned in 2014-15 and Rs.7 lakhs per MW for the plants commissioned in 2016-17. The escalation is provided at 5.72%. Based on this, the O&M expense approved for the year for new solar energy plant is as shown below:

Table 28
O&M costs for solar PV projects approved for the year 2017-18

	•	• • • •	•		
Project	CoD	Capacity (MW)	Capital cost (Rs.Crore)	O&M expenses/MW for 2017-18 (Rs. Lakh)	O&M cost for the year (Rs. Lakh)
Thalakulathur	22.04.2017	0.650	4.50	7.40	4.81
Vaidyuthi bhavanam- RT	13.06.2017	0.030	0.23	7.40	0.20
Manjeshwaram	24.05.2017	0.500	3.69	7.40	3.08
Moovattupuzha	Jan-18	1.250	7.72	7.40	2.31
Pothencode	Feb-18	2.000	11.79	7.40	1.23
Kanjikode	28.08.2015	1.000	6.99	14.53	14.53

Chaliyar	31.08.2015	0.096	1.09	14.53	1.39
Peringalkuthu	10.09.2015	0.050	0.44	14.53	0.73
Banasurasagar Floating	21.01.2016	0.500	9.25	14.53	7.26
Banasurasagar solar tree, flower etc	21.01.2016	0.003	0.25	14.53	0.05
Kollamcode	08.082016	1.000	6.75	7.40	7.40
Padinjarethara	29.08.2016	0.440	4.29	7.40	3.26
Edayar	05.09.2016	1.250	8.00	7.40	9.25
Palakkad Adivasi colony (5)	30.11.2016	0.047	1.08	7.40	0.35
Barapole Canal Bank	07.11.2016	1.000	6.75	7.40	7.40
Palakkad Adivasi colony (2)	30.11.2016	0.018	0.76	7.40	0.13
Barapole canal top	17.11.2016	3.000	25.98	7.40	22.20
Roof Top various locations	By Mar 2017	0.700	5.88	7.40	5.18
Total		11.885	87.43		90.78

- 2.98 The O&M costs for solar energy projects for the year 2017-18 as per the Regulations is Rs.0.91crore as shown above.
- 2.99 Thus, the total O&M expense for new SHPs and Solar PV stations approved for the year 2017-18 is Rs.8.08 crore (Rs.7.17 crore+Rs.0.91 crore).

Summary of O&M expenses for SBU-G

2.100 The summary of the O&M expenses excluding terminal benefits as approved by the Commission is shown below:

Table 29
O&M Expenses approved for SBU-G for 2017-18

	As per truing	Approved in
	up petition	Truing up
	(Rs. crore)	(Rs. crore)
Employee Costs (Excluding terminal benefits)	116.77	104.43
R&M Expenses	29.30	20.99
A&G expenses	25.11	4.86
O&M Expenses for New stations	8.20*	8.08
Total O&M Expenses	179.38	138.36

^{*}Not included in the Revenue gap

2.101 Thus, as per the Regulations, total O&M expenses, excluding terminal benefits approved for SBU-G as per the Regulations is Rs. 138.36 crore as shown above.

Capital Additions made during the year 2017-18

2.102 KSEB Ltd in their petition, has stated that as per Accounts, KSEB Ltd executed capital works to the tune of Rs.1658 crore during the year and completed works capitalized to the tune of Rs.1390.56 crore. Of this, Rs.182.98 crore was the asset addition for SBU-G as per Accounts, as shown below:

Table 30
Summary of capitalisation during the year 2017-18

		CWIP as on	Works executed		Adjustments	CWIP as on
Sl. No	SBU	01/04/2017	during the year	GFA Addition		31/03/2018
1	Generation	750.81	361.59	182.98	201.47	1130.89
2	Transmission	352.34	547.38	499.00	40.00	440.71
3	Distribution	680.14	749.03	707.30	155.42	877.29
4	GRAND TOTAL	1,783.29	1658.00	1,390.56	398.18	2,448.90

- 2.103 Of the above Rs.1390.56 crore, Rs.1.29 crore was decommissioning liability. Thus, the net asset addition sought in the petition is Rs.1389.28 crore.
- 2.104 As per the details furnished in the petition, only one project was commissioned in SBU-G ie., Perunthenaruvi SHEP (6MW) which was commissioned on 24-10-2017. KSEB Ltd sought to consider capital asset addition worth Rs.61.96 crore (adjustment of Rs.5.23 crore towards part capitalization made in 2016-17 and Rs.56.73 crore as Asset addition included in 2018-19 Accounts) in 2017-18 towards Perunthenaruvi SHEP. The Commission sought the details of completion regarding the project and KSEB Ltd in the letter dated 20-10-2020 furnished the following details regarding the project.

Table 31
Details of commissioning of Perunthenaruvi SHEP

			<u> </u>	AS	Actual	
Star	t Date	Commission	oning date	Amount	expen- diture	Remarks
						Remarks
Scheduled	Actual	Scheduled	Actual	Rs.crore	Rs.crore	
22-03-2011	02-03-2012	21-03-2014	23-01-2017	67.90	71.95	Delay in land acquisition - forest dept. handed over land during 2011-12 only. Land at right bank was acquired only on 29-6-2016 due to court cases. Adverse climatic conditions such as flood in Pamba River also delayed the work. Increase in Power house area to suit the requirement of the E&M contractor was one of reasons for cost overrun

2.105 KSEB Ltd had installed and commissioned the following solar generating plants with aggregate capacity of 6.590 MW in 2017-18. Capital cost for these installations is Rs 50.34 Crore. Details are furnished in Table below:

Table 32
Solar PV projects commissioned during 2017-18 as per petition

Project	CoD	Capacity (MW)	Cost (Rs.Crore)	Scheme
Thalakulathur, Kozhikkode NABARD	22.04.2017	0.650	4.50	RIDF
Roof top at Vydyuthi Bhavanam, TVPM	17.05.2017	0.030	0.23	IPDS
Manjeswaram, Kasaragod	30.05.2017	0.500	3.69	KSEBL
Generation Roof top Solar projects (17 nos)	7.2017	0.700	5.88	IPDS (2 Locations) &
				KSEBL
Kuttippuram	28.11.2017	0.500	3.46	KSEBL
Banasura reservoir/ Kakkayam Grid connected	04.12.2017	0.500	9.25	
floating solar				State Plan
Pezhakkappally-Muvattupuzha	15.01.2018	1.250	7.72	RIDF
Roof top solar-KSEBL Distribution wing(12	02.02.2018	0.460	3.82	
nos)				IPDS
Pothencode s/s ground mounted	02.02.2018	2.000	11.79	RIDF
		6.590	50.34	

- 2.106 Total GFA addition during 2017-18 as per accounts of KSEB Ltd was amounted to Rs.1390.57 Crore. After deducting the decommissioning liability of Rs.1.29 crore, Rs.1389.28 crore was sought as assets capitalised during the year 2017-18 as per petition. The only projects achieved CoD is in 2017-18 was Perunthenaruvi project. However, GFA addition of the Perunthenaruvi Project was in 2018-19, KSEB Ltd claimed the same in 2017-18 since it was commissioned during 2017-18.
- 2.107 KSEB Ltd had also made certain adjustments such as reversal of IND AS adjustments, withdrawal of part commissioned assets etc to arrive at the amount of GFA addition eligible for 2017-18 for the computation of normative loan. Based on adjustments, KSEB Ltd sought approval of a total capital addition of Rs.1201.48 crore for KSEB Ltd and Rs.117.68 crore for SBU-G for the year 2017-18 in the petition. The adjustments made are summarized in the following Table.

Table 33
Addition to GFA claimed in the petition for the year 2017-18

Particulars	SBU G Rs.crore	SBU T Rs.crore	SBU D Rs.crore	TOTAL Rs.crore
Capitalized during the year-As per IND AS Accounts	182.98	499	707.3	1389.28*
Less: IND AS addition considered in 2016-17, now withdrawn	141.75	113.29	7.85	262.89
Add: GFA addition of KAES not capitalized at ARU level in 17-18.	16.46	0	0	16.46
Less: Part capitalization in 2017-18	1.99	18.34	0	20.33

GFA addition as per Tariff Regulation	117.66	384.37	699.45	1201.48
Add: Perunthenaruvi SHE Scheme commissioned in 2017-18	56.73			56.73
Add: Part capitalization in 2016-17 commissioned in 2017-18	5.23	17	0	22.23

^{*}As per accounts addition to assets is Rs.1390.57 crore, less decommissioning liability Rs.1.29 crore = Rs.1389.28 crore.

- 2.108 In the letter dated 04-1-2021, KSEB Ltd further clarified that as part of Ind AS compliance in 2016-17 GFA worth Rs.414.82 crore (including decommissioning liability of Rs.16.64 crore) was capitalized as on 31-03-2017 at HQ level with instruction to capitalize the same in 2017-18 at ARU level. A sum of Rs.398.18 crore (Rs.414 crore-Rs.16.64 crore) therefore has been reversed as HO level in 2017-18 to nullify the impact of Ind AS adjustments made in the year 2016-17 since the ARUs were under direction to capitalize the same in 2017-18.
- 2.109 According to KSEB Ltd out of the adjustments of Rs.398.18 crore, a sum of Rs.135.29 crore was identified as duplication, and reported in the truing up for 2016-17 and therefore the net amount to be considered is only Rs.262.89 crore (Rs.398.18 crore Rs.135.29 crore) towards reversal in 2017-18. The Commission has already admitted Rs.262.89 crore as per Order in OP64/2019. Therefore, this sum has been excluded while determining GFA addition for 2017-18, since the same is already captured in 2016-17. This amount represented the adjustments made during the year
- 2.110 Further, KSEB Ltd stated that, field ARUs failed to capitalize Kuttiyadi Additional Extension Scheme amounting to Rs.16.46 Crore and therefore the excess reversal to this extent has to be adjusted.
- 2.111 Further, part capitalised assets in 2017-18 to the tune of Rs.20.33 Crore has been excluded. Out of the total Rs.20.33 crore part capitalized projects during the year, Rs.1.99 crore pertains to SBU-G. KSEB Ltd has also furnished the details of part capitalization of projects SBU-wise, the details pertaining to SBU-G is given below:

Table 34
Part capitalisation of projects under SBU-G in 2017-18

Name of Office	Name of Project	Total (in Rs. Crore)
	BDPP-Online continuous stack emission & Online effluent quality monitoring system	0.68
	MARIPPUZHA	-
C E, CIVIL CIRCLE	VALANTHODE	-
KOZHIKODE	CHATHANKOTTUNADA STAGE II	0.17
	PAZHASSI SAGAR	0.01

	OLIKKAL	0.02
	POOVARAMTHODE	0.23
	CHEMBUKADAVU III	0.02
CIVIL CIRCLE KOTHAMANGALAM	Sengulam Augmentation Scheme	0.01
	Poringalkuthu	0.02
	Upper Sengulam SHEP	0.07
	Upper Kallar SHEP	-
	Bhoothankettu SHEP	0.01
CIVIL CIRCLE MEENCUT	Mankulam HEP	0.15
	Chinnar HEP	0.55
	Pallivasal Extension Scheme	0.05
	Chinnar HEP	-
	Pallivasal Extension Scheme	-
	TOTAL	1.99

- 2.112 But Rs. 22.23 Crore worth part capitalization removed in the year 2016-17 has been considered in this year 2017-18 since the projects were commissioned during 2017-18 According to KSEB Ltd the part capitalization in 2016-17 pertains to Perunthenaruvi project worth Rs.5.23crore and the balance Rs.17.00 crore pertains to SBU-T, totaling to Rs.22.23 crore.
- 2.113 GFA addition during 2017-18 as per accounts as reduced / added by Ind AS adjustments reversal, part capitalization etc., are adjusted to arrive at the quantum of GFA addition eligible for the computation of normative loan for 2017-18. Accordingly, Rs.1201.48 crore is proposed as Asset Addition in the petition of which Rs.117.66 crore pertains to SBU-G.

Provisions in the Regulations regarding addition of assets

- 2.114 As per the provisions of Tariff Regulation, only when an asset is ready and put into use, the costs relating to such assets are to be included for determination of tariff as shown below:
 - As per proviso to Regulation 23(2) the value of assets forming part of the project but not put to use or not in use, shall be excluded from the capital cost.
 - As per Regulation 24(4), the assets forming part of the project cost but not put to use, shall not be approved for determination of tariff.
 - Proviso to Regulation 29, RoE shall be allowed on the amount of equity capital approved by the Commission for the assets put to use at the commencement of the financial year.
 - Regulation 30(1)(b) provides that the interest and finance charges on capital works in progress shall be excluded from such consideration.

Hence, the provisions of Regulation clearly excludes the assets which are part capitalized.

Analysis and decision of the Commission

2.115 The GFA addition in 2017-18 as per accounts is Rs.1390.56 crore. Though as per Accounts, the asset addition is Rs.1390.56 crore, KSEB Ltd has sought asset addition of Rs.1389.28 crore only in the petition (Table 5.7 of petition). Out of this Rs.182.98 crore pertains to SBU-G In the clarification letter dated 20-10-2020, KSEB Ltd stated that the difference is on account of decommissioning liability as shown below:

Table 35
Asset Addition as per petition and Annual accounts

	SBU-G	SBU-T	SBU-D	KSEB Ltd
	Rs. Crore	Rs. crore	Rs. Crore	Rs. crore
Asset Addition as per Annual Accounts (IND AS) - 2017-18	183.14	499.47	707.96	1,390.57
Decommissioning liability	0.16	0.47	0.66	1.29
Asset Addition as per petition	182.98	499.00	707.30	1,389.28

2.116 As per the petition, from Rs.1389.28 crore, Ind AS reversals of Rs.262.89 crore and part capitalization of Rs.20.33 crore, are to be excluded to arrive at the net asset addition for the year 2017-18. KSEB Ltd's submission in this regard has been carefully considered by the Commission and the following are the decisions:

Capitalisation of Perunthenaruvi Project

- 2.117 KSEB Ltd submitted that Perunthenaruvi project was commissioned in 2017-18, and KSEB Ltd proposed an additional capitalization of Rs.56.73 crore in addition to Rs.182.98 crore. The above statement reveals that this amount of Rs.56.73 crore was though not taken in the books of accounts in 2017-18, but only in 2018-19, KSEB Ltd proposed to consider the same since the project achieved CoD in 2017-18.
- 2.118 The Commission has examined the details furnished by KSEB Ltd. As per the accounts only Rs.1.06 crore was capitalized for the project (project code 14.95) in 2017-18. The Commission as part of the approval of addition to assets in 2016-17 did not allow part capitalized assets worth Rs.32.18 crore pertaining to Perunthenaruvi Project. KSEB Ltd has proposed asset addition of Rs.56.73 crore pertaining to Perunthenaruvi project in 2017-18, though the same is not included in the accounts in the year 2017-18, but included in 2018-19 accounts only.

- 2.119 The Commission is of the firm view that assets can be considered as part of its fixed assets only if the same is put into its intended use and included as part of accounts. Since this aspect has not been fulfilled by KSEB Ltd the Commission is not in a position to consider the value of assets which is not fully taken into the books. Hence the request to include the amount of Rs.56.73 crore capitalized in the year 2018-19 is declined. Since, the project achieved CoD in 2017-18, the Commission inclined to allow the asset additions pertains to Perunthenaruvi project which was already taken into books as part capitalized assets till 2016-17 ie., before the project was put into its intended use. The balance amount will be considered during the year in which it is taken in the books after prudence check.
- 2.120 Details of the part capitalization of Assets pertaining to SBU-G which was disallowed by the Commission in 2016-17 is as shown below:

Table 36
Project wise Part capitalised Assets under SBU-G disallowed in the Truing up for 2016-17 (OP64/2019)

Project code	Name of the project	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Total
14.15	Sabarigiri Pumping scheme					1.40	3.01	4.41
14.20	Western Kallar SHP						0.01	0.01
14.25	RMU Sholayar						0.08	0.08
14.49	Poovaramthode SHEP					0.95	0.99	1.94
14.64	Marmala SHEP						1.02	1.02
14.65	Kuttiadi SHEP	0.05		0.23	1.83		0.02	2.13
14.69	RMU-Poringalkuthu						2.03	2.03
14.71	Peruvannamuzhi SHEP						2.23	2.23
14.72	Chembukadavu III SHEP						2.67	2.67
14.74	Chinnar SHEP			5.39	5.82	2.95	3.15	17.31
14.77	Pallivasal Extension Scheme	0.09	1.57	1.06	6.72	0.63	0.01	10.08
14.79	Mangulam HEP	0.80	4.07	7.26	7.37	5.47	16.33	41.30
14.89	LADRUM SHEP				0.05	0.62	1.02	1.69
14.95	Perunthenaruvi SHEP	0.46	0.29	18.66	5.93	1.61	5.23	32.18
	Total	1.40	5.93	32.60	27.72	13.63	37.80	119.08
	Total from 2011-12 to 2016-17							119.08

2.121 The Commission notes that in the Order dated 12-10-2020 in OA 64/2019, the Commission had disallowed the part capitalized assets pertaining to 14 account heads in SBU G worth Rs.119.08 crore. Out of this, Rs.32.18 crore pertains to Perunthenaruvi SHEP. Ie., Rs.5.23 crore pertains to part-capitalization of the Perunthenaruvi SHEP in 2016-17 and the balance Rs.26.95 pertains to part capitalization from 2011-12 to 2015-16. KSEB Ltd in their letter dated 04-01-2021 had sought to include this amount, since the

project had achieved CoD in 2017-18. Since the project has declared CoD during 2017-18, the Commission hereby allows Rs. 32.18 crore (Rs.5.23 crore+Rs.26.95 crore) to be included in the capital assets added during the year 2017-18. In this context, the Commission notes the qualified opinion given by the Auditor in the Annual Accounts under Property, plant and equipment and capital work in progress. KSEB Ltd shall address these comments on priority.

Time and Cost overrun of completion of Perunthenaruvi under SBU-G

- 2.122 SBU-G of KSEB Ltd has commissioned only one small hydro project i.e., Perunthenaruvi in 2017-18. As per the details furnished by KSEB Ltd the scheduled commissioning date was 21-03-2014 and the actual commissioning date was 21-03-2017, showing a delay of about 34 months. According to KSEB Ltd, delay was on account of delay in land acquisition. The forest department handed over the land in 2011-12 only and the land at the right bank was acquired only on 29-06-2016 due to court cases. The flood in Pamba river was also stated to be the reason for delay. The sanctioned project cost was Rs.67.90 crore whereas the expenditure so far booked is Rs. 71.95 crore. As per the details shown as capitalization itself up to 2018-19, is Rs.88.91 crore. Such huge cost escalation was not explained properly
- 2.123 The details for examination of the time and cost overrun of the projects commissioned in 2017-18 is neither available not has been provided. Hence, the same is not considered in this truing up. The same will be appropriately taken up after seeking balance details from KSEB Ltd.

Part capitalisation under SBU-G in 2017-18

2.124 KSEB Ltd has stated in the petition that part captivated projects worth Rs.1.99 crore under SBU-G under Civil circles Meecut, Kothamangalam and Kozhikode for the year 2017-18 is to be removed. Since the projects are not commissioned, the same is not considered in the truing up.

GFA addition of KAES not capitalized at ARU level in 2017-18.

2.125 KSEB Ltd in their petition stated that, field ARUs failed to capitalize Kuttiyadi Additional Extension Scheme amounting to Rs.16.46 Crore while making adjustments as part of Ind AS adoption in 2016-17. However, the same was removed at the H.O level in 2017-18 and therefore the excess reversal to this extent has to be adjusted. The Commission examined the matter in detail. It is noted that the said amount is not yet reflected in the accounts and hence the amount cannot be admitted. KSEB Ltd may claim the said amount as and when included in the accounts.

Summary of the approved capital additions in 2017-18

2.126 The adjustments and other changes to be made for the year 2017-18 is as shown below:

Table 37
Asset addition approved for the year 2017-18

	SBU-G	SBU-T	SBU-D	KSEB Ltd
	Rs. Crore	Rs. crore	Rs. crore	Rs. Crore
Addition As per IND AS Accounts-2017-18	182.98	499.00	707.30	1,389.28
Less: IND AS addition considered in 2016-17, now withdrawn	141.75	113.29	7.85	262.89
Add: GFA addition of KAES not capitalized at ARU level in 17-18.	0.00	-		0.00
Less: Part capitalization in 2017-18	1.99	18.34	-	20.33
Add: Part capitalization in 2016-17 commissioned in 2017-18	5.23	17.00	-	22.23
Add part capitalisation 2011-12 to 2015-16 (Perunthenaruvi/ muvta 110kv)	26.95	4.45		31.40
Add: Perunthenaruvi SHP 2017-18 (Since not in the accounts, not included)	0.00			0.00
GFA addition for 2017-18	71.42	388.82	699.45	1,159.69

- 2.127 In the above table following adjustments are made:
 - a) Withdrawal of addition of Rs.262.89 crore made in 2016-17 as per Ind AS. During the part of the Ind AS adoption, addition capital assets pertain to previous three years (2014-15 to 2016-17) for a total of Rs.414.82 crore was made. The effect of the same was reflected in 2017-18 accounts. Since these adjustments were made for the respective previous years, the has to be withdrawn from 2017-18. Of this Rs.414.82 crore Rs.16.64 crore was decommissioning liability. Out of the balance Rs.398.18 crore, Rs.135.29 crore was identified as duplication and the same was accounted and removed as part of asset addition in 2016-17. Thus, the balance amount to be considered is Rs.262.89 crore. Thus, the net amount of Rs.262.89 crore was already accounted as part of Ind AS adjustments for 2016-17, the same is to be removed from the additions in 2017-18. Of this Rs.262.89 crore, share of SBU-G is Rs.141.75 crore
 - b) Part capitalization in 2017-18: KSEB Ltd stated in the petition that the part-capitalization is **Rs.20.33 crore** in 2017-18. Of this, SUB-G is Rs.1.99 crore
 - c) Reversing the part-capitalized assets in previous years. Assets commissioned in 2017-18 for which Part capitalized portion included in the accounts in previous years till 2016-17, but removed in 2016-17. As part of the details furnished for assets addition in 2016-17, part capitalization for Perunthenaruvi SHEP to the tune of Rs.32.18 crore was disallowed and removed (Rs.26.95 crore from 2011-12 to 2015-16 and Rs.5.23 crore for 2016-17) from the total asset addition for 2016-17. As per the petition in 2017-18 Perunthenaruvi project achieved CoD. in 2017-18. Since the project has been achieved CoD in 2017-18, the value of assets already taken in the books is to be considered.

However, KSEB Ltd sought to include the balance portion of Asset of Perunthenaruvi SHEP to the tune of Rs.56.73 crore, which was in fact included in 2018-19. The Commission notes that since the said amount is not reflected as part of the assets in the accounts for 2017-18, it cannot be considered. As soon as the same is reflected in the accounts, the same will be considered.

d) Capitalization of KAES: The claim of KSEB Ltd to include the capital addition of Rs.16.46 crore since field unit failed to capitalize the same, is declined since it is not reflected in the accounts so far.

Table 38
Summary of approved Asset addition in 2017-18 and GFA

	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Opening level of Approved GFA (as on 01-04-2017)	4,658.32	4,628.56	7,530.50	16,817.38
Asset Additions approved in 2017-18	71.42	388.82	699.45	1,159.69
Closing balance of GFA (as on 31-03-2018)	4,729.74	5,017.38	8,229.95	17,977.07

2.128 The total approved Asset additions for GA KSEB Ltd in 2017-18 is Rs. 1159.69 crore of which share of SBU-G is Rs.71.42 crore, against Rs.117.66 crore sought in the petition.

Interest and financing charges

2.129 The interest charges claimed by KSEB Ltd for SBU-G was Rs.146.71 crore for the year 2017-18 as against the approved interest charges of Rs.221.29 crore in the *Suo motu* ARR&ERC Order as shown below:

Table 39
Interest and financing charges claimed in the petition for 2017-18

No	Particulars	Approved in the Suo motu ARR Order Rs. Crore	As per accounts (Rs. Crore)	Truing up petition (Rs. Crore)
1	Interest on Outstanding Capital Liabilities	171.62	136.65	87.75
2	Less: Capitalized	0.00	11.53	
3	Net Interest on outstanding cap. Liabilities	171.62	125.12	87.75
4	Interest on GPF	7.21	8.23	8.23
5	Other Interests	0.52	3.26	0.76
6	Interest on Master Trust Bonds	41.94	42.90	42.90
7	Interest on Working capital	0.00	5.00	7.07
8	Total	221.29	184.51	146.71

2.130 In the petition, KSEB Ltd has stated that following factors caused difference between actual figures from approved values:

- a. The Commission considered Rs. 1560 Crore as the loan share of SBU-G as on 31-03-2016 based on the GFA of SBU-G as on 31.03.2013 and approved interest @ 11% on this amount. There has been change in allocation of loans among SBUs as per audited accounts and average rate of interest was 9.47%.
- b. However as per as per audited accounts, loan amount of SBU-G is Rs. 1468.46 Crore and net Interest thereon is Rs. 125.12 Crore. The interest on loans as per accounts is net of capitalized portion of interest pertaining to capital works in progress.
- c. True up claim has been preferred in this petition strictly in compliance of relevant provisions contained in Tariff Regulations. Reason for variation is primarily because of the loan amount considered in Suo motu approval and normative amount considered in truing up.
- 2.131 In the Suo *motu* ARR order, the Commission had approved the interest charges for SBU-G at Rs.221.29 crore considering Rs.1560.18 crore as the loan at the end of 31-3-2016 based on the GFA of SBU-G as on 31-10-2013 and the interest at the rate at 11%. Further, the Commission has also approved the interest on Master trust in lieu of terminal benefits.
- 2.132 Interest charges include, interest on long term secured and unsecured loan, interest on Master Trust Bonds, interest on GPF, interest on security deposits, interest on overdraft, and other interest charges. Each item is explained below:

Interest on normative loan for existing assets

- 2.133 In the petition, KSEB Ltd stated that as per the methodology adopted by the Commission interest on normative loan as on 01-04-2017 has been determined after considering GFA, approved depreciation, consumer contribution and grants and equity. As per this, an amount of Rs.87.75 crore is claimed as interest on normative loan for SBU-G. The same has been claimed as per the truing up petition. However, as per the accounts, the actual loans and interest charges are different and the same as per accounts is given below:
- 2.134 In the petition, KSEB Ltd stated that SBU wise interest as per accounts, the basis of apportionment of loans and interest among SBUs in the account are shown as below:

Table 40
Basis of apportionment of interest charges as per accounts for 2017-18

No	Institution	Basis
Α	SECURED LOANS-TERM LOANS	
1	LIC	GFA+CWIP
2	REC ON VARIOUS SCHEMES	GFA+CWIP
3	REC R-APDRP PART-B	DISTRIBUTION
4	R E C – RGGVY	DISTRIBUTION
5	REC – Medium Term Loan	GFA+CWIP
6	PFC-Pallivasal	GENERATION
7	PFC R-APDRP	DISTRIBUTION
8	SOUTH INDIAN BANK-Barapole	GENERATION
9	PFC GEL KAKKAYAM	GENERATION
10	REC-Distribution-23 circle scheme	DISTRIBUTION
11	REC-Distribution-Meter scheme	DISTRIBUTION
12	REC-Thottiyar	GENERATION
13	REC-Transmission-Kattakkada-Pothencode	TRANSMISSION
14	REC-Transmission-Group 1	TRANSMISSION
15	Special loan assistance REC	GFA+CWIP
16	DRIP	GENERATION
17	R E C-DDG Scheme	DISTRIBUTION
18	RIDF of NABARD-Upper Kallar & Banasurasagar	GENERATION
19	Special loan assistance -PFC	GFA+CWIP
20	PFC GEL Perunthenaruvi	GENERATION
В	UNSECURED LOANS TERM LOANS	
1	State Bank of India	GFA+CWIP
2	Vijaya Bank	GFA+CWIP
3	South Indian Bank	GFA+CWIP
4	Bank of India	GFA+CWIP
5	REC	GFA+CWIP
6	Union bank of India	GFA+CWIP
7	Canara Bank	GFA+CWIP
8	Andhra Bank	GFA+CWIP

2.135 The total borrowings of KSEB Ltd during 2017-18 as per the Accounts is shown in the Table below:

Table 41
Interest charges for Loans and advances as per accounts for 2017-18

	Secured	Unsecured	Total
	loan	loan	loan
Gross Loan -Opening	4,266.57	1,887.50	6,154.07
Cumulative repayments till previous year (IND Adj)2016-17	269.67	-	269.67
Net loan-Opening – 01/04/17	4,536.23	1,887.50	6,423.73
Add: Drawal (s) during the Year	586.17	4,763.97	5,350.14
Less: Repayment (s) of Loans during the year	92.99	5,201.54	5,294.52
Net loan – Closing – 31/03/2018	5,029.42	1,449.93	6,479.35
Current maturities of long term debt (CFL)	263.19	-	263.19
Ind ADJ	70.97	-	70.97
Net loan – Closing – 31/03/2018	4,695.25	1,449.93	6,145.19

Interest on loan	477.20	133.78	610.98
Rate of Interest on Loan on annual basis %		1	9.47
Average Net Loan	4,782.82	1,668.72	6,451.54

2.136 The above table reveals that the total loan outstanding as on 31-3-2017 for KSEB Ltd was Rs.6423.71 crore. Of this outstanding loan, Rs 4536.23 crore is classified as secured long term loans and Rs.1887.50 crores as unsecured.

Table 42
SBU wise Interest charges on loan for 2017-18

							Average
	Opening	Add: additions	Less: Repayments	Closing	Interest	Average	interest rate
SBU	(01/04/17)	during the Year	during the year	(31/03/18)	on loan	loan	(%)
SBU G	1460.19	1293.72	1285.45	1468.47	136.65	1464.33	9.33
SBU T	1488.18	1460.43	1542.03	1406.58	133.92	1447.38	9.25
SBU D	3475.36	2595.99	2467.05	3604.30	340.41	3539.83	9.62
Total	6423.73	5350.14	5294.53	6479.35	610.98	6451.54	9.47

- 2.137 As per the details furnished by KSEB Ltd the outstanding loan as on 01-04-2017 was Rs.6423.73 crore and the net addition in loan was Rs.55.61 crore in 2017-18. There is net increase in secured loans whereas unsecured loans have been reduced in the current year.
- 2.138 Against total closing loan of Rs.6479.35 crore, KSEB Ltd has apportioned Rs.1468.47 crore towards SBU-G. In order to service this long-term loan @ average interest rate of 9.33% per annum, KSEB Ltd have apportioned Rs.136.65 crore towards interest and financing charges for SBU-G.
- 2.139 KSEB Ltd stated that since short term loans could be obtained at comparatively lower rate than long term loans, KSEB Ltd had availed short-term loans for meeting capital liabilities in the past. Considering the risk involved in financing capital project through short term loans, KSEB Ltd had started availing long and medium-term loans for this purpose by restricting STL borrowings to the possible extent. KSEB Ltd was able to secure STL at more favourable rates than those prevailed earlier and thereby reduced interest burden by Rs.58.28 Crore in comparison to 2016-17. Thus, interest on STL for the year 2017-18 had been Rs.133.78 Crore compared to Rs. 192.06 Crore of previous year.
- 2.140 In the petition, KSEB Ltd stated that as per the truing up orders for 2015-16 and 2016-17 the Commission has approved interest on loan on normative basis. Based on the said methodology, the normative loan at the beginning of the year 01-04-2017 has been determined based the GFA and approved depreciation as on 01-04-2017. As per the computation, an amount of

Rs,87.75 crore is claimed as interest on normative loan for SBU-G for 2017-18 as shown below:

2.141 As per accounts, KSEB Ltd executed capital works to the tune of Rs.1658.00 Crore during 2017-18. The completed works capitalized during the year was to the tune of Rs.1390.56 crore. As part of IND AS compliance in 2016-17, GFA worth Rs. 414.82 Crore (including de commissioning liability Rs.16.64 Crore) was capitalized as on 31.03.2017 at HO level with instruction to capitalize the same in 2017-18 at ARU level. This amount as reduced by decommissioning liability denotes the adjustments during the year. A summary of capital works is furnished below:

Table 43
Summary of capital works executed in 2017-18 as mentioned in the petition

		CWIP as on	Works executed		Adjustments*	CWIP as on
Sl. No	SBU	01/04/2017	during the year	GFA Addition		31/03/2018
1	Generation	750.81	361.59	182.98	201.47	1130.89
2	Transmission	352.34	547.38	499.00	40.00	440.71
3	Distribution	680.14	749.03	707.30	155.42	877.29
4	GRAND TOTAL	1,783.29	1658.00	1,390.56	398.18	2,448.90

^{*}Adjustments = 398.18 crore=414.82-16.64 crore (decommissioning liability)

- 2.142 The Commission, as per Truing up Order for 2016-17 has determined normative loan at Rs.1951.51 Crore as on 31.03.2017 by considering GFA addition till 31.03.2016. Additional normative loan/Asset addition for the year 2016-17 was not approved for want of details as stipulated in the Tariff Regulation. The Commission also directed KSEB Ltd to furnish the same, so as to determine the extent of additional loan for 2016-17. In compliance of the direction, KSEB Ltd submitted additional details along with computation of normative loan applicable for GFA addition in 2016-17 amounting to Rs.916.65 Crore. According to KSEB Ltd after deducting depreciation for the year, closing balance of additional normative loan for 2016-17 has been Rs.899.91 Crore.
- 2.143 However, KSEB Ltd was aggrieved on the determination of normative loan balance as on 01.04.2015 (Rs.2276.22 Crore) by the Commission in the truing up Order for 2015-16 and sought review for an additional claim of Rs.467.60 Crore (on account of depreciation disallowed), which was turned down as per the Review order dated 16.05.2019. Aggrieved by the decision, KSEB Ltd has filed an appeal before the Hon'ble APTEL. In view of the above, the quantum of normative loan at the beginning of the year has been considered in this petition at Rs. 3319.02 Crore as detailed below:

Table 44

Normative loan claimed at the beginning of the year as per KSEB Ltd petition

SI.	Description	Amount
No		Rs. crore
1	Closing balance of Normative loan as per True up order for 2016-17	1951.51
2	Add: Additional normative loan claimed by KSEBL as per separate submission (for	899.91
	2016-17 Asset addition)	
3	Add: Claim towards normative loan as on 01.04.2015 pending disposal before APTEL.	467.60
4	Opening balance of Normative loan as on 01.04.2017 considered in this petition	3319.02
	(1+2+3)	

2.144 As shown above, KSEB Ltd claimed that the normative loan as on 01-04-2017 is Rs.3319.82 crore. The SBU wise split up is as per the petition is as shown below:

Table 45 SBU wise allocation of normative loan as per petition

SI. No	Particulars	SBU G	SBU T	SBU D	Total
	Normative loan as on 01.04.2017 as per TU				
1	order	564.38	547.59	839.54	1951.51
2	KSEBL claim before Hon'ble APTEL	135.23	131.21	201.16	467.60
3	Additional normative loan for 2016-17	291.21	241.44	367.26	899.91
4=					
(1+2+3)	Opening normative loan considered in petition	990.82	920.24	1407.96	3319.02

2.145 As per the provisions of the Regulation, depreciation is treated as deemed repayment. Depreciation on Fixed assets till 01.04.2017 amounted to Rs.520.47 Crore which is considered as normative repayment. Normative interest for opening balance of loans for 2017-18 (as on 01.04.2017) amounted to Rs.288.45 Crore as detailed below

Table 46
Interest charges for Normative loan as on 1-4-2017 claimed in the petition

		SBU G	SBU T	SBU D	Total
Sl. No	Particulars	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
1	Normative loan as on 01.04.2017 as per TU order	564.38	547.59	839.54	1951.51
2	KSEBL claim before Hon'ble APTEL	135.23	131.21	201.16	467.60
3	Additional normative loan for 2016-17	291.21	241.44	367.26	899.91
4= (1+2+3)	Opening normative loan considered in petition	990.82	920.24	1407.96	3319.02
5	Normative repayment	142.39	149.15	228.93	520.47
6= (4-5)	Closing normative loan	848.43	771.09	1179.03	2798.55
7= (4+6)/2	Average normative loan	919.63	845.67	1293.50	3058.79
8	Average rate of interest (Actual)	9.33%	9.25%	9.62%	9.47%
9= (7*8)	Normative interest	85.80	78.22	124.43	288.45

2.146 Thus, KSEB Ltd has claimed an interest cost of Rs.85.80 crore for SBU-G for the existing normative loan as on 01-04-2017, from the total interest charges of Rs.288.45 crore.

Addition to normative loan for 2017-18

2.147 KSEB Ltd has claimed Rs.1201.48 crore as the net asset addition for the year 2017-18 of which Rs.117.66 crore is for SBU-G. In the petition KSEB Ltd also furnished the details of Consumer contribution, capital subsidy and grants. Receipt under this head during 2017-18 amounted to Rs. 573.45 Crore. SBU wise segregation of capital receipts are as given below:

Table 47

Consumer contributions, Grants and subsidy received in 2017-18 as per petition

SI.	Description	(Rs Crore)
No		
1	SBU G	75.31
2	SBU T	103.99
3	SBU D	394.15
4	Total	573.45

2.148 Based on the above, the total net asset addition for the year 2017-18 for SBU-G as per the petition is Rs.42.35 crore and that of KSEB Ltd is Rs.628.03 crore as shown below:

Table 48
Interest charges on normative loan for addition of assets as per petition

SI No	Particulars	SBU G	SBU T	SBU D	TOTAL
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA addition eligible for normative loan	117.66	384.37	699.45	1201.48
2	Consumer contribution, Grants and Subsidies received during the year	75.31	103.99	394.15	573.45
3	Equity infusion during the year	0	0	0	0
4=(1-2-3)	Additional normative loan for 2017-18	42.35	280.38	305.30	628.03

2.149 Based on the net addition of assets for the year 2017-18, entitlement of additional normative loan eligibility for 2017-18 works out to Rs.628.03 Crore and normative interest Rs.29.25 Crore for KSEB Ltd. Out of this the share of SBU-G is Rs.1.95 crore as shown below:

Table 49
Interest charges on normative loan for addition of assets as per petition

SI No	Particulars	SBU G	SBU T	SBU D	TOTAL
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA addition eligible for normative loan	117.66	384.37	699.45	1201.48
2	Consumer contribution, Grants and Subsidies received during				
	the year	75.31	103.99	394.15	573.45

	T				
3	Equity infusion during the year	0	0	0	0
4=(1-2-3)	Additional normative loan for 2017-18	42.35	280.38	305.30	628.03
5	Less: Normative repayment for 2017-18 (Depreciation on				
	assets added in 2017-18 at half the normal rate (@				
	5.14%/2=2.57%)	1.09	7.21	7.85	16.14
6=(4-5)	Net additional normative loan	41.26	273.17	297.45	611.89
7 =(6/2)	Average additional normative loan	41.81	276.78	301.38	619.96
8	Average rate of Interest % (Actual)	9.33	9.25	9.62	9.47
9 =(7*8%)	Normative interest on GFA addition for 2016-17	1.95	12.80	14.50	29.25

Table 50

Total interest charges on normative loan as per petition.

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
1	Normative interest on loan as on 01.04.2017	85.80	78.22	124.43	288.45
2	Normative interest on loan during 2017-18	1.95	12.80	14.50	29.25
3	Total	87.75	91.02	138.93	317.70

2.150 As shown above, KSEB Ltd claimed Rs.87.75 crore for SBU-G as interest on normative loan including the asset addition made during the year.

Objection of stakeholders

- 2.151 The HT-EHT Association had objected to the claims of KSEB Ltd. According to the Association, the Commission has taken only 58% of the value of grants of Rs.4670 crore for arriving at the normative loan requirements. According to the Association, the method would have been correct if the licensee had accounted the grants and contributions for the creation of assets as per AS 12 accounting standards i.e., depreciation for the assets created out of contribution and grants are booked as expenses and equal amount is treated as income in the P&L accounts to nullify the effect, thereby write off of assets and grants over the useful life of assets.
- 2.152 However, KSEB Ltd has not followed the AS12 provisions till 2013-14, instead it had only booked depreciation in its P&L accounts. The corresponding income portion has not been recognized in the such P&L accounts. Hence the corresponding reduction of 42% for depreciation is not correct. The objector also stated that according to their calculation, the opening level of normative loan as on 01-04-2015 is only Rs.314.82 crore (i.e., Rs.8483.82 crore (NFA as on 01-04-2015) Rs.3499 crore (Equity as on 01-04-2015) Rs.4670 crore (grants and contributions as on 01-04-2015=314.82 crore). The objector has shown the detailed calculation of the claim as shown below

Table 51
Calculation of normative loan by objector

S.No	Particulars	Amount in
		Crore
1	GFA as on 01/04/15	26608.06
2	Value enhancement as per Transfer scheme	11988.99
3	Net GFA = (1-2)	14619.07
4	Cumulative Depreciation as on 01/04/15	6800.04
5	Less: Depreciation disallowed due to rates difference	664.79
6	Net Depreciation allowed = (4-5)	6135.25
7	Net fixed Assets = (3-6)	8483.82
8	Equity	3499.00
	Consumer contribution	
9	as on 31/10/13	4169.87
10	additions from 01/11/13 to 31/03/14	172.61
11	additions in 2014-15	327.52
12	Total grants & cons cont. as on 01/04/15 = (9+10+11)	4670.00
13	Normative opening loan as on 01/04/15 = (7-8-12)	314.82

- 2.153 The Association also pointed out that the asset addition in 2016-17 and 2017-18 is to be examined closely before allowing this addition considering the observation made by the Commission in its Order in the Truing up of accounts for 2016-17. Considering the claims, and allowing asset addition of Rs.899 crore in 2016-17 and depreciation for the year Rs.369.87 crore, the opening normative loan according to estimate of the objector is Rs.890.07 crore. After depreciation of Rs.369.87 crore for the year 2017-18, the closing normative loan is Rs.520.20 crore. Accordingly, the interest charges at 9.47% is Rs.66.78 crore only. Since the Commission has not approved any capital expenditure in 2017-18, there is no addition to normative loan for the year 2017-18.
- 2.154 The Association also pointed out the serious remarks made by the C&AG regarding execution of SHEPs. According to the Association, C&AG in their Report had highlighted that four SHEP projects namely Barapole, Kakkayam, Adyanpara and Perunthenaruvi had defective financial appraisals. For all these projects, as per CAG, the IRR of the project will fall below the cost of capital if proper financial principles in assessing financial viability is followed. The report says that ".....because as per the guidelines issued by SERC and CERC, the SHEPs were to be financially viable. But KSEBL assessed the financial viability of SHEPs using incorrect criteria and thereby financial tools like IRR, NPV etc. were made out to be attractive...."
- 2.155 Further, the CAG Report summarized the observation on SHEP as "Against the envisaged capacity addition of 148 MW through commissioning of 22 SHEPs during the twelfth five-year plan period (2012-17), actual capacity

addition was 39.35 MW by commissioning seven SHEPs as of March 2018. Detailed Project Reports were prepared without considering water availability based on 90 per cent dependable year and realistic financial viability indicators. Delay in diversion of forest land and acquisition of private land, defective DPR and non-synchronization of civil and E&M works led to extension of completion time and resultant loss of generation of 608.93 MUs of energy valuing ₹313.59 crore. Further, KSEBL sustained avoidable liability to purchase 6.09 lakh Renewable Energy Certificates to meet Renewable Purchase Obligation. Performance of the commissioned units did not match the projections due to failure of equipment, obstructions in the free flow of water to the water conductor system etc". Based on this, the Association requested the Commission to take into consideration the observations made by CAG and the prudence of SHEP projects shall be determined accordingly.

- 2.156 The Association also stated that based on the reference in the CAG Report on the investments in the power sector and commented that the Commission may verify the variation in figures being reported and approve the finance charges on the basis of approved Capex, financing as per regulations and interest rates as per the capital loans raised by petitioner. Further, the Commission may verify the details of funding, the petitioner has received from FY14 to FY18 and consider the applicable rates also while computing the weighted average interest rates. If interest free long-term loans have been extended to KSEBL, the Objector requests Hon'ble Commission that the benefits of lower cost of financing shall be extended to the consumers as well.
- In reply to the comments of the Association, KSEB Ltd stated that the 2.157 normative loan as on 01-04-2015 was decided by the Commission as per the Order dated 31-08-2019 (OA6 of 2018). Since there is no challenge so far, this Order has become final and hence cannot be agitated and is not subjected to re-opening. According to KSEB Ltd as per AS 12, the Commission has disallowed depreciation on grants and contribution to the tune of Rs.689.40 crore. Hence, the contention of the petitioner is not valid. KSEB Ltd pointed out that the consideration the petitioner had deducted from the GFA accumulated depreciation and then deducted the entire grants and contribution which is against AS 12 and erroneous. The objector failed to consider the fact that the depreciation is inclusive of the depreciation for assets created out of contribution and grants. Hence, the entire contributions cannot be deducted and only the portion can be deducted. On the contrary KSEB Ltd argued that the depreciation to be considered is only Rs.5445.85 crore which amounts to 37.25% instead of 42%. Hence the normative loan to be considered is Rs.2930 crore.

2.158 KSEB Ltd also rejected the argument of the Association that the capital addition for the year 2017-18 is to be disallowed since capex sanction was not obtained. KSEB Ltd stated that the same was submitted on 06-07-2017 itself.

Provisions in the Regulation

2.159 Regarding approval of the interest charges, following Regulations provide the detailed procedure for the approval of interest and financing charges.

Regulation 27 provides for the debt: equity ratio and the relevant portions are given below:

- "27. Debt-equity ratio. (1) For the purpose of determination of tariff, debt-equity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission: Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.
- (2) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (3) Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.
- (4) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending the Thirty First day of March, 2015 shall be considered.

"

- 2.160 As per Regulation 27(1), for determination of tariff, debt: equity as on the date of commercial operation on or after first day of April 2015 shall be 70:30. As per proviso to Regulation 27(1), debit equity ratio shall be applied only to the balance of the capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy and grant if any. As per the details furnished by KSEB Ltd the total contribution and grants received during 2017-18 is Rs.573.95 crore.
- 2.161 Regulation 27(3) and Regulation 29 are also applicable while estimating the normative interest on loan. As per Regulation 29, Return on equity is to be allowed on the paid-up equity capital determined as per Regulation 27.

Regulation 27(3) provides that in case actual equity is less than 30% of the approved capital cost, the actual equity is to be considered.

- 2.162 Regulation 30 provides for interest and financing charges, which is given below:
 - **30.Interest and finance charges**. (1) (a) The loans arrived at in the manner indicated in regulation 27 shall be considered as gross normative loan for calculation of interest on loan.
 - (b) The interest and finance charges on capital works in progress shall be excluded from such consideration.
 - (c) In the case of retirement or replacement of assets, the loan amount approved by the Commission shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.
 - (2) The normative loan outstanding as on the First day of April, 2015, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission up to the Thirty First day of March, 2015, from the normative loan.
 - (3) Notwithstanding any moratorium period availed by the generating business/company or the transmission business/licensee or the distribution business/licensee, the repayment of loan shall be considered from the first financial year of commercial operation of the project and shall be equal to the depreciation allowed for that financial year.
 - (4) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each financial year applicable to the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre:

Provided that if there is no actual loan for a particular financial year but normative loan is still outstanding, the weighted average rate of interest on the last available loan shall be considered:

Provided further that if the regulated business of the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre does not have actual loan, then interest shall be allowed at the base rate.

- (5) The interest on loan shall be calculated on the normative average loan for the financial year by applying the weighted average rate of interest.
- (6) The generating business/company or the transmission business/licensee or the distribution business/licensee or the state load despatch centre, as the case may be, shall make every effort to refinance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and any benefit from such refinancing shall be shared in the ratio 1:1 among, -
 - (i) the generating business/company and the persons sharing the capacity charge; or
 - (ii) transmission business/licensee and long-term intra-State open access customers including distribution business/licensee; or

- (iii) distribution business/licensee and consumers.
- (7) The changes to the terms and conditions of the loans during the financial year, if any, shall be effective from the date of coming into force of such changes.
- (8) Interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on the First day of April of the financial year in which the application is filed:

Provided that interest on security deposit actually paid to the users of the transmission system or distribution system and to the consumers during the financial year, shall be considered at the time of truing up for the financial year."

Analysis and decision of the Commission

- 2.163 The Commission has examined the claims of KSEB Ltd and the objections of the stakeholders in detail. The HT-EHT Association objected to the calculation of normative loan of KSEB Ltd as on 1-4-2015. According to the Association, the principle of AS 12 was not followed since in the case of grants and contributions, only depreciation was taken into consideration and corresponding income was not booked in the P&L accounts. According to AS 12, either grants are shown as deduction from gross value of assets or grants are recognized as profit in P&L Account on a systematic and rational basis over the useful life of assets (i.e., in proportion to the amount of depreciation charged over the period). As per the estimate of the Association, the opening level of loan can be only Rs.314.82 crore.
- 2.164 KSEB Ltd objected to the contentions of the Association stating that the opening level of normative loan was fixed at Rs.2276.18 crore as per the Order dated 21-08-2018 of Truing up of accounts for 2015-16. Thereafter, since there was no challenge to that Order, the same has become final. Further, according to the KSEB Ltd the calculation of the Association is erroneous. However, KSEB Ltd has not submitted any justification for their claim that the calculation is erroneous.
- 2.165 The Commission has examined the contentions of the Association and KSEB Ltd. The statement of KSEB Ltd that there is no challenge of the Order is not correct, since KSEB Ltd itself had challenged the said order vide Appeals No. 27 of 2021 and 31 of 2021 before the APTEL on the normative loan component itself. The matter is pending before the Hon. APTEL for consideration. The Commission in its counter affidavit has made it clear that the treatment of grants and contribution and depreciation thereof has been done in the truing up of accounts for 2015-16 and 2016-17 giving due consideration and adopted a methodology which is more beneficial to the appellant. KSEB Ltd. Following table showing the alternative method available and the method adopted by the Commission was also furnished as part of the counter affidavit.

Table 52
Alternate methods of arriving at Normative Loan (as per the Affidavit given before APTEL)

SI. No.	Particulars	Method -1 adopted	Alternate Method-
		Rs.Crore	Rs.Crore
1	GFA as on 01.04.2015 as per Accounts	26,608.06	26,608.06
2	Less: Value of assets enhanced as part of Transfer Scheme (Revaluation)	11,988.99	11,988.99
3	Less: Consumer contribution and grants	-	4,670.00
4	GFA eligible for tariff as on 01.04.2015	14,619.07	9,949.07
5	Less: Approved depreciation till 31.03.2015	6,135.25	5,445.85
6	Net Fixed Assets	8,483.82	4,503.22
7	Less: Equity	3,499.05	3,499.05
8	Less: Pro rata contribution and grants	2,708.60	-
9	Balance Normative loan as on 01.04.2015	2,276.17	1,004.17
10	Addition to Loan (2015-16)	380.08	380.08
11	Repayment (Depreciation approved for 2015-16)	334.87	334.87
12	Normative loan as on 01.04.2016	2321.38	1049.38
13	Repayment (Depreciation approved for 2016-17)	369.87	369.87
14	Normative loan as on 31.03.2017	1951.51	679.51
15	Average Loan	2136.45	864.45
16	Normative Interest on Ioan @ 10.45%	223.26	90.34

- 2.166 Though there can be procedural infirmities in the argument of the Association as pointed out by KSEB Ltd, the fundamental argument of the Association is that in the case of assets created out of grants and contribution of principle under AS 12 is to be followed. It is to be noted that before the transfer scheme was made effective, the erstwhile KSEB was following the Annual Account Rules and no corresponding income was recognized in the accounts.
- 2.167 Para 2.33 and 2.34 of ESAAR 1985 provides that depreciation shall be on 'full cost of the asset' and the cost of grants are not considered. In line with the rule, KSEB Ltd was enjoying the benefit of depreciation for the assets created out of grants and contribution, till the Order of the Commission dated 13-04-2012 in the *Suo motu* proceedings. If such treatment is true, the Commission can logically deduct from GFA, Grants and contribution and then depreciation so far passed on through the tariff, so as to arrive at the assets which is funded out of loan and equity. *Though, the Commission is not venturing into such re-estimation at this point of time, the Commission reserves the right to undertake such re-estimation if the situation so warrants.*
- 2.168 Since there are number of components in the interest charges, each of the item is examined separately. Concurrent reading of the provisions of

Regulation 27 and 30 shows that interest charges applicable to assets created up to 01-04-2015 and after 01-04-2015 (i.e., assets addition during the year 2015-16) shall be provided. Proviso to Regulation 27(1) provides that funds received in the form of grants and contributions are to be reduced from the fund requirements. Regulation 30(1) (b) specifies that, interest charges for capital works in progress are not allowable. Further, in the case of assets during construction, the same is to be treated as part of fixed assets only when the assets are put to its intended use.

- 2.169 Hence, the Regulation provides for treatment of loans and interest charges thereon on a normative basis. The normative loan amount required to meet the value of fixed assets taken in the books as on 01-04-2015 (i.e., the date of effect of control period), of the licensee is taken as the funding requirement. Further, the Regulation requires that funds received in the form of grants and contributions has to be reduced from the fund requirements. Similarly, for operational purposes, interest on working capital is also provided separately on normative basis. In the case of assets during construction, *the same is to be treated as part of fixed assets capitalized only when the assets are put to its intended use*. Thus, all the funding requirements are considered normatively, so that the consumers are required to pay only for the assets being used effectively for providing supply.
- 2.170 Rate of interest for the loan is specified in Regulation 30(4). As per this, the rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each financial year applicable to the Generating business, transmission business or distribution business as the case may be. KSEB Ltd in their petition has estimated the average rate of interest for the year 2017-18 for SBU-G at 9.47%. KSEB Ltd also furnished the details of all the loans availed during the year and the outstanding at the end of the year including the interest charges for each loan.
- 2.171 The Commission has examined the details furnished by KSEB Ltd on the average rate of interest. The interest charges on long term loans vary from 8.5% to 13%, and most of the loans are having interest rate between 10 to 11.5%. In the case of short-term loans, the interest charges average 8%. The Commission urges that in the situation of falling interest regime the high-cost loans are to be restructured to take advantage of lower interest and to reduce the interest burden. Based on the available details, and as worked out in the truing up for 2016-17, the weighted average interest charges based on the actual interest charges paid as per petition worked out to 9.47%.

Table 53
Weighted average rate of interest for 2017-18

	Opening Balance (Rs. crore)	Add: Drawl(s) during the Year	Less: Repayment (s) of Loans during the year	Closing Balance (Rs. crore)	Average loan (Rs. crore)	Interest Charges (Rs. crore)	% share	Average Rate of Interest	Weighted average Rate
								(%)	(%)
Long Term Loans	4,536.23	586.17	92.99	5,029.42	4,782.83	477.20	74.13%	9.98%	7.40%
Short Term loans	1,887.50	4,763.97	5,201.54	1,449.93	1,668.72	133.78	25.87%	8.02%	2.07%
Total	6,423.73	5,350.14	5,294.53	6,479.35	6,451.54	610.98	100.00%		9.47%

- 2.172 Of the long-term loans, the major component is the special assistance of Rs.1250 crore taken from REC and PFC in 2016-17. The interest charges for loans for the year 2017-18 as per the accounts is Rs.610.98 crore. Considering a total closing loan of Rs.6479.35 crore, average loan of Rs.6451.54 crore and interest payment of Rs.610.98 crore, this weighted average rate of interest works out to be 9.47% per annum as shown in the Table above.
- 2.173 The interest charges allowable for the year 2017-18 is to be worked out based on the provisions of Regulations. As per the Regulations, interest on working capital is allowed normatively and in the case of loans taken for fixed assets, the same is to be assessed based on the net fixed assets available as on 01-04-2017. As per Regulation 30(2), the normative loan outstanding as on 01-04-2017 shall be worked out by deducting the amount of cumulative repayment, which represents the depreciation allowed, as approved by the Commission as on 31-03-2017 from the normative loan.
- 2.174 The Commission had arrived at the existing normative loan (opening levels) as per the Regulations for the year 2016-17 in the Order on Truing up of accounts for 2016-17 as shown below:

Table 54

Normative existing loans for the year 2016-17 as per true up Order

		Rs. Crore
1	Net Fixed Assets as on 1-4-2015	8483.82
2	Equity as per accounts	3,499.05
3	Grants and Contribution as on 01-04-2015	2 700 60
	(after depreciation)	2,708.60
4=1-2-3	Normative Loan as on 01-04-2015	2,276.17
5	Repayment equivalent to depreciation for the year for the year 2015-16	334.87
6	Addition to loans in 2015-16 (738.44-358.35)	380.08
7=4+6-5	Opening levels of Loan (as on 1-4-2016)	2,321.38

- 2.175 The Commission in the truing up order for 2015-16 had considered for the purpose of estimating the normative loans, the net fixed assets as on 01-04-2015 as Rs.8483.82 crore. After deducting the funds from grants and contribution (Rs.2708.60 crore after depreciation) and equity (Rs.3499.05 crore), the normative loan as on 1-4-2015 was Rs.2276.17 crore. After deducting the normative repayment of Rs.334.87 crore equivalent to the depreciation, the net normative loan at the end of 2015-16 was Rs.1941.30 crore. The addition to normative loan i.e., net increase in fixed assets excluding grants and contribution, was Rs.380.08 crore. Thus, level of normative loan as on 31-03-2016 and the opening level as on 01-04-2016 was Rs.2321.38 crore.
- 2.176 In the initial truing up Order for 2016-17 dated 14-09-2018 the Commission did not allow the addition to capital assets for the year for want of details. However, KSEB Ltd subsequently filed the details and as per the Order in OA64/2019 dated 12-10-2020, the Commission has allowed Rs.1459.87 crore the addition to capital assets for the year 2016. Accordingly, the Asset addition for the year 2016-17 is as shown below:

Table 55
Approved Asset additions for 2016-17

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. crore	Rs. crore
Asset addition as per accounts 2016-17 (IndAS)	450.22	410.19	908.25	1,768.66
Less: Duplication	81.98	53.31	-	135.29
Less: Part capitalization	37.80	31.98	-	69.78
Less: Part capitalization during previous years	81.28	5.80	ı	87.08
Less: Decommissioning Liability	-	-	16.64	16.64
GFA addition under SBU D wrongly included under SBU G	-31.69	-	31.69	-
GFA addition approved for 2016-17	217.47	319.10	923.30	1,459.87

2.177 The asset addition of Rs.1768.66 crore as per the accounts for the year 2016-17 was inclusive of the additional asset addition pertaining to previous years (Rs.282.73 crore out of the total Rs.414.82 crore) made as part of the cleaning up of accounts during the first-time adoption of Ind AS. The full effect of these adjustments was made in the Accounts for 2017-18, by withdrawing Rs.398.18 crore (Rs.414.82 crore-Rs.16.64 crore decommissioning liability) from GFA of 2017-18. The normative loan for the asset addition made during the year 2016-17 was allowed after deducting the grants and contribution for the year 2016-17 (Rs.646.94 crore) and depreciation for the addition of assets (Rs.12.56 crore). The effect of asset additions for the previous years were not considered while allowing addition to normative loan for 2016-17, since complete effect of the adjustments were reflected in the accounts of 2017-18

only. Hence addition to normative loan for 2016-17 was approved at Rs.517.64 crore only. However, the full effect of these additions from 2017-18 is available since the same has been fully included in the Accounts.

- 2.178 KSEB Ltd had filed a review petition against the Order dated 12-10-2020 in OA 64/2019 on approval of addition to assets for the year 2016-17 as part of truing up. In the said review petition, KSEB Ltd had sought to review the Commissions' decision on approval of depreciation and normative loan and to approve additional interest on normative loan to the tune of Rs.14.71 crore and additional depreciation to the tune of Rs.0.92 Crore. The Commission has admitted the petition. The first hearing of the petition was conducted on 31-03-2021. Vide daily Order dated 31-03-2021, the Commission sought the following additional details:
 - (a) Whether the valuation of fixed assets under Ind AS is based on the cost model or revaluation model. If so, the adjustments made in the fixed assets due IndAS towards fair value adjustments/revaluation adjustments to be provided
 - (b) Net addition of land under SBU-G for a year 2016-17 is -ve (Rs.(-)8.16 crore) after removing the part capitalization and duplication. Reasons for negative value may be furnished
 - (c) Whether any fair value adjustments included in the claims under the asset additions during 2015-16 and 2016-17.
 - (d) Whether the interest rate booked under the accounts for 2016-17, any fair value adjustments are included. If so the details, and the processing of the same is in progress. Since the matter has not been disposed of the impact if any on the same will be considered separately.

In their response, KSEB Ltd has furnished the details and based on the same and to obtain greater clarity on the issue so as to facilitate a considered decision, the Commission has decided to hold another hearing. In the meantime, due to the intensification of Covid-19 pandemic severe restrictions were announced by the Government on the functioning of the offices including lockdowns and triple lockdowns in Thiruvananthapuram among other districts. The next hearing is expected to be held shortly. Since the matter is not been disposed off the impact if any on the same will be considered separately.

2.179 As mentioned above, the Commission has approved the asset addition of Rs.1159.69 crore for 2017-18. The grants and contribution for SBU-G is Rs.75.31 crore and that of KSEB Ltd is Rs.573.45 crore. Based on the above, the normative loan approved for the year is as shown below:

Table 56
Normative loan approved for 2017-18

Normative loan Summary	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Normative loan as on 1-4-2015	789.34	628.83	857.99	2,276.17
Add Asset additions approved 2015-16	34.79	212.24	491.41	738.44
Less Grants & contributions	13.11	12.93	332.31	358.35
Less Depreciation-2015-16	122.05	132.84	79.98	334.86
Net Normative loan as on 1-4-2016	688.97	695.30	937.11	2,321.40
Add Asset Additions approved 2016-17	217.47	319.1	923.3	1459.87
Less Grants & contributions	13.05	79.12	554.77	646.94
Less Depreciation 2016-17	129.11	151.14	102.18	382.43
Normative loan as on 1-4-2017	764.28	784.14	1,203.46	2,751.90
Add Asset Additions approved 2017-18	71.42	388.82	699.45	1,159.69
Less Grants & contributions	75.31	103.99	394.15	573.45
Less Depreciation 2017-18	132.61	151.74	69.12	353.47
Closing normative loan as on 31-3-2018	627.78	917.23	1,439.64	2,984.67

2.180 As shown above, there is reduction in normative loan for SBU-G for 2017-18 to the tune of Rs. 136.50 crore (Rs.764.28 crore-Rs.627.78 crore), whereas the total normative loan for KSEB Ltd was increased by Rs.232.77crore. The interest charges applicable for the year is worked out as shown below:

Table 57
Interest charges approved for normative loan for 2017-18

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Opening level of Normative loan (as on 1-4-2017)	764.28	784.14	1,203.46	2,751.90
Closing level of Normative loan (as on 31-3-2018)	627.78	917.23	1,439.64	2,984.67
Average Normative loan	696.03	850.69	1,321.55	2,868.29
Rate of Interest	9.47%	9.47%	9.47%	9.47%
Interest charges for 2017-18	65.91	80.56	125.15	271.63

- 2.181 The opening level of normative loan of KSEB Ltd for the year 2017-18 is Rs.2751.90 crore whereas the closing level loans is Rs.2984.67 crore i.e., an increase of Rs.232.77 crore. Since the weighted average rate of interest on the actual loan portfolio is 9.47% and the interest on normative loan for the year 2017-18 approved at Rs.65.91 crore for SBU-G and Rs.271.63 crore for KSEB Ltd.
- 2.182 The interest charges apportioned among SBUs and accordingly for SBU-G, the interest on normative loan approved is Rs.65.91 crore.

Overdrafts

2.183 KSEB Ltd in their truing up petition submitted that in addition to long term and short-term loans, they have also availed overdraft from banks to make up the shortages in cash flow during 2017-18. However, KSEB Ltd did not provide SBU wise details of utilization of overdrafts. According to KSEB Ltd, since the Commission is allowing carrying cost for the unbridged revenue gap, interest on over draft is not sought separately. Hence, the Commission is not allowing any amount on this account.

Interest on working capital

2.184 In their truing up petition, KSEB Ltd has claimed interest on working capital for SBU-G of Rs.7.07 crore as shown below:

Table 58
Interest on working capital sought by KSEB Ltd for SBU-G

3	1% of GFA towards maintenance spares Total	48.91 63.70
5		
6	Less: Security deposit Net working capital	0.00 63.70
7	Base rate as on 01.04.2017	9.10%
_		
8	Interest rate @2% above base rate	11.10%
9	Interest on Working capital (6x8)	7.07

2.185 As per the details furnished in the petition, estimate of interest on normative working capital for the year for SBU-G is Rs.7.07 crore at an interest rate of 11.10%.

Objections of the Stakeholders

2.186 Regarding interest on overdraft from the Banks, the HT-EHT Association computed the interest on working capital based on the regulatory norms and stated that only Rs.6.03 crore only needs to be allowed as shown below:

Table 59
Interest on working capital as per HT-EHT Association

Particulars	Amount (Rs. Crore)
Cost of fuel for 1 month (Stock 6.23/12)	0.52

O&M expense for 1 month	9.43
1% of GFA towards maintenance spares	44.41
Total	54.36
Less: Security deposit	0
Net working capital	54.36
Base rate as on 01.04.2017	9.10%
Interest rate @2% above base rate	11.10%
Interest on Working capital	6.03

Provisions in the Regulations

- 2.187 As per the provisions of Regulations, interest on working capital for liquid fuel stations and hydel stations are separately mentioned.
 - "33. Interest on working capital. (1) The generation business/company or transmission business/licensee or distribution business/licensee or the state load despatch centre shall be allowed interest on the normative level of working capital for the financial year, computed as under, -
 - (a) In the case of liquid fuel based generating stations the working capital shall comprise of, -
 - (I)cost of liquid fuel for one month corresponding to actual generation; plus
 - (ii)operation and maintenance expenses for one month; plus (iii)cost of maintenance spares at one per cent of the historical cost; plus
 - (iv)receivables equivalent to fixed charges and energy charges for sale of electricity for one month calculated at actual generation:
 - Provided that in the case of own generating stations, no amount shall, in the computation of working capital in accordance with these Regulations, be allowed towards receivables, to the extent of supply of power by the generation business to the distribution business.
 - (b)In the case of gas turbine/combined cycle generating stations the working capital shall comprise of, -
 - (I)cost of gas and liquid fuel for one month corresponding to actual generation; plus
 - (ii)operation and maintenance expenses for one month; plus
 - (iii)cost of maintenance spares at one per cent of the historical cost; plus
 - (iv)receivables equivalent to fixed charge and energy charge for sale of electricity for one month calculated at actual generation:

Provided that in the case of own generating stations, no amount shall, in the computation of working capital in accordance with these Regulations, be allowed towards receivables, to the extent of supply of power by the generation business to the distribution business.

- (c)In the case of hydro-electric generating stations the working capital shall comprise of, -
 - (I)operation and maintenance expenses for one month; plus
 - (ii)cost of maintenance spares at one per cent of the historical cost; plus
 - (iii)receivables equivalent to fixed cost of one month:

Provided that in the case of own generating stations, no amount shall, in the computation of working capital in accordance with these Regulations, be allowed towards receivables, to the extent of supply of power by the generation business to the distribution business."

Analysis and decision of the Commission

- 2.188 In case of own generation, no amount shall in the computation of working capital be allowed towards receivables, to the extent of supply of power by the generation business to the distribution business.
- 2.189 As per the provisions of the Regulations, interest on working capital is allowed on a normative basis for each business separately. The Commission has carefully examined the details furnished by KSEB Ltd. Regulation 33 requires the Commission to estimate the interest on working capital for liquid fuel based generating station and for hydro-electric stations separately. According to KSEB Ltd the interest on working capital is Rs.7.07 crore for SBU-G
- 2.190 As per Regulation 33(1), interest shall be allowed on the normative level of working capital. Regulation 33 (1) (a) states that, In the case of liquid fuel based generating stations, the working capital shall comprise of:
 - cost of liquid fuel for one month corresponding to actual generation; plus
 - O&M expenses for one month plus
 - Cost of maintenance of spares at 1% of the historical cost plus
 - Receivables equivalent to fixed charges and energy charges for sale of electricity for one month calculated at actual generation.
- 2.191 As per Regulation 33(2), interest on normative working capital shall be allowed at a rate 2% higher than the base rate as on the first day of April of the respective financial year.
 - 33(2) Interest on normative working capital shall be allowed at a rate equal to two percent higher than the base rate as on the First day of April of the financial year in which the application for approval of aggregate revenue requirement and determination of tariff is filed.
- 2.192 The Commission notes that KSEB Ltd has not furnished the method for segregation the calculation of working capital between the liquid fuel based generating stations and the hydro-electric generating stations. The Commission also notes that now the liquid fuel stations are not being used at present. The generation from these stations are below 2MU in 2017-18 and KSEB Ltd is not using these plants on a routine basis.

- 2.193 Since KSEB Ltd in their submissions have not furnished the segregation of Rs.7.07 crore claimed as working capital for SBU-G, the Commission is not in a position to accept the claim of KSEB Ltd. Further, generation from liquid fuel stations was below 2 MU during this period.
- 2.194 Hence, the Commission has adopted the installed capacity of the two types of generating stations as the basis in working out the interest on normative working capital. Accordingly, the parameters required for estimation of normative working capital requirements as per the Regulations is as shown below:

Cost of fuel for the year 2017-18 - Rs.2.08 crore

O&M expenses of SBU-G approved for 2017-18 - Rs.138.36 crore

Historical cost of Assets of SBU-G - Rs.4658.32 crore

Base rate of SBI as on 1-4-2017 - 9.10%
Interest on working capital (base rate+2%) -11.10%
Installed capacity of LSHS Stations - 159.96MW
Installed capacity of Hydel stations - 2055.76MW

2.195 Based on the above, the interest on normative working capital is estimated as shown below:

Table 60
Interest on working capital approved for SBU-G

J 1 11	LSHS Stations Hydro		Total for SBU-G	
	(Rs. crore)	(Rs. crore)	(Rs. crore)	
Cost of fuel for one month (Rs.2.08 cr/12)	0.17	-		
O&M expenses for one month	0.83	10.70	11.53	
Cost of maintenance of spares 1% of historical cost	3.36	43.22	46.58	
Total Normative Working Capital Requirement	4.37	53.92	58.29	
Base rate as on 1-4-2017	9.10%	9.10%	9.10%	
Interest rate on working capital	11.10%	11.10%	11.10%	
Interest on working capital	0.48	5.98	6.47	

2.196 As shown above, the interest on working capital approved for SBU-G is Rs.6.47 crore for the year 2017-18

Interest on security deposits

2.197 Since there is no security deposit available with SBU-G, no interest charges are provided for SBU-G by KSEB Ltd in their truing up petition. Hence no amount on this account is allowed by the Commission during 2017-18.

Interest on GPF

2.198 In the petition, KSEB Ltd stated that the Commission has approved Rs 7.21 Crore towards interest on GPF. But as per the audited accounts, the actual interest paid on PF was Rs.8.23 Crore, which exceeded approval by Rs.1.02 Crore. The Commission adopted Rs.1600 Crore as PF balance as on 31.03.2017 and applied interest @ 8.75% in the Suo motu ARR&ERC Order. However, the actual PF balance was Rs.2029.93 Crore as on 01-04-2017. The actual rate of interest during the year, however, was lower than the approved rate of 8.75%, at 7.90% and it further came down to 7.60%. Hence, KSEB Ltd requested that actual interest for SBU- G of Rs.8.23 Crore out of the total interest on GPF of Rs.156.26 crore for KSEB Ltd to be approved

Objections of the stakeholders

2.199 The HT -EHT Association stated that interest on GPF is to be allowed as per the Note 29 of the audited accounts at Rs.156.26 crore and accordingly, Rs. 8.23 crore can be allowed

Analysis and decision of the Commission

2.200 As per the Accounts, the interest charges booked for GPF is Rs.156.26 crore. Out of this, the share of SBU-G is Rs.8.23 crore, which is allowed for 2017-18.

Interest on Master Trust Bonds

- 2.201 In the petition KSEB Ltd stated that the State Government, as per notifications dated 31.10.2013 and 28.01.2015, ordered creation of a Master Trust for meeting the unfunded liability of pension, gratuity and leave surrender as on 31.10.2013, in respect of the personnel transferred from erstwhile KSEB to KSEB Ltd. The total liability as on 31.10.2013 was estimated at Rs.12,418.72 Crore and necessary funding arrangements were put in place through issue of 2 series of Bonds. The Commission has recognized the unfunded pension liabilities as above and approved recovery of interest on KSEB Ltd submitted share of Bonds as per Tariff Regulations, 2014. KSEB Ltd submitted that in the *Suo motu* Order dated 17-04-2017 of the Commission had approved the interest charges of Rs.814.06 crore for 2017-18. KSEB Ltd has now requested that the actual share of expenses for SBU G is Rs. 42.90 Crore, which may kindly be approved.
- 2.202 KSEB Ltd further submitted that the operationalization of the Master Trust was delayed due to non-receipt of the Income tax exemption and the actual date of operationalization of the Master Trust is only from 01.04.2017. Actuarial

valuation has been done on 31.03.2017 and the assessed unfunded pension liability, gratuity liability and leave surrender liability as on 31-03-2017 stood at Rs.16,147.70 Crore i.e., an increase of Rs.3,728.98 Crore liability for the period from 01.11.2013 to 31.03.2017

2.203 In the petition KSEB Ltd stated that the Kerala Service Rules as applicable in the Government are applicable to employees of KSEB Ltd. The details of terminal benefits paid to retired employees in FY 2017-18 through Master Trust amounts to Rs.1341.36 Crore as detailed below:

Table 61
Amount paid to pensioners by Trust in 2017-18

Month	Rs. Crore	Month	Rs. Crore
Apr-17	107.17	Nov-17	112.94
May-17	153.04	Dec-17	99.82
Jun-17	124.60	Jan-18	99.48
Jul-17	98.14	Feb-18	95.83
Aug-17	219.54	Mar-18	94.30
Sep-17	25.68	Total	1341.36
Oct-17	110.82		

2.204 KSEB Ltd as per their audited accounts for 2017-18 has not claimed pension and terminal liabilities under employee cost by virtue of operationalization of Master Trust and provisioned 10% interest on Bonds (Rs.8144.40 Crore) amounting to Rs.814.40 Crore among the SBUs as detailed below:

Table 62
Interest on Master Trust Bonds sought in the petition

Item	SBU G SBU T S		SBU D	Total
	Rs. crore	Rs. crore	Rs. crore	Rs. crore
Interest on Bonds	42.90	80.55	690.95	814.40

Objections of the stakeholders

2.205 The HT-EHT association stated that the Commission should approve interest on Master Trust Bonds strictly as per the audited accounts for the year 2017-18

Analysis and decision of the Commission

2.206 The Commission has examined the submissions of KSEB Ltd regarding interest on bonds issued to Master Trust. As per the submissions of KSEB Ltd, the Master Trust is operational only from 2017-18 and in the first year of the Trust itself the fund has become unsustainable considering the fact that the actual pension payments (Rs.1341.36 crore) is more than the interest allowed

on bonds (Rs.814.40 crore). KSEB Ltd sought to bridge the gap in pension outflow (Rs.526.96 crore) for the year 2017-18 by recovery through consumer's tariff in the form of interest on unfunded actuarial liability of Rs.531.39 crore.

- 2.207 The Commission noted that as per the original scheme of issue of Bonds, the actuarial liability as on 31-10-2013 was assessed at Rs. 12418.72 crore. This liability was as per transfer scheme apportioned in the ratio of 35:65 between the Government of Kerala and KSEB Ltd. The Commission notes that the scheme envisages the flow of funds from the Government in the form of interest and repayments to the tune of Rs.586.10 crore and Rs.52.40 crore for 10 years, in addition to the interest on Bonds issued to the Master Trust at the rate of 10% for 20 years @814.40 crores for the first year. Further, a substantial portion of funds inflow was envisaged by the increase in the ROE, through increase in equity from Rs.1553 crore to Rs.3499.05 crore in the transfer scheme which would also contribute to fund the Master Trust. The Commission has examined this issue as part of the Tariff Order dated 08-07-2019 and noted that payments are not being remitted by KSEB Ltd as envisaged in the Scheme for creation of a corpus fund and to make this Fund self-sustaining over a period of 20 years. Instead, KSEB Ltd has been operating the Trust Accounts like a "Current Account" by remitting money into the account on requirement basis for dispersal and fulfilment of retirement benefits. Hence, the payments into the Trust account by KSEB Ltd is not as per the original scheme envisaged but only as per the fund requirements to disburse the pension. The Commission has also sought a copy of the audited accounts of the Trust and KSEB Ltd has furnished the same vide letter dated 20-10-2020. In the Note to the accounts of said audited accounts, (schedule 12.2.2.) it is mentioned that no income and expenditure account has been prepared as the trust is only acting as the intermediary institution for effecting disbursement of pension, gratuity and other retirement benefits of the employees of erstwhile KSEB and receipts /payments are accordingly credit/debited to the fund account. There is no revenue earning activity for the trust in view of the above. Based on this, the statutory auditors have qualified their opinion.
- 2.208 It is pertinent to note that the Auditors had noted that the Trust was not being managed as envisaged. The Commission notes that the proposal of KSEB Ltd for additional funds is also not in line with the scheme of operation of the Fund. The deficit in the Master Trust is on account of not providing the funds to the Trust on a yearly basis as envisaged. The Commission notes that KSEB Ltd did not constitute the Trust till the financial year 2017-18 claiming that they were not exempted from Income Tax liability. This according to the Commission is a lame excuse. The Master Trust could have been constituted and operationalized and IT exemption petition could have been moved

simultaneously. KSEB Ltd however did not act accordingly. Since the Master Trust was not constituted and operationalized by KSEB Ltd as originally envisaged, no provision was made by the Commission in the Truing up orders till 2016-17, but Rs.814.40 crore was allowed yearly for payment of terminal liabilities. It is also important to note that even the increase in income from ROE is being utilized by KSEB Ltd to fund their working capital requirements and no amount from this is being apportioned to the Master Trust as envisaged. The contribution from the Government to the tune of Rs.586.10 crore and Rs.52.40 crore is also not included in the Fund. *This is a very serious lapse and threatens the very sustainability of the Master Trust.*

2.209 The above facts very clearly reveal that from the first year itself, the fund is not functioning as envisaged. This is highly objectionable and contrary to the very intent of setting up of the Master Trust. The Commission cautions KSEB Ltd that they are required to take urgent corrective action to overcome this serious deviation from the Scheme. The Commission also opines that if KSEB Ltd does not urgently take corrective action, the very payment of the pension will be jeopardized and the retirement financial security of the retirees of KSEB Ltd shall be compromised. KSEB Ltd also submitted that they will place a proposal in this regard in consultation from the Government. With the above caution and with the proposed submission, the proposal and consultation with the Government, the Commission hereby approves the interest on bonds on Master Trust as per the initial scheme approved by the Government. Since 2017-18 is the first year of effective establishment of the Trust, an amount of Rs.814.40 crore is allowed and the SBU wise details as are shown below:

Table 63
Interest on Master Trust Bonds approved for 2017-18

Item	SBU G SBU T		SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Interest on Master Trust Bonds	42.90	80.55	690.95	814.40

Other interest charges

2.210 Other interest charges are inclusive of discount to consumers for timely payment, interest to contractors, cost of raising finance etc., KSEB Ltd has allocated Rs.0.76 crore towards this head out of Rs.6.83 crore claimed. In the petition, KSEB Ltd stated that an amount of Rs. 5.06 Crore incurred towards interest on power purchase bills has been classified under interest to suppliers/contractors. These bills were raised in line with the tariff revision ordered by CERC for the control period 2014-19 and the payment was strictly in line with CERC regulations, which allow interest for the differential amount between provisional AFC and final AFC. KSEB Ltd has been reducing the

bank charges consistently through negotiations with banks. In the IND AS audited accounts, bank charges amounting to Rs.1.07 Crore has been disclosed under A&G expenses. The actual expenses under other charges include guarantee charges payable to Government. Interest on fair valuation of concessional loans at Rs.22.28 Crore is charged as expense under this head has been shown as income under FV adjustments. Since this amount does not involve any cash flow and is only an adjustment entry made in line with IND AS compliance, this amount is to be excluded in the truing up. Therefore, KSEB Ltd submitted that the actual expense during the year was Rs.6.83 Crore as against the approval of Rs.10 Crore in the *Suo motu* Order.

Objections of the Stakeholders

2.211 HT-EHT Association has stated to allow the other interest charges as proposed by the licensee

Analysis and decision of the Commission.

2.212 As stated by KSEB Ltd, the other charges are inclusive of IndAS adjustments, the same is not to be included part of the truing up. Interest charges on account of power purchase is to be paid as part of the tariff of Central Stations, hence the same is to be allowed. Considering the same, the Commission allows the interest charges as proposed by KSEB Ltd for the Truing up. The share of SBU-G is Rs.0.76 crore as shown below:

Table 64
Other interest charges allowed for 2017-18

	SBU G	SBU G SBU T SBU D			
	Rs.crore	Rs.crore	Rs.crore	Rs.crore	
Other interest	0.76	0.49	5.58	6.83	

2.213 After considering the details, the other interest charges of Rs.0.76 crore is approved as claimed in the petition for SBU-G.

Summary of Interest and financing charges

2.214 A summary of the approved interest and finance charges of SBU-G is shown in the Table below:

Table: 65
Summary of Interest charges allowable for SBU-G

Particulars	Approved	As per accounts	As per petition	Approved in truing up
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Interest on Normative Loan	171.62	125.12	87.75	65.91
Interest on Working capital	-	5.00	7.07	6.47
Interest on security deposits				-
Interest on GPF	7.21	8.23	8.23	8.23
Interest on Master Trust Bonds	41.94	42.90	42.90	42.90
Other Interests	0.52	3.26	0.76	0.76
Total	221.29	184.51	146.71	124.27

2.215 Based on the submissions of KSEB Ltd and its due consideration the Commission approves the total interest and financing charges for the year 2017-18 for SBU-G as Rs. 124.27 crore.

Interest on unfunded actuarial liability

- 2.216 KSEB Ltd has sought Rs.27.99 crore for SBU-G on account of interest on unfunded actuarial terminal liability. In the petition, KSEB Ltd stated that as per the actuarial valuation as on 31.03.2018, the liability on this account has been assessed at Rs. 17,732.57 Crore. The increase of Rs.1584.87 Crore over previous year, according to KSEB Ltd has been captured in audited accounts as follows:
 - (i) Liability pertaining to 2017-18 amounting to Rs.509.42 Crore has been booked under employee cost for the year and
 - (ii) Remaining portion, pertaining to earlier years Rs.1075.46 Crore under other comprehensive income in P&L account.
- 2.217 However, KSEB Ltd has not claimed the liability pertaining to 2017-18 of Rs.509.42 crore booked under employee cost. KSEB Ltd while seeking approval of employee cost in the petition had excluded this Rs.509.42 crore. Instead in the petition KSEB Ltd stated that the claim is made through interest charges on unfunded actuarial liability.
- 2.218 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore i.e., an increase of Rs. 5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. KSEB Ltd has decided to issue 20-year bonds at a coupon rate of 10% to the Master Trust. Claiming the entire additional contribution to the Master Trust in one-go is likely to result in tariff shock.

Therefore, KSEB Ltd proposes to claim 10% interest on unfunded liability to the tune of Rs.531.39 crore and the share of SBU G on this count is Rs.27.99 Crore.

2.219 KSEB Ltd has requested to approve the interest on unfunded portion of actuarial liability since the pension and terminal benefits pay out cannot be met from the existing arrangement. Actual pension and terminal benefit disbursement during the year exceeded interest on bonds by Rs. 526.96 Crore. (Rs.1341.36 Crore-Rs.814.40 Crore). Hence, KSEB Ltd requested the Commission to approve provisionally, an additional amount Rs.531.39 Crore (being 10% of the unfunded liability as on 31.03.2018 Rs.5313.85 Crore) in view of the fact that KSEB Ltd has no other source to meet this expense and charging the entire additional liability in the ARR for one year may result in tariff shock. Therefore, KSEB Ltd requested the Commission to approve Rs.531.39 Crore as detailed below:

Table 66
Interest on unfunded terminal liability sought for 2017-18 as per petition

Item	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Interest on Bonds	27.99	52.56	450.84	531.39

- 2.220 According to KSEB Ltd, Tariff Regulations, 2014 also provide that, the annual pension contribution by KSEB Ltd to the Master Trust based on the actuarial valuation is also allowed to be recovered through tariff on annual basis. KSEB Ltd further stated that claiming the entire additional contribution to the Master Trust in one-go is likely to result in huge accumulation of Regulatory Asset and subsequent tariff shock. Therefore, KSEB Ltd has already taken up the matter of unfunded liability till 31.03.2018 with the Government and a detailed scheme in consultation with the Government is proposed to be prepared and submitted before the Commission separately.
- 2.221 KSEB Ltd also pointed out that the Commission as per MYT order for the control period from 2018-19 to 2021-22 appraised the matter in detail and provisionally allowed Rs. 200 Crore in addition to Bond interest and decided to take up the matter through separate proceeding to examine the working of the Master Trust

Objections of the stakeholders

2.222 Regarding unfunded actuarial liability, the Association stated that as per clause 31 the licensee shall issue bonds to service terminal liabilities. The interest on bonds issued by KSEB Ltd to service the terminal liabilities shall be recovered through tariff at the rates specified by State Government. The

Association argued that till such time the licensee furnishes a detailed scheme for the maintenance and disbursal of the fund, the proposed 10% interest amounting to Rs.531.39 crore is to be disallowed.

Analysis and decision of the Commission

- 2.223 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore i.e., an increase of Rs. 5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. In order to fund this additional liability, KSEB Ltd proposes to issue bonds for the said amount at an interest rate of 10% That is additional requirement to the tune of Rs.531.39 crore in the form of interest to additional liability on account of actuarial valuation. Out of which Rs.27.99 crore pertains to SBU-G.
- 2.224 The Commission notes that the proposal of KSEB Ltd is not at all in line with the governing principles of the Fund. The deficit in the Master Trust is on account of not appropriately providing the funds to the Trust as envisaged. The share of Government through adjustment of electricity duty and portion of RoE envisaged to fund the Trust is not being credited to the Trust fund but being diverted for funding other expenses. The shortfall on account of funds is due to the amounts not being transferred to the fund at the appropriate time. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year. If this arrangement is continuing on a year on year, there is no doubt that the entire scheme will be a failure in no time and the financial security of KSEB Ltd pensioners will be jeopardized.
- 2.225 The approach taken by KSEB Ltd in this case is not correct and also not in line with the provisions of the Government Order dated 31-10-2013 and 28-1-2015. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year which is an unsustainable proposal and will seriously impact consumers tariff for KSEB Ltd.'s fault.
- 2.226 After examining the issue, the Commission in the MYT Tariff order dated 08-07-2019, had allowed Rs.200 crore provisionally for the control period from 2018-19 to 2021-22, and proposed to review the scheme holistically. With the available details, the Commission is not in a position to assess the exact commitment required for funding the terminal liabilities. KSEB Ltd in the petition has proposed to submit a proposal in this regard in consultation with the Government.

2.227 However, the Commission has also given due consideration to the stated difficulty of KSEB Ltd in obtaining income tax exemption till 2017, hindering the roll out of the Master Trust. The Commission has also noted that against the total provision of Rs.814.40 crore, the actual disbursement during the year was Rs.1341.36 crore i.e., an additional amount of Rs.526.96 crore (without accounting for the contribution from the Government and increase in ROE as envisaged in the original scheme). The Commission is also duty bound to ensure that the licensee is also able to fulfill its commitments to its pensioners. As pointed out earlier, the Commission is also not in a position to assess the requirement of funds for funding the terminal liabilities with available information. Hence, after considering the scenario holistically and keeping in view of the financial viability of the licensee, the Commission is inclined to provisionally allow an additional amount of Rs.200 crore in the current year as in the case of MYT Period 2018-19 to 2021-22. This amount is allowed additionally on the condition that the same is to be transferred to the Trust fund and the proof is to be placed before the Commission within three months. The amount is allocated to the SBUs in the same ratio as proposed by KSEB Ltd. Thus, the additional amount allowed to SBU-G is as shown below:

Table 67
Unfunded actuarial liability provisionally approved for 2017-18

	SBU G	SBU T	SBU D	Total
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
As per Petition	27.99	52.56	450.84	531.39
As approved	10.54	19.78	169.68	200.00

2.228 Accordingly, the Commission approves Rs.10.54 crore for SBU-G as unfunded actuarial liability for the year 2017-18 as against Rs.27.99 crore sought by KSEB Ltd.

Depreciation

- 2.229 The Commission in the *Suo motu* Order dated 17-04-2017 had approved depreciation for the year 2017-18 as Rs.172.43 crore for SBU-G. KSEB Ltd has now claimed Rs.180.01 crore in their petition. In the Suo motu Order, the asset additions from 2014-15 to 2016-17 was not considered. Depreciation for KSEB Ltd as per the Accounts is Rs.803.70 crore and as per the petition is Rs. 536.62 crore.
- 2.230 In the audited accounts KSEB Ltd has made adjustments for Ind AS transition. Depreciation as per audited accounts has been worked out at the rates specified in Tariff Regulations, 2014. GFA as on 31.03.2017 as per the

restated accounts to make it IND AS compliant includes completed works, which lying under CWIP (which were identified and capitalized during the restatement) to the tune of Rs.414.82 Crore in line with the first-time adoption of Indian Accounting Standards (IND AS 101). The field offices were directed to account the same in 2017-18. In order to avoid duplication, IND AS capitalized values in 2016-17 was removed while finalizing accounts for 2017-18.

- 2.231 Depreciation as per accounts has been worked out in line with IND AS at Rs.803.70 Crore. From this amount, claw back of depreciation for the assets created out of grants and contribution was determined at Rs.112.29 Crore and credited to Claw back of grant under Note 33 (Changes in fair valuation and adjustments). Hence, KSEB Ltd stated that since depreciation is claimed as per Regulations after deducting applicable claw back, the income accounted under Note 33 towards claw back as per accounts may not be considered in True up
- 2.232 KSEB Ltd worked out the depreciation as per the provisions of the Regulations at Rs.536.62 crore as shown below:

Table 68
Depreciation claimed in the petition for 2017-18

SI.					
No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA as on 31.03.2017	16,880.05	4,719.64	7,515.45	29,115.14
2	Less: Enhancement in value while re vesting	11,988.98	0	0	11,988.98
3	GFA as on 31.03.2017 excluding value enhancement	4,891.07	4,719.64	7,515.45	17,126.16
4	Less: GFA addition for 2016-17 as per accounts	450.22	410.19	908.25	1768.66
5	GFA as on 01.04.2016	4,440.85	4,309.45	6,607.20	15,357.50
6	Add: Additions during the year 2016-17	298.75	324.90	939.94	1563.59
7	Closing GFA as on 31.03.2017 (A)	4,739.60	4,634.35	7,547.14	16,921.09
8	Assets more than 12 yrs old GFA as on 01.04.2005 (B)	2,655.68	2,230.21	2,174.08	7,059.97
9	Assets less than 12yrs old C= (7-8)	2,083.92	2,404.14	5,373.06	9,861.12
10	Less fully depreciated assets (01.04.1987)	192.33	90.89	252.03	535.25
11	Assets with life from 13 to 30 years (D)= (8-10)	2,463.35	2,139.32	1,922.05	6,524.72
12	Land value GFA 13-30 yrs GFA (2.80%* of D)	68.97	59.9	53.82	182.69
13	-DO- On < 12 years (2.80%* of C)	58.35	67.32	150.45	276.11
14	GFA excl land on 13-30 years GFA (11-12)	2,394.38	2,079.42	1,868.23	6,342.03
15	GFA excl land < 12 years (9-13)	2,025.57	2,336.82	5,222.61	9,585.01
16	GFA eligible for depreciation (14+15)	4,419.95	4,416.24	7,090.85	15,927.04
17	Depreciation on assets <12 years (Av 5.28% on 15 above)	106.95	123.38	275.75	506.09
18	Depreciation on assets >12 years (Av 1.48 % on 14 above)	35.44	30.78	27.65	93.86

19	Total depreciation for 2017-18 (15+16)	142.39	154.16	303.4	599.95
20	Combined average rate (19/16)*100	3.22	3.49	4.28	3.77
21	Consumer contribution & Grants as on 01.04.2017	0	94.94	1410.46	1505.40
23	Disallowance of depreciation (@5.28% on 21)	0	5.01	74.47	79.49
24	Allowable depreciation on GFA till 01.04.2017 (19-23)	142.39	149.15	228.93	520.47
	Depreciation on GFA addition in 2017-18 as per Table				
25	5.12 above	1.09	7.21	7.85	16.14
26	Total depreciation for the year 2017-18	143.48	156.36	236.78	536.62

^{*}Land value has been determined at 2.80% being value of land before value enhancement as a % GFA)

- 2.233 The methodology followed by KSEB Ltd for estimating the depreciation is as shown below:
 - (i) SBU wise GFA as on 31.03.2017 as per audited accounts has been taken as the opening balance for the year. SBU wise addition to fixed assets during the year and depreciation thereon are worked out separately.
 - (ii) SBU wise GFA as on 01.04.2005 is taken as assets having more than 12 years. Further opening GFA as on 01.04.2017 as reduced by the value of GFA as on 01.04.2005 to determine the value of fixed assets less than 12 years old.
 - (iii) From the GFA more than 12 years old as per (ii) above, the SBU wise GFA as on 01.04.1987 reduced towards the value of fully depreciated assets. It is to be noted that assets above 30 years are considered as fully depreciated.
 - (iv) SBU wise GFA determined for assets less than 12 years and more than12 years old (13 to 30 years old) are inclusive of land value. The land value as a percentage of the total GFA as on 31.03.2018 has been 2.80%. (Land value as on 31.03.2018 of Rs.1783.89 Crore is inclusive of enhancement in value amounting to Rs.1277 Crore). This percentage has been applied to arrive at the GFA eligible for depreciation.
 - (vi) Depreciation @5.28% and 1.48% has been applied for the assets less than 12 years old and 13-30 years old. KSEB Ltd submitted that depreciation has been limited to 90% of the GFA and the balance depreciation after 12 years has been spread over to 18 years (30yrs-12yrs) to arrive at the rate applicable on assets above 12 years old.
 - (vii) Combined rate of depreciation is determined on the basis of total depreciation and corresponding GFA value.
 - (viii) SBU wise capital contribution and grants as on 31.03.2017 as per accounts has been considered to determine the claw back portion at the combined rate as per (vi) above. Gross Consumer Contribution and grants till 31.03.2017 amounted to Rs.1579.47 Crore and after excluding concessional loans and

decommissioning liability, actual consumer contribution amounts to Rs.1505.40 Crore {1579.47- (55.69+18.38)}.

2.234 According to KSEB Ltd, the depreciation as above represent the depreciation claim for the year 2017-18 on assets added till 31.03.2018. KSEB Ltd requested that depreciation of Rs.536.62 Crore for the year 2017-18 is to be approved for truing up.

Objections of the stakeholders

2.235 The HT-EHT Association pointed out that in the case of depreciation, the amount should be calculated as per the rates given in the Regulation. The Association has worked out the depreciation as per the methodology mentioned in the truing up for 2016-17. As per the calculations, the total depreciation to be approved against for KSEB Ltd claim of Rs.536.62 crore is Rs.369.87 crore only and that of SBU-G is Rs.124.59 crore as against the claim of KSEB Ltd of Rs.143.48 crore.

Provisions in the Regulations

- 2.236 Regulation 28 provides for depreciation for the purpose of tariff determination. The relevant provisions are reproduced below:
 - "28.Depreciation. (1) The value base for the purpose of depreciation shall be the original capital cost of the asset approved by the Commission:
 - Provided that no depreciation shall be allowed on revaluation reserve created on account of revaluation of assets.
 - (2) The generation business/company or transmission business/licensee or distribution business/licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective business, computed in the following manner: -
 - (a)depreciation shall be computed annually based on the straight-line method at the rates specified in the Annexure-I to these Regulations for the first twelve financial years from the date of commercial operation;
 - (b)the remaining depreciable value as on the Thirty First day of March of the financial year ending after a period of twelve financial years from the date of commercial operation shall be spread over the balance useful life of the assets as specified in Annexure- I;
 - (c)the generating business/company or transmission business / licensee or distribution business/licensee, shall submit all such details and documentary evidence, as may be required under these Regulations and as stipulated by the Commission from time to time, to substantiate the above claims;
 - (d)the salvage value of the asset shall be ten per cent of the allowable capital cost approved by the Commission and depreciation shall be a maximum of ninety per cent of the approved capital cost of the asset.

(3) The generating business/company or transmission business/licensee or distribution business/licensee shall be allowed to claim depreciation to the extent of financial contribution in the form of loan and equity, including the loan and equity contribution, provided by them:

Provided that depreciation shall not be allowed on assets funded through consumer contribution, deposit works, capital subsidies and grants.

- (4) In the case of existing assets, the balance depreciable value as on the First day of April, 2015, shall be worked out by deducting the cumulative depreciation as approved by the Commission up to the Thirty First day of March, 2015, from the gross depreciable value of the assets."
- 2.237 Regulation 35 provides the principles to be adopted for treating the transfer scheme under Section 131 of the Act.
 - "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":

Analysis and decision of the Commission

- 2.238 In the accounts, KSEB Ltd has accounted for depreciation using the higher rates applicable to the first 12 years of COD of assets, for their entire assets, thereby overstating the depreciation. The Commission notes that the KSEB Limited has charged depreciation for the assets created out of contribution and grants. Thereafter an equivalent amount is credited as claw back of grant and included under "other income" to nullify the effect.
- 2.239 The Commission notes that as per the provisions of the Electricity Act, 2003 and the Tariff Policy, the depreciation rates specified by the Commission shall be used for the purpose of tariff determination as well as for accounting purposes. Second and Third proviso to Section 129 (1) of the Companies Act

- 2013 states that the companies engaged in the generation, and supply of electricity to follow the provisions of the Electricity Act.
- 2.240 Since depreciation as per KSEB Ltd.'s accounts are not in line with the provisions of the Regulations, KSEB Ltd has devised a methodology for estimating the depreciation in the petition. In both the versions i.e., in the accounts as well as in the petition, the depreciation arrived at is not as per the provisions of the Regulations and cannot be considered for the purpose of truing up.
- 2.241 Since the depreciation methodology adopted for the assets is not in line with the provisions of the Regulations, the Commission has no other alternative, but to estimate the depreciation as per the provisions of the Regulations for the purpose of truing up. The details are given below:

Table 69
Depreciation approved for 2017-18

	Depreciation for existing Assets 2017-18	SBU-G	SBU-T	SBU-D	KSEBLtd
		Rs. crore	Rs. crore	Rs. crore	Rs. crore
1	Opening GFA as on 1-4-2017	4,658.32	4,628.56	7,530.50	16,817.38
2	Assets >12 years old (GFA as on 1-4-2005)	2,655.68	2,230.21	2,174.08	7,059.97
3	Fully depreciated Assets (assets up to 1-4-1987)	192.33	90.89	252.03	535.25
4=(2-3)	Assets having life 12-30 yrs	2,463.35	2,139.32	1,922.05	6,524.72
5=(4*2.8%)	Value of land (Average 2.8% of GFA)	68.97	59.90	53.82	182.69
6	Grants and contributions (upto 1-4-2005)		-	1,413.12	1,413.12
7=(4-5-6)	Assets having life 12-30 yrs eligible for depreciation	2,394.38	2,079.42	455.11	4,928.91
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	34.00	29.53	6.46	69.99
9=(1-2)	Assets < 12 years old (1-4-2005 to 31-3-2017)	2,002.64	2,398.35	5,356.42	9,757.41
10=(9*2.8%)	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
11	Grants and contributions (1-4-2005 to 31-3-2017)	26.16	95.95	4,140.05	4,262.16
12=(9-10-11)	Opening balance of Assets < 12 years old	1,920.41	2,235.25	1,066.39	5,222.04
13	Total asset addition approved	71.42	388.82	699.45	1,159.69
14	Grants and Contributions for 2017-18	75.31	103.99	394.15	573.45
15=13+14	Total Grants and Contributions (1-4-2005 to 31-3-2018)	101.47	199.94	4,534.20	4,835.61
16	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
17=(12+13-15- 16)	Closing balance of Assets <12 years Old (1-4-2005 to 31-3-2018)	1,916.52	2,520.08	1,371.69	5,808.28
18=(12+17)/2	Average Value of Assets <12 Years old	1,918.46	2,377.66	1,219.04	5,515.16
19=(18*5.14%)	Depreciation for assets <12 years (@5.14%)	98.61	122.21	62.66	283.48
20=8+19	Total Depreciation for assets for 2017-18	132.61	151.74	69.12	353.47

^{*}The total value of land out of the total approved capital additions for the year 2017-18 is Rs.10.46 crore (Rs.1.24 crore for SBU-G, Rs.9.15 crore for SBU-T and Rs.0.07 crore for SBU-D). Out of this, land included in the part capitalized which were commissioned in **2017-18 itself** is Rs.8.75 crore. Since the net value of land as part of capitalized assets for the year 2017-18 is very low, the Commission has not made any adjustments on the value of land while estimating depreciation for the assets added during the year.

2.242 As shown above the opening value of GFA as on 01-04-2017 as per truing up Order 14-09-2018 for 2016-17 is Rs.16817.38 crore, which lower by

Rs.103.72 crore as per KSEB Ltd petition on account of asset addition approved during 2016-17. The difference is due to the fact that asset addition approved by the Commission for 2016-17 is Rs.1459.87 crore, which is arrived at after removing the part capitalized assets (Rs.87.08 crore) and decommissioning liability (Rs.16.64). The value of land is taken at 2.80% of the GFA. The asset addition approved for the year 2017-18 is Rs.1159.69 crore. After deducting the depreciation for grants and contribution, at the average rate of 5.14%, the depreciation for the year is arrived at.

2.243 Based on the above, the total depreciation approved for SBU-G for 2017-18 is Rs.132.61 crore. *The Commission approves the depreciation of Rs.132.61 crore for SBU-G for the purpose of truing up as against the claim of Rs.143.48 crore.*

Other expenses:

Other expenses as accounted for by KSEB Ltd includes other debits, fair value adjustments, prior period expenses and income. The Other debits include Material cost Variance, R&D Expenses, Bad Debts and Misc Losses Written-off. The material cost variance represents the difference between the actual rate at which material was procured and the standard rate at which materials are issued. Bad and doubtful debts written off/ provided for represent the withdrawal of credits to revenue in earlier years. The miscellaneous losses and write off represent the compensation paid to staff and outsiders for injuries/death. The Other debits as per the petition for SBU-G is Rs.-0.92 crore. The total Other expenses include other debits (Rs. -15.85 Crore) and prior period charges (Rs.1.68 Crore) showing a net income of Rs.14.17 Crore. The details of other debits as per the audited accounts are given below.

Table 70
Details of Other Expenses

N		Amount
0	Particulars	Rs Crore
1	Research and Development Expenses	0.21
2	Bad and Doubtful debts written off/ provided for	8.11
3	Miscellaneous Losses and write-offs	2.76
4	Loss on account of flood and cyclone	-0.53
5	Material cost variance	-26.46
6	Sundries	0.06
7	Other debits Total (1 to 6)	-15.85
8	Prior period expenses	9.24
9	Prior period income	7.56
10	Prior period expenses (net) (8-9)	1.68
11	Other expenses (7+10)	-14.17

2.245 Bad and doubtful debts written off/ provided for, represent the withdrawal of credits to revenue in earlier years. The miscellaneous losses and write-offs represent the total compensation paid for injuries, death and danger to staff and outsiders. The material cost variance represents the difference between the actual rate at which material was procured and the standard rate at which pricing the issue of material was made. As per the ESAAR-1985, the material cost is first accounted as per the standard rates and subsequently difference between the actual and standards are accounted under material cost variance. This policy has been dispensed with consequent to the integration of SCM software (material issues) and SARAS (accounting) software with effect from 01.07.2017 for the distribution function. The credit balance under this head is mainly on account of transactions prior to the integration of SCM & SARAS software i.e., till 30.06.2017.

Prior period credit/ charges:

2.246 Prior period credits/charges include both income as well as expenses relating to earlier years. During the year, this amounted to Rs. 7.56 Crore and Rs.9.24 Crore respectively; resulting in net prior period expense of Rs.1.68 Crore. KSEB Ltd stated that the Commission did not approve any amount in ARR towards Prior period expenses. It is the considered position of the Commission that prior period charges could be covered in the truing up exercise. Hence, KSEB Ltd requested that the same may be admitted as detailed above. SBU wise break up of other expenses as per the petition is furnished below:

Table 71 Other expenses

Item	SBU G	SBU T	SBU D	Total
	Rs. crore	Rs.crore	Rs.crore	Rs.crore
Other expenses	- 0.92	3.84	-17.09	-14.17

Analysis and decision of the Commission

2.247 Many of the items under the head 'Other Expenses' relates to other SBUs. Hence the same is dealt with in detail in the respective sections. The share of SBU-G is Rs.0.92 crore only and is approved after examining the details for the purpose of truing up. The Commission approves Other Expense of Rs.-0.92 crore as per the KSEB Ltd truing up petition for SBU-G

Return on equity

2.248 KSEB Ltd in their truing up petition has claimed return on equity at the rate of 14%. As per the petition, the total equity mentioned of KSEB Ltd is Rs.3499 crore. KSEB Ltd in their petition sought RoE of Rs.116.38 crore based on the SBU wise breakup of equity, made on the basis of equity allocation among the SBUs in the trifurcated balance sheet as shown below:

Table 72 RoE claimed by KSEB Ltd for 2017-18

Particulars	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Equity Capital	831.27	857.05	1810.73	3499.05
RoE @14% on above	116.38	119.99	253.50	489.87

Objections of the stakeholders

2.249 According to the HT-EHT Association, the return on equity shall be as per the equity base approved by APTEL in the Order dated 18-11-2015 in Appeal No.247 of 2014 or as approved by the Commission i.e., Rs.1553 crore Any equity more than Rs.1553 will be in the violation of the Order of the APTEL. Accordingly, RoE of Rs.217.42 crore only to be given for entire KSEB Ltd instead of Rs.489.86 crore as claimed by KSEB Ltd.

Provisions in the Regulations

- 2.250 As per Regulation 27, normative debt equity ratio is 70:30 as shown below:
 - **27. Debt-equity ratio.** (1) For the purpose of determination of tariff, debt-equity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

- (2) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (3) Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.
- (4) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2015, debt-equity ratio allowed by

the Commission for determination of tariff for the period ending the Thirty First day of March, 2015 shall be considered.

- 2.251 Regulation 29 provides for return on equity. As per the said Regulation, RoE of 14% shall be allowed on the equity on the paid-up equity capital as shown below:
 - **"29. Return on investment. –** (1) Return on equity shall be computed in rupee terms, on the paid-up equity capital determined in accordance with the regulation 27 and shall be allowed at the rate of fourteen percent for generating business/companies, transmission business/licensee, distribution business/licensee and state load despatch centre:

Provided that, return on equity for generating business/company, transmission business/licensee, distribution business/licensee and state load despatch centre, shall be allowed on the amount of equity capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity capital portion of the approved capital cost for the investment put to use during the financial year:

Provided further that at the time of truing up for the generating business/company, transmission business/licensee, distribution business/licensee and state load despatch centre, return on equity shall be allowed on pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year."

Analysis and decision of the Commission

2.252 The Commission has examined the details furnished by KSEB Ltd and the objections of the HT-EHT Association. The Association has pointed out the APTEL judgment in Appeal No.247 of 2014 and stated that equity to be considered is only Rs.283.91 crore or the Equity capital approved by the Commission i.e., Rs.1533 crore. The Commission notes that aggrieved by the Order of the APTEL dated 18.11.2015 in Appeal No.247 of 2015, KSEB Ltd has filed a second appeal before the Hon'ble Supreme Court of India, raising certain substantial questions of law. The said appeal was admitted as Civil Appeal Nos 7247-48 of 2016 and Hon'ble Supreme Court, as per order dated 29.07.2016 has Ordered that:

"The State Commission may proceed with the matter pursuant to the remand. However, no final order may be passed without permission from the Court."

2.253 It can be seen that the said judgment of Hon APTEL and subsequent appeal filed before the Hon. Supreme Court pertains to the period 2014-15. The Commission in exercise of the power vested under the Electricity Act has issued KSERC (Terms and Conditions for Determination of Tariff) Regulations

for the control period 2015-16 to 2017-18. Hence, the provision of the Regulations is applicable for the determination for the control period 2015-16 to 2017-18.

- 2.254 As per Regulation 35(b), for the purpose of computation of return on equity, the equity of the Government of Kerala as per the transfer scheme published under Section 131 is to be followed. In this context, it is also to be mentioned that the Government has issued the G.O after reconciling the accounts between KSEB Ltd and the Government. In the said G.O, the Government has specifically mentioned that the increase in equity as per the Transfer Scheme is through cash infusion by the way of adjustment of Electricity Duty. Hence, the argument of the Association that the reduced equity of Rs.283.91 crore or equity capital approved by the Commission of Rs.1533 crore is not maintainable at present subject to the final decision of the Hon. Supreme Court. However, the Commission will be duty bound to consider this issue based on the decision of the Hon. Supreme Court. Accordingly, the Commission has considered the equity of Rs.3499 crore as per the G.O issued by the Government of Kerala.
- 2.255 KSEB Ltd has apportioned the equity capital based on the trifurcated balance sheet and apportioned the RoE. The Commission accepts this division of equity as per the audited accounts and accordingly, the RoE allowable for the SBU-G for the year 2017-18 is as shown below:

Table :73
Return on equity approved for the year 2017-18

	Equity As per petition		Approved for Truing up	
	Equity	RoE @ 14%	Equity	RoE @ 14%
	(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)
SBU-G	831.27	116.38	831.27	116.38
Total	3,499.00	489.86	3,499.05	489.86

2.256 As shown above, the Commission approves Rs.116.38 crore as ROE for SBU-G for 2017-18.

Non-Tariff income

2.257 In the truing up petition, SBU-G has claimed, based on apportionment a non-tariff income of Rs.24.99 crore which include income from sale of scrap, interest on advances to contractors, interest on staff loans and advances, rent from buildings etc., The different components of non-tariff income as submitted by KSEB Ltd in their truing up petition is shown in the Table below:

Table 74
Non-Tariff income of SBU-G for 2017-18

Particulars	Approved in the Suo motu ARR Order	Audited	As per Truing Up petition
	(Rs.crore)	(Rs.crore)	(Rs. crore)
Non-tariff income (Rs crore)			
Interest on staff loans and advances		0.01	0.01
Income from statutory investments		0.02	0.02
Income from sale of ash/rejected coal			
Income from rent of land or buildings		0.72	0.72
Income from sale of scrap		2.43	2.43
Income from staff welfare activities			
Rental from staff quarters		0.06	0.06
Excess found on physical verification		0.01	0.01
Interest on investments, fixed and call deposits and bank balances		1.34	1.34
Interest on advances to suppliers/contractors		2.22	2.22
Income from hire charges from contractors and others			
Income from advertisements, etc.			
Miscellaneous receipts		18.18	18.18
Interest on delayed or deferred payment on bills			
Rebate from fuel suppliers			
Total non-tariff income	0	24.99	24.99

Objections of Stakeholders

2.258 The HT-EHT Association participating in the hearing submitted that as per their estimates proposed Rs.27.86 crore as non-tariff income for SBU-G. The higher non-tariff income compared to the claims in the petition, according to the respondent is by including the income from energy sale to NVVN (Rs.51.18 crore) in the total non-tariff income.

Provisions in the Regulations

- 2.259 Relevant Regulations regarding Non-Tariff income is given below:
 - "45.Non-tariff income.- (1) The amount of non-tariff income of the generation business/company as approved by the Commission shall be deducted from the annual fixed charges while determining the annual fixed charges of the generation business/company."
- 2.260 Hence, in compliance to Regulation 45, the amount of non tariff income of SBU-G is to be deducted from annual charges. Regulation 45(2) provides the indicative list of items under non tariff income.

Analysis and decision of the Commission

- 2.261 In the year 2015-16, the KSEB Ltd has apportioned Rs. 19.43 crore towards non-tariff income and in 2016-17, the same has increased to Rs.22.23 crore. In 2017-18, the non-tariff income as per the petition is Rs.24.99 crore. The Commission notes that non-tariff income of SBU-G is 4.11% of the total non-tariff income. It is not clear whether the same is based on allocation or actuals. KSEB Ltd has not given justification towards such allocation. Hence the Commission hereby directs that henceforth accounting of non-tariff income has to be on factual and verifiable data and documents.
- 2.262 The Commission after considering KSEB Ltd's submission of the details, approves the non-tariff income of Rs.24.99 crore for SBU-G for the year 2017-18 as claimed by KSEB Ltd for SBU-G.

Annual capacity charges of SBU-G

- 2.263 Regulation 43 provides for the annual capacity/fixed charges. Relevant provisions of the Regulation are as shown below:
 - **"43. Annual capacity / fixed charges. –** (1) The annual capacity/fixed charges of a hydro-electric generating station or of a liquid fuel or gaseous fuel based thermal generating station, shall comprise of the following components: -
 - (i) Operation & maintenance expenses;
 - (ii) Depreciation;
 - (iii) Interest and finance charges
 - (iv) Interest on working capital:
 - (v) Return on equity:

Provided that the non-tariff income if any, shall be reduced while computing the annual capacity / fixed charges.

- 2.264 Based on the above provisions, various components of the capacity/fixed charges are determined as shown below:
 - (a) The O&M expenses including terminal benefits for SBU-G is Rs.138.36 crore
 - (b) Interest and finance charges

 The approved level of interest and financing charges including interest on working capital and interest on Master Trust for SBU-G is Rs.124.27 crore
 - (c) Depreciation:
 - Approved level of depreciation for SBU-G is Rs.132.61 crore
 - (d) Return on equity:
 - The RoE for SBU-G is Rs.116.38 crore
 - (e) Non-Tariff income
 - The approved level of non-tariff income for SBU-G is Rs.24.99 crore

2.265 Thus, the total fixed charges approved for the year 2017-18 for SBU-G is as shown below:

Table :75
Fixed charges allowable for SBU-G

	As per Petition (Rs. Crore	Approved in truing up (Rs. Crore)
Total O&M expenses	171.18	138.36
Unfunded Actuarial Liabilities	27.99	10.54
Interest and financing charges	146.71	124.27
Depreciation	143.48	132.61
RoE	116.38	116.38
Other expenses	-0.92	-0.92
Less Other income	24.99	24.99
Total	579.83	496.25

2.266 Since Plant Availability Factor (PAF) is a performance parameter for generating stations, in order to assess the overall performance of SBU-G, the Commission has sought the details of Normative Plant Availability Factor (NAPAF) of the all the generating stations for the year 2017-17vide letter dated 28-5-2020. However, KSEB Ltd in the letter dated 20-10-2020 had furnished the NAPAF as per the Regulations and the actual NAPAF was not furnished. Hence, the Commission could not asses the actual performance of SBU-G in terms of availability.

Summary and Transfer Cost of SBU-G

- 2.267 The primary role of SBU-G envisaged in the Transfer Scheme is to generate electricity and transfer it to SBU-D. All expenses incurred for the generation of electricity by the different stations of SBU-G is recovered from SBU-D as Transfer Cost, which is treated as the income from operations of SBU-G. As against an ARR&ERC approved cost of Rs.677.48 crore KSEB Ltd in their truing up petition has claimed the SBU-G transfer cost as Rs.581.91 crore i.e., a reduction of Rs.95.57 crore over the approved ARR&ERC figures.
- 2.268 SBU-G does not have any separate tariff income. Instead, its tariff income is derived considering expenses such as cost of power generation, interest and finance charges, depreciation, O&M expenses, Return on Equity, etc., and after deducting the non-tariff income. This amount is considered as the transfer cost which it charges from the SBU-D. The approved transfer cost is arrived at as Rs.497.50 crore. Total approved revenue requirements for SBU-G are the transfer cost of internal Generation to SBU-D as shown below:

Table 76
Approved Transfer Cost of SBU-G for 2017-18

Particulars	Approved in Suo motu order (Rs. Crore)	Petition (Rs. Crore	Approved in Truing up (Rs. Crore)
Fuel cost	-	2.08	2.08
Employee expense	50.43	116.77	104.43
R&M expenses	20.99	29.30	20.99
A&G expenses	4.86	25.11	4.86
O&M for new Stations	3.85		8.08
Total O&M expenses	80.13	171.18	138.36
Unfunded Actuarial Liabilities		27.99	10.54
Interest and financing charges	221.29	146.71	124.27
Depreciation	172.43	143.48	132.61
RoE	203.63	116.38	116.38
Other expenses		-0.92	-0.92
Less cost of aux consumption		-	-0.83
Gross Expenses	677.48	606.90	522.49
Less Non-Tariff Income	-	24.99	24.99
Transfer Cost of SBU-G	677.48	581.91	497.50

2.269 As shown above the approved gross transfer cost of SBU-G is Rs.522.49 crore. After deducting Rs.24.99 crore on account of Non-Tariff Income the net transfer cost of Rs. 497.50 crore is arrived at. This amount is the internal generation cost.

Revenue Gap/Surplus of SBU-G

2.270 The Commission after analyzing the petition and the arguments of the petitioner KSEB Ltd and the stakeholders, arrives at a net transfer cost of Rs.497.50 crore which is transferred as internal cost of generation to SBU-D. Since the entire cost of SBU-G is transferred to SBU-D as internal generation cost, there is no revenue gap or surplus for SBU-G for 2017-18.

CHAPTER -3

TRUING UP OF ACCOUNTS OF STRATEGIC BUSINESS UNIT – TRANSMISSION (SBU-T)

Introduction

- 3.1 SBU-Transmission (SBU-T) is vested with the functions of development and management of the transmission network in the State and is the State Transmission Utility. It manages the construction, operation and maintenance of EHT substations and transmission lines. It also co-ordinates the transmission loss reduction programme and coordinating the activities of transmission system development. At present SBU-T is also entrusted with the responsibility of controls the State Load Despatch Centre (SLDC) activities and of the management of protection and communication systems.
- 3.2 SBU-T of KSEB Ltd at present operates the following the voltage levels 220kV, 110kV, 66kV and 33kV. There is one 400 kV substation, 22 nos of 220kV substations, 154 nos of 110kV substations, 74 nos of 66kV substations and 149 nos of 33kV substations. The 400kV lines and the other 400kV substations in the State are owned and managed by the PGCIL. There are 2856km of 220kV lines, 4521.5 km of 110 kV lines 2151.12 km of 66kV lines and 1943.51km of 33 kV lines in the State.
- 3.3 The SBU-T is geographically organized into two zones, the North and South, each headed by a Chief Engineer stationed at Kozhikode and Thiruvananthapuram. The system operations wing performs the real time management of Kerala Power System and is headed by a Chief Engineer with headquarters at Kalamassery.

Expenses of SBU-T

3.4 As per the details furnished by KSEB Ltd in the petition, the expenses of SBU-T inclusive of Return on equity is Rs.909.93 crore as shown below:

Table 1
ARR of SBU-T as per Petition

	Approved in	As per	As per Truing up
Particulars	Suo motu	accounts	petition
	Rs. crore	Rs. crore	Rs. crore
Interest and financing charges	286.58	223.28	204.75
Depreciation	184.25	232.87	156.36
O&M Expenses	216.78	422.28	372.44
Return on equity (14%)	217.59	160.90	119.99
Other Expenses & PP expenses		3.84	3.84
Change in Fair value adjustments		-11.29	

Interest on unfunded Master Trust			
liability			52.56
Total ARR	905.20	1031.88	909.93
Less Non-Tariff Income	0.00	28.06	28.06
Total ERC/ Transfer cost	905.20	1003.83	881.87

3.5 Based on the above details in the petition, the Commission has carried out a prudence check of each of the above heads of expenditure viz-a-viz the Regulations as indicated below:

O&M Expenses

- 3.6 O&M expenses comprised of Employee expenses, R&M and A&G expenses. According to KSEB Ltd, total O&M cost for the year 2017-18 of SBU-T was Rs.422.28 crore.
- 3.7 However, in the petition, KSEB Ltd claimed Rs.372.44 crore as O&M expenses. The split-up details of actual O&M expenses in to Employee expenses, R&M Expenses and A&G expenses as per the petition is given below:

Table 2
Components of O&M cost of SBU-T for 2017-18 as per Petition

			. '
Particulars	Suo motu approval	As per Accounts	As per Petition
	Rs. Crore	Rs. Crore	Rs. Crore
Employee cost		346.81	288.66
Less: Capitalized		49.49	41.20
Balance		297.31	247.47
R&M expenses		42.27	42.27
A&G expenses		84.19	84.19
Less: Capitalized		1.49	1.49
Balance		82.70	82.70
O&M New stations			
Total O&M Expenses	216.78	422.28	372.44

3.8 As per the Regulations, O&M cost of Transmission is governed by the following two parameters i.e., no. of bays and length of circuit lines. According to KSEB Ltd, as per CERC norms (Regulation 29(4) (a) of CERC (T&C of Tariff) Regulations, 2014) for the above drivers, the allowable costs are Rs. 34.42 Lakh per bay (weighted average for 220 KV and 132 KV and below) and 0.334 for (Double Circuit single conductor) lines. Thus, the permissible O&M cost would be (2488 x Rs. 34.42 Lakhs + 9451 km x 0.334 =) Rs. 887.94 Crore as per norms under CERC Regulations. It may be seen that the actual O&M expense of the petitioner is substantially lower than the cost allowed as per

CERC Regulations. Therefore, KSEB Ltd requested to approve Rs.372.44 Crore towards O&M expenses.

Analysis and decision of the Commission

- 3.9 The Commission has examined the submission of KSEB Ltd regarding CERC norms for transmission allowing higher O&M expenses compared to the claim of KSEB Ltd, and notes that the same is irrelevant. As per Section 61 of Electricity Act, the Commission is fully empowered to determine among others the norms governing O&M expenses. The Commission also notes that the due process in framing the Regulations has been scrupulously followed while framing the MYT 2014 Regulations. Further, the comparison is also meaningless considering the fact that the mix of voltage levels in the KSEB system and that of PGCIL is also different. Hence, the Commission summarily rejects this contention of KSEB Ltd.
- 3.10 The component wise O&M expenses reported by KSEB Ltd are as shown below.

Employee expenses

3.11 KSEB Ltd in their truing up petition has claimed the employee expenses for SBU-T at Rs.247.47 crore out of total O&M expenses of Rs.372.44 crore of SBU-T. This amount of employee expenses as per the petition however excludes terminal benefits. The split-up details of employee expenses for SBU-T given by KSEB Ltd in the petition are given below:

Table 3
Split up details of employee cost and provisions for SBU-T for 2017-18

	As per Accounts	As per Petition
	Rs.crore	Rs.crore
Basic Salary	272.05	213.90
Dearness Allowance (DA)	55.41	55.41
House Rent Allowance	5.16	5.16
Conveyance Allowance	-	-
Leave Travel Allowance	0.03	0.03
Earned Leave Encashment	18.11	18.11
Other Allowances	1.92	1.92
Medical Reimbursement	1.36	1.36
Overtime Payment	-	-
Bonus/Ex-Gratia Payments	0.98	0.98
Interim Relief / Wage Revision	-	-
Staff welfare expenses	0.18	0.18

VRS Expenses/Retrenchment Compensation	-	-
Commission to Directors	-	-
Training Expenses	-	-
Payment under Workmen's Compensation Act	-	-
Net Employee Costs	355.21	297.06
Terminal Benefits	-9.71	-9.71
Annual Contribution for Terminal Liabilities based on actuarial valuation		-
Others	1.31	1.31
Gross Employee Expenses	346.81	288.66
Less: Expenses Capitalized	49.49	41.20
Net Employee Expenses	297.31	247.47

- 3.12 The difference in the Accounts and the truing up petition is on account of actuarial liability of Rs.58.15 crore (out of Rs.509.42 crore for KSEB Ltd) included in the Accounts and excluded in the claim.
- 3.13 In the accounts, KSEB Ltd has booked the actuarial liability for the year 2017-18 also. The actuarial liability for the year 2017-18 was ascertained as Rs.1584.88 crore and the same was captured in the accounts as Rs.509.42 crore has been booked under employee cost for the year and the remaining amount of Rs.1075.46 crore was booked under other comprehensive income in P&L account. KSEB Ltd also stated that the actuarial liability from 1-11-2013 to 31-03-2017 amounting to Rs.3728.98 crore has not been charged off to P&L account and claimed in the truing up till 31-03-2017. In view of this, KSEB Ltd also excluded the Rs.509.42 crore from employee cost for the year and claimed only Rs.2195.76 crore for 2017-18 and correspondingly the share of SBU-T at Rs.247.47 crore.
- 3.14 In order to comply with the Hon'ble High Court direction in WPC 465/2015, the Commission sought clarifications dated 28-05-2020 from KSEB Ltd for implementing the judgment of Hon. High Court. KSEB Ltd in their submission dated 20-10-2020 furnished the details. The salaries and allowances actually disbursed in 2017-18 to employees recruited after 01-04-2009 (11519 nos in total as on March 2018) works out to Rs.421.18 crore. The employee strength in 2018 was 33542 and has increased by 6367 nos over the 2009 (33542-27175) as part of Government's resolve to fill all vacancies through PSC. As per the methodology adopted by the Commission on truing up till 2013-14, the employee cost attributable to 6367 employees i.e., over and above the APTEL Judgment is Rs.232.76 crore. The additional financial commitment on account of increased number of employees works out to 9.2% only and considering

the business growth over 9-year period it is reasonable. Based on the above, KSEB Ltd stated that Commission may approve the employee cost in full in light of the following:

- a) The expenses towards the enhanced strength as a percentage of total employee cost is reasonable and much below in comparison with business growth
- b) There has been considerable growth in business over 9 years from 2009 to 2018 and the additional cost is very much comparable to the actual business growth over 2009.
- c) The number of sanctioned places as on 31-03-2009 was 30978 and the Commission considered only 27175. The gap between working strength and sanctioned strength is due to administrative delay in Public Service Commission giving advice memo after due process. The Vacant places are to be invariably filled up in due process.
- d) Hon'ble APTEL as per judgment dated 10-11-2014 has not fixed any ceiling limit to determine the allowable employee cost
- e) Maximum MYT time frame is for 5 years. Revision in expenses in consideration of actual expenses during the control period is provided in CERC and State Regulations. 2017-18 is the 9th year in succession from 2008-09.
- 3.15 Since KSEB Ltd has sought for approval of the entire employee cost, the Commission vide letter dated 28-05-2020 had sought from KSEB Ltd the following (1) copy of the Government of Kerala Orders sanctioning posts in KSEB from 1-4-2009 to 31-10-2013 i.e., when KSEB Ltd was a departmental undertaking under the Power Department. This is also the period prior to revesting of the Board under Section 131 of the Electricity Act and (2) Full Board resolutions of KSEB Ltd sanctioning new posts in KSEB Ltd from 01-11-2013 to 31-03-2018. In reply to the same KSEB Ltd vide letter dated 20-10-2020 has furnished the details which elaborately given in chapter 2.
- 3.16 KSEB Ltd further stated that Hon. APTEL has ordered to allow at least the pay and allowances for the staff strength a on 1-4-2009 and it is not a ceiling limit. Further, revision of other allowances forms an integral part of the agreements reached between the management and trade unions as envisaged in the APTEL Order in Appeal Nos.1 and 19 of 2013.

Objection of the Stakeholders

3.17 The HT-EHT Association stated that employee cost of the KSEB Ltd is to be curtailed as per the judgment of the Hon., APTEL. According to the Association, the excess employees as per the petition is 6367 nos. The cost pertains to excess employees works out to be Rs.421.44 crore and accordingly the allowable cost to SBU-T will be Rs.192.40 crore instead of

Rs.247.47 crore proposed by the petitioner. Hence an amount of Rs.55.06 crore is to be deducted from the employee cost claimed by KSEB Ltd for SBUT.

Provisions in the Regulations

- 3.18 In the case of SBU-T, as per Regulation 60, O&M expenses are to be determined as shown below:
 - "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 substation of the transmission business/licensee.
- (ii)For the purpose of deriving normative O&M expenses, 'cut km' means the length in circuit kilometres, of the transmission lines at voltages of and above 66 kV"
- 3.19 As per Annexure VIII of the Regulations, the O&M expenses are specified as given below:

<u>Annexure-VIII</u>

<u>O&M norms for the transmission business of KSEB Limited and transmission licensee</u>

Particulars	FY 2015-16	FY 2016-17	FY 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 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.

Analysis and decision of the Commission

- 3.20 KSEB Ltd in their truing up petition has sought Rs.247.47 crore towards employee expenses of SBU-T excluding the terminal benefits. The Commission has examined KSEB Ltd submission in the petition and the letter dated 20-10-2020 for claiming full employee expenses as per the petition. The Commission has addressed these appropriately in Chapter 2 of this Order.
- 3.21 As per the provisions of Regulations employee cost of SBU-T is allowed on a normative basis, excluding terminal benefits. Terminal benefits are regulated under proviso to Regulation 60, which stipulates that:

"the Transmission business of KSEB Limited shall, subject to prudence check by the Commission, be allowed to recover, in addition to the above specified normative operation and maintenance expenses, 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".

The recovery of expenses for the Master Trust is provided under Regulation 31. Hence the expenses under terminal benefits are treated separately.

3.22 As per Regulation 60, SBU-T is entitled for recovery of O&M expenses (employee costs, R&M expenses, A&G expenses) in a composite manner benchmarking against the no. of bays and circuit length (kms). However, in view of the judgment of the Hon. High Court in WPC No.465/2015(G), employee cost has to be determined in line with directions of APTEL in Appeal Nos. 1 and 19 of 2013. The details of the matter are given below:

Judgment of High Court in Writ Petition WPC No.465/2015(G)

3.23 As mentioned in Chapter 1, the main contention of KSEB Ltd was that the O&M norms for determining the expenditure specified in the Regulations are inadequate, resulting in under recovery of its expenses. Thereafter, KSEB Ltd submitted before the Hon'ble High Court that:

"in case the truing up of Accounts for the year 2014-15 onwards are also considered in the light of the revised Orders passed for the year 2010-11 onwards in tune with the judgments of the APTEL, the difficulties faced by the petitioner on account of the Regulations would be addressed to some extent".

The Commission also submitted before the Hon. High Court that while taking truing up applications of the petitioner for the year 2015-16, 2016-17 and 2017-18, the Commission would take into account the judgment of APTEL and the consequential orders passed thereafter, Hon'ble High Court on 28-02-2018 issued the final judgment and disposed off the petition WP(C) 465/2015, without going into the broad contentions raised in the writ petition as the Regulation under challenge, which is a sub-ordinate legislation issued under the Section 181(2)(d) of the Electricity Act 2003. The Hon. High Court in the judgment, directed the Commission to pass order on the application of the petitioner KSEB Ltd for truing up of accounts for the years 2015-16, 2016-17, 2017-18 with due regards to the findings in APTEL Judgments in Appeal Nos. 1 and 19 of 2013 and consequential orders passed by the Commission for 2010-11 onwards, in the case of KSEB Ltd. The relevant portion of the judgment of the Hon. High Court is quoted below:

"In view of the submission made by learned senior counsel that the Commission would take into account Ext.P6 judgment of the APTEL while taking up the applications for truing up of accounts, I direct the 1st respondent to pass orders on the applications of the petitioner for truing up of accounts for the year 2015-16, 2016-17, and in 2017-18 with due regard to the findings in Ext.P6 judgment and the consequential orders passed by the commission for the year 2010-11 onwards in the case of petitioner."

- Thus, the Commission is required to comply with the direction of the Hon. High Court of Kerala, with reference to the Order of APTEL in Appeal Nos. 1 and 19 of 2013, while considering the approval of employee cost of KSEB Ltd in the truing up petitions.
- 3.25 The Commission further notes that the Hon'ble APTEL vide the common judgment dated 10-11-2014 had decided on the issues raised in the Appeal Nos. 1 of 2013 and 19 of the 2013. In their appeal before the Hon'ble APTEL, against the Commission's Order dated 30-10-2012 on the truing up of accounts of KSEB for the year 2010-11 and the order dated 28-4-2012 on the ARR&ERC of KSEB for the year 2012-13 KSEB Ltd had raised a number of common issues including I) Employees cost ii) Repair and Maintenance Expenses iii) Administrative and General Expenses iv) Return on Equity v) Depreciation vi) Capitalization of Expenses.
- 3.26 Paragraph 8.3 to 8.6 of judgment of Hon'ble APTEL in Appeal No.1 and 19 of 2013 pertains to the observation and directions regarding the employee cost and related matters, which are extracted below.

- "8.3 We find that the State Commission in the impugned order dated 28.04.2012 has shown concern about the high employees cost and non-compliance of the directions given by the State Commission in this regard. The State Commission has noted that without a scientific study on manpower requirements, the recruitments are continuing and about 1000 persons are added every year. The State Commission has decided to benchmark employees' expenses based on the base year expenses escalated at price indices. The State Commission has used FY 2008-09 as the base year since latest true-up was carried out for 2008-09. The State Commission provided 3% increase in basic pay for accounting for increments. The other components are benchmarked based on CPI/WPI indices with weightage of 70:30 for estimating the increase in employees cost. Thus, while basic pay was increased by 3% the other components of employee expenses viz. DA allowances, terminal benefits, pay revision, etc., were increased as per CPI/WPI indices with weightage of 70:30 (CPI: WPI)
- .8.4 The State Commission has rightly shown concern about the high employees cost but we are not able to appreciate magnitude in the absence of a specific finding about the excess manpower and non-availability of Regulations. We feel that DA increase which is affected as per the Government orders have to be accounted for and allowed in the ARR as it compensates the employees for the inflation. The pay revision as per the agreements reached between the management and the unions have also to be honoured. The terminal benefits have also to be provided for.
- 8.5 We find that the State Commission has taken the actual expenses trued-up for FY 2008-09 as the base. The State Commission should have at least allowed the actual basic pay and DA increase, pay revision and terminal benefits over the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The gratuity directed to be paid as per the judgments of the High court dated 10.03.2003 as the Division bench of the High Court had dismissed the Appeal filed against this judgment, and which were disallowed by the State Commission by order in Appeal no. 1 of 2013 should also be allowed.
- 8.6 Accordingly, we direct the State Commission to true-up the employees cost from FY 2010-11 to FY 2012-13, as per the above directions."
- 3.27 It is clear from the above judgment of Hon'ble APTEL, that as far as employee cost is concerned, the Commission shall at least allow the actual basic pay and DA increase, pay revision and terminal benefits over *the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The same was made applicable to the truing up of accounts for 2013-14 also.*

3.28 The Commission further notes that KSEB Ltd in their submission before the Hon. High Court of Kerala on the same issue had stated:

"while taking up the truing up applications of KSEB Ltd for the year 2015-16, 2016-17 and 2017-18 the Commission would take into account the judgment of APTEL and the consequent orders passed thereafter."

The Commission had agreed to consider this requirement of KSEB Ltd before the Hon. High Court and consequently Hon. High court had passed Orders directing the Commission to pass orders on the applications of KSEB Ltd for truing up of accounts for the year 2015-16 to 2017-18 with due regard to the finding of the judgment of APTEL and consequent orders passed by the Commission for the year 2010-11 onwards in the case of KSEB Ltd. As pointed out above, as per the Judgment of Hon. High Court of Kerala, dated 28-02-2018, the Commission has to pass appropriate orders in the truing up petition for 2015-16 to 2017-18 with due regard to Orders of APTEL in 1& 19 of 2013 and the consequential orders of the Commission on truing up till 2013-14.

- 3.29 Thus, based on the submission of KSEB Ltd and submissions of the Commission to consider the request of KSEB Ltd, the Hon. High Court was pleased to pass Orders on the said Writ Petition. Hence, it is clear that the methodology adopted by the Commission in compliance to Hon. APTEL Orders was acceptable to KSEB Ltd as per their submissions before Hon. High Court of Kerala. This submission and acceptance by KSEB Ltd of the Commission's methodology in calculating employee cost is accepted by both sides and hence continued in this year of truing up also as per the submissions before the Hon. High Court.
- 3.30 From a combined reading of the Judgment of the Hon. APTEL and Hon.High Court, it can be inferred that in the case of employee costs, the actual basic pay and DA thereon, pay revision and terminal benefits over the actual base year expenses for the level of employees during the year 2008-09, should be provided for. Further, the terminal benefit paid is also required to be allowed in full. Therefore, the provisions of the Regulations regarding employee costs have been modified to this effect. As mentioned in previous sections, the Commission has faithfully complied with their commitment before Hon'ble APTEL and Hon. High Court of Kerala, in the truing up till 2016-17 and is duty bound to apply this methodology in the truing up for 2017-18 also.
- 3.31 KSEB Ltd vide letter dated 20-10-2020 has furnished the actual disbursement of pay and allowances and pay revision expenses of the employees recruited after 2009. The total addition to the employee strength from 2009 was 11519. KSEB Ltd has also stated that the strength of employees in 2017 was 33,542 as against the APTEL approved number of 27175 in 2009. Thus, the net

increase in employee strength is 6367, after considering the retirements. As per the details furnished by KSEB Ltd, the total amount disbursed for 2017-18 for the net increase in employees (6367 nos) from 2009 (33542-27175). The total disbursements for these 6367 employees over the 2009 levels is according to KSEB Ltd Rs.232.76 crore

Thus, in line with the Orders of Hon. APTEL, the employee expenses without accounting for the increase in manpower from 2008-09 can be estimated by deducting the employee expenses on account of the net increase in additional employees from the 2009 level from the total employee cost for the year. As mentioned above, the employee cost for KSEB Ltd excluding actuarial liability and capitalization is Rs.2195.76 crore. As furnished by KSEB Ltd in its letter dated 20-10-2020, the employee cost of additional employees is Rs.232.76 crore. Hence, the allowable expenses for KSEB Ltd are Rs.1963.01 crore (Rs.2195.76 crore - Rs.232.76 crore).

Table 4
Approved employee cost for SBU-T for 2017-18

	SBU-T	KSEB Ltd
	(Rs. crore)	(Rs. crore)
Net Employee costs as per petition	247.47	2,195.76
Net employee cost of SBU-T as a percentage of KSEB Ltd	11.27%	
Net cost of additional employees as per the letter dated 20-10-2020		232.76
Balance Employee cost		1,963.01
Employee cost attributable to SBU-T (1963.00 crore x 11.27%)	221.24	

3.33 On a pro-rata basis, the employee cost for SBU-T at 11.27% of Rs.1963.01 crore i.e., Rs.221.24 crore in compliance to the directions of the Hon APTEL and judgment of Hon. High Court of Kerala.

Table 5
Employee cost Approved for SBU-T for 2017-18

	As per truing up petition (Rs. crore)	Approved in the truing up (Rs. crore)
Employee Costs (Excluding terminal liabilities)	247.47	221.24

3.34 The Commission approves Rs.221.24 crore as the total employee cost for SBU-T for 2017-18

R&M Expenses

- 3.35 The R&M expenses of SBU-T claimed by KSEB Ltd for the year 2017-18 as per the petition was Rs.42.27 crore, out of the total O&M expenses of Rs.372.44 crore. KSEB Ltd stated that the business activity of KSEB Ltd has been continuously increasing over several decades. The average growth in respect of number of consumers, their electricity requirement and fixed assets during last 10 years has been 3.65%, 7.56% and 9.61% respectively. Correspondingly the physical assets of KSEB Ltd have also increased substantially during the period from 2006-07 to 2016-17.
- 3.36 Split up details of R&M expenses of SBU-T furnished by KSEB Ltd are given below:

Table 6
SBU wise Split up details of R&M expenses as per petition for 2017-18

2017-18		
Particulars	As per accounts	As per Truing Up petition
	Rs. Crore	Rs. Crore
Plant & Machinery	26.58	26.58
Buildings	2.16	2.16
Civil Works	6.11	6.11
Hydraulic Works	0.04	0.04
Lines & Cable Networks	6.06	6.06
Vehicles	0.75	0.75
Furniture & Fixtures	0.1	0.1
Office Equipment	0.47	0.47
Gross R&M Expenses	42.27	42.27
Less: Expenses Capitalized		
Net R&M Expenses	42.27	42.27

3.37 KSEB Ltd submitted that the R&M cost depends on the Gross Fixed Assets in use at the beginning of the financial year, age of the assets as well as inflation. While approving the R&M expenses as per the orders on ARR, the Commission has not allowed the R&M cost for the assets created after the year 2008-09. According to KSEB Ltd, there has been substantial increase in physical addition to major fixed assets during the period from 2008-09 to 2016-17.

Table 7
Physical additions to major fixed assets from 2008-09 to 2016-17

Table	Table 5.32: Physical addition to major fixed assets between FY 2008-09 and FY 2016-17				
Veer	220 KV	110 KV	66 KV Lines	33 KV Lines	11 & 22 KV Lines
Year	Lines	Lines	17	17	
	Km	km	Km	Km	Km
2008-09	2641.86	4067.59	2161.91	1184.78	41440
2016-17	2801.89	4440.30	2208.81	1867.61	59496
Increase	6.06 %	9.16 %	2.17 %	57.63 %	43.57 %
Year	EHT S/s	33 KV S/s	Step-Up Transfs	Step-Down Transfs	Distribution Transfs
2008-09	218	89	2465.6 MVA	14631 MVA	46359
2016-17	258	144	2699.05 MVA	19143.4 MVA	75579
% Increase	18.35 %	61.80 %	9.47 %	30.84	63.03 %

3.38 In the petition, KSEB Ltd has also furnished the following information regarding the cost drivers for determining the R&M expenses of SBU-T as given below:

Table 8
Cost drivers of SBU-T

Sl. No	Item	2016-17	2017-18		
1	Substation Bays*	2488	2564		
2	Substation Bays**	3536	3636		
3	Tran Lines***	9451	9585.30		
	* Excluding 33 kV bay	s ** Including 33 kV bays	*** in Ckt Kms		

Provisions of the Regulations

- 3.39 In the case of SBU-T, as per Regulation 60, O&M expenses are to be determined as shown below:
 - "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 substation 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."

3.40 In the case of SBU-T, O&M expenses are determined under Regulations 60 in a composite manner. Since out of the O&M expenses, employee cost is determined as per the directions of the Hon. High Court of Kerala, the other components of O&M expenses such as R&M expenses and A&G expenses are determined as per the norms in the Regulations.

Analysis and decision of the Commission

- 3.41 The R&M expenses of SBU-T claimed by KSEB Ltd for the year 2017-18 as per the petition is Rs.42.27 crore. KSEB Ltd submitted that the R&M cost depends on the Gross Fixed Assets in use at the beginning of the financial year, age of the assets as well as inflation. According to KSEB Ltd while approving the R&M expenses as per the orders on ARR, the Commission has not allowed the R&M cost for the assets created after the year 2008-09. There has been substantial increase in physical addition to major fixed assets during the period from 2008-09 to 2016-17
- 3.42 The Commission notes that, the O&M expenses for SBU-T is arrived at in a composite manner benchmarking against the number of bays and circuit length of lines(kms). The Commission also notes that KSEB Ltd's arguments before the Hon. APTEL has been rejected and they have also not pursued this issue in the Hon. High Court in their WPC thereafter. Since the MYT for 2015-16 to 2017-18 has become final KSEB Ltd cannot give the business growth argument to justify the increase in expenditure. It is to be noted that in the norms, inflationary impact has been considered and provided for. It is also to be noted that the recovery of R&M expenses is based on the no. of bays and circuit km and hence any increase in physical assets and 'business growth' is duly taken care of in the norms. Under such circumstances KSEB Ltd's argument of increase in transmission assets over the years for justification will not hold any merit. Hence this claim of KSEB Ltd is rejected.
- 3.43 In the judgment on Appeal No. 1 and 19 of 2013, regarding R&M expenses, Hon'ble APTEL has remarked that;

"in view of above findings of the State Commission, we do not incline to interfere with the findings of the State Commission. Thus, this issue is decided against the appellant". A combined reading of the APTEL judgment and the judgment of the Hon. High Court of Kerala in WPC No.465/2015(G), it is clear that it is not applicable in the case of R&M expenses. Accordingly, the provisions of the Regulations on normative R&M expenses are applicable.

3.44 Since there is no reconsideration required in the case of R&M expense and A&G expenses in the light of the directions of Hon.High Court of Kerala in WPC 564/2015, the same is determined as per the provisions of Regulations. Thus, R&M expenses and A&G expenses are to be separated from the composite norms of O&M expenses. This can be done relying on the base figures provided in the Note to the Regulations. The norms for each year of the control period are arrived at by escalating the norms for the previous year by 5.85%. By following this principle, the Commission has arrived at the norms for 2016-17 for the truing up of accounts for 2016-17. Based on the same, the segregated norms based on number of bays and circuit kilometers for 2017-18 for SBU-T are as shown below:

Table 9
Norms for O&M expenses for Bays as per Regulation

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	2016-17		2017-18			
	Rs. lakh Rs.lakh/circuit per Bay km		Rs. lakh per Bay	Rs.lakh/circuit km		
Employee cost	3.05	0.34	3.23	0.36		
R&M expenses	2.01	0.22	2.13	0.23		
A&G Expenses	0.48	0.05	0.51	0.05		
Total O&M expenses as per Regulations	5.54	0.61	5.86	0.65		

- 3.45 As shown above, as per the Regulations, total O&M expenses for bay for 2017-18 is Rs.5.86 lakh and for per circuit kilometer is Rs.0.65 lakh. Of this, R&M expenses for SBU-T for a bay is Rs.2.13 lakh and Rs.0.23 lakh per circuit km.
- 3.46 As shown above, in the case of SBU-T, the R&M expenses have to be determined based on the operational parameters such as number of bays and circuit kilometers. The operational parameters applicable for the SBU-T for estimation of O&M cost is that of the year beginning of the year 2017-18. As per the details furnished by KSEB Ltd in the petition, the no. of bays and circuit km at the beginning of the year 2017-18 is as shown below.

Table 10
Operational parameters for SBU-T for R&M and A&G expenses

Item	2017-18*
No. of Substation Bays*	2488
Transmission lines (Ckt kms)	9451

^{*}at the beginning of the year

3.47 Based on the above, the R&M expenses applicable for SBU-T for the year 2017-18 is approved as shown below:

Table 11
R&M expenses for SBU-T as per the Regulations for 2017-18

real expenses in each are regulatione in an in-			
Parameters	2017-18*	Norms as per Regulation (Rs.lakh/bay/ Circuit km)	Allowable R&M expenses 2017-18 (Rs.crore)
1	2	3	4=2x3/100
No. of Substation Bays	2488	2.13	52.99
Transmission lines (Ckt kms)	9451	0.23	21.74
Total R&M expenses as per Regulation			74.73

^{*}at the beginning of the year

3.48 As shown above, the R&M expenses approved for SBU-T as per the provisions of the Regulations is Rs.74.73 crore as against KSEB Ltd petition of Rs.42.27crore.

Table 12 R&M expenses approved for SBU-T for 2017-18

	As per truing up petition (Rs. crore)	Approved for Truing up (Rs. crore)
R&M Expenses	42.27	74.73

3.49 The Commission approves Rs.74.73 crore as R&M expenses for SBU-T for 2017-18 for the purpose of truing up. It is pertinent to note that the Approved R&M expenses based on the norms are about 58% more than the actual R&M expenses claimed by KSEB Ltd.

A&G expenses

3.50 As per the petition the A&G expenses booked is Rs.82.70 crore out of the total O&M expenses Rs.530.38 crore for KSEB Ltd. However, KSEB Ltd sought the same amount in the truing up petition also. The split-up details of A&G expenses are shown below:

Table 13
A&G expenses under SBU-T for 2017-18 as per KSEB Ltd

Particulars	Ltd
Rs. Crore Rs. Crore Rs. Crore Rent Rates & Taxes 0.63 0.64 0.44	As per Audited
Rent Rates & Taxes 0.63 0.63 Insurance 0.03 0.03 Telephone & Postage, etc. 1.51 1.51 Legal charges 0.41 0.44 Audit Fees 0.04 0.04 Consultancy charges - - Other Professional charges 0.53 0.53 Conveyance 6.73 6.73 Vehicle Running Expenses Truck / Delivery 0.14 0.14 Vehicle Hiring Expenses Truck / Delivery Van 0.12 0.12 Electricity charges 0.04 0.04 Water charges 0.09 0.03 Entertainment 0.19 0.19 Fees & subscription 0.09 0.09 Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.0 Miscellaneous Expenses 0.53 0.53 DSM activities - - Spo	Rs. Crore
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Telephone & Postage, etc. 1.51 1.51 Legal charges 0.41 0.41 Audit Fees 0.04 0.04 Consultancy charges - - Other Professional charges 0.53 0.53 Conveyance 6.73 6.73 Vehicle Running Expenses Truck / Delivery Van 0.14 0.14 Vehicle Hiring Expenses Truck / Delivery Van 0.12 0.12 Electricity charges 0.04 0.04 Water charges 0.09 0.05 Entertainment 0.19 0.15 Fees & subscription 0.09 0.09 Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.0 Miscellaneous Expenses 0.53 0.53 DSM activities - - SPPC expenses 0.67 0.67 Sports and related activities 1.10 1.10 <	
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Other Professional charges 0.53 0.53 Conveyance 6.73 6.73 Vehicle Running Expenses Truck / Delivery Van 0.14 0.12 Vehicle Hiring Expenses Truck / Delivery Van 0.12 0.12 Electricity charges 0.04 0.04 Water charges 0.09 0.05 Entertainment 0.19 0.19 Fees & subscription 0.09 0.09 Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.0 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5	-
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Water charges 0.09 0.05 Entertainment 0.19 0.15 Fees & subscription 0.09 0.09 Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - </td <td>0.12</td>	0.12
Entertainment 0.19 0.19 Fees & subscription 0.09 0.09 Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01	0.04
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Printing & Stationery 0.94 0.94 Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others- Other Purchase related Expenses 0.28	0.19
Advertisements, exhibition publicity 1.20 1.20 Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19	0.09
Contribution/Donations 0.12 0.12 Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.075 0.75 Others 0.01 0.07 Others 0.01 0.02 Gross A&G Expenses	0.94
Training expenses -0.04 -0.04 Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 84.19 84.1	1.20
Miscellaneous Expenses 0.53 0.53 DSM activities - - SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 84.19 84.1	0.12
DSM activities -	-0.04
SRPC expenses 0.67 0.67 Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 84.19 84.19	0.53
Sports and related activities 0.12 0.12 Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.01 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.19	-
Freight 1.07 1.07 Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.00 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.19	0.67
Purchase Related Advertisement Expenses 1.10 1.10 Bank Charges -0.01 -0.00 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.19	0.12
Bank Charges -0.01 -0.00 Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured - - Outsourcing of metering and billing system - - V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.19	1.07
Office Expenses 65.59 65.5 License Fee and other related fee 1.23 1.23 Cost of services procured	1.10
License Fee and other related fee 1.23 1.23 Cost of services procured	-0.01
Cost of services procured	65.59
Outsourcing of metering and billing system V-sat, Internet and related charges Security arrangements Books & periodicals Computer Stationery Others Others- Other Purchase related Expenses Outside System Outside Sys	1.23
V-sat, Internet and related charges 0.06 0.06 Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	-
Security arrangements - - Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	
Books & periodicals 0.01 0.01 Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	0.06
Computer Stationery - - Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	-
Others 0.75 0.75 Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	0.01
Others- Other Purchase related Expenses 0.28 0.28 Gross A&G Expenses 84.19 84.1	-
Gross A&G Expenses 84.19 84.1	0.75
Gross A&G Expenses 84.19 84.1	0.28
Ele. Duty u/s 3(I). KED Act	84.19
=	
Less: Expenses Capitalised 1.48 1.48	1.48
Net A&G Expenses 82.70 82.7	82.70

3.51 The total A&G expenses of KSEB Ltd is inclusive of Electricity Duty under Section 3 of Electricity Duty Act, 1963. However, KSEB Ltd has not apportioned Electricity duty to SBU-T.

Objections of the Stakeholders

3.52 There is no specific objection raised by stakeholders regarding O&M expense of SBU-T. However, the Association has stated that O&M expenses should be allowed only as per the provisions of the Regulations. According to Association Rs.16.40 crore should be the allowable A&G expenses against the claim of Rs.82.70 crore.

Analysis and decision of the Commission

3.53 The A&G expenses of SBU-T claimed by KSEB Ltd for the year 2017-18 as per the petition were Rs. 82.70 crore, which is same as per the accounts. As far as KSEB Ltd prayer regarding increase in allowing A&G expenses beyond Regulation's norms, it is to be noted that Hon'ble APTEL in Appeal No. 1 and 19 of 2013 had stated that:

"we find that the State Commission has allowed escalation on the basis of CPI & WPI indexes with weightage of 70: 30 over the actual A&G expenses for FY 2008-09. The Appellant Board has not been able to give a satisfactory reply to the substantial increase in A&G expenses. We do not find any infirmity in the findings of the State Commission."

- 3.54 A combined reading of the APTEL judgment and the judgment of the Hon. High Court of Kerala in WPC No.465/2015(G), it is clear that the directions are not applicable in the case of A&G expenses. Accordingly, the provisions of the Regulations on normative A&G expenses are applicable.
- As shown above, the O&M expenses for SBU-T is estimated in a composite manner benchmarking against no. of bays and circuit length for R&M expenses, employee cost and A&G expenses. Since the employee expense has been determined as per the judgment of Hon. High Court and Hon APTEL, the balance component i.e., R&M expense and A&G expenses have to be determined as per the provisions of Regulations. Thus, R&M expenses and A&G expenses are to be separated from the composite norms of O&M expenses. As mentioned above, this can be done based on the base figures provided in the Note to the Regulations. Accordingly segregated norms based on No. of bays and circuit km of lines for SBU-T can be as shown below:

Table 14

O&M expenses for Bays and circuit km for 2017-18 as per Regulations

	20	16-17	2017-18		
	Rs. lakh per Rs.lakh/circuit		Rs. lakh per	Rs.lakh/circuit	
	Bay	km	Bay	km	
Employee cost	3.05	0.34	3.23	0.36	
R&M expenses	2.01	0.22	2.13	0.23	
A&G Expenses	0.48	0.48 0.05		0.05	
Total O&M expenses	5.54	0.61	5.86	0.65	

- 3.56 As shown above, as per the Regulations, composite norms for a bay is Rs.5.86 lakh. Of this, A&G expense is Rs.0.51 lakh per bay. Similarly, composite norms for a circuit kilometer is Rs.0.65 lakh. Of this, A&G expenses for a circuit kilometer is Rs.0.05 lakh.
- 3.57 The operational parameters applicable for the SBU-T for estimation of O&M cost is that at the beginning of the year 2017-18. As per the details furnished by KSEB Ltd in the petition, the number of bays and circuit km at the at the beginning of the year as shown below.

Table 15
Operational parameters under SBU-T for estimation of O&M expenses

Item	2017-18*
No. of Substation Bays	2488
Transmission lines (Ckt kms)	9451

^{*}at the beginning of the year

3.58 Based on the above, the A&G expenses applicable for SBU-T for the year 2017-18 is estimated as shown below:

Table 16
A&G expenses applicable to SBU-T as per the Regulations for 2017-18

Parameters	2017-18*	Norms as per Regulation (Rs.lakh/bay/ Circuit km)	Allowable A&G expenses 2017-18 (Rs.crore)
1	2	3	4=2x3/100
No. of Substation Bays	2488	0.51	12.69
Transmission lines (Ckt kms)	9451	0.05	4.73
Total A&G expenses as per Regulation			17.41

^{*}at the beginning of the year

3.59 The A&G expenses allowable to SBU-T as per the provisions of the Regulations is Rs.17.41 crore.

Table 17
A&G expenses approved for SBU-T for 2017-18

	As per	Approved for
	petition	Truing up
	(Rs. crore)	(Rs. crore)
A&G Expenses	82.70	17.41

3.60 As shown above, the A&G expenses allowable to SBU-T as per the provisions of the Regulations is Rs.17.41 crore as against KSEB Ltd claim of Rs.82.70 crore.

Approved O&M Expenses

3.61 The total O&M expenses approved for 2017-18 considering the provisions of the Regulations and the impact of the Order of the Hon. High Court for SBUT is as shown below:

Table 18

O&M expenses except terminal benefits approved for SBU-T for 2017-18

	As per truing up petition	Approved in truing up
	(Rs. crore)	(Rs. crore)
Employee Costs	247.47	221.24
R&M Expenses	42.27	74.73
A&G expenses	82.70	17.41
Total O&M Expenses	372.44	313.38

Asset addition in 2017-18 as per petition

3.62 KSEB Ltd submitted that they have capitalized Rs.499 crore for SBU-T out of the total Rs.1390.56 crore in 2017-18. The summary of the details of capitalized the substations and lines commissioned during the year 2017-18 is given below.

Table 19
Summary of the capital works executed in 2017-18

No	Item	Quantity
1	220KV lines	54.10 ckt-km
2	110KV lines	79.76 ckt-km
3	66KV lines	0.44 ckt-km
4	33KV lines	41.08 ckt-km
5	EHT Substations	11 numbers
6	33KV Substations	5 numbers
7	Capacity addition/enhancement	809.90 MVA

3.63 As per the second Transfer Scheme, SBU-T is entrusted with the construction of 33kV and above system of KSEB Ltd. The voltage level wise capacity of Transmission system and number of substations and transmission lines within the State as on 31st March, 2018 is summarized below:

Table 20
Transmission system as on 31-3-2018 as per petition

	<u> </u>	<u> </u>	•
No	ltem	Unit	Quantity
1	400 kV Lines	Ckt-km	855.96*
2	220 kV Lines	Ckt-km	2855.98
3	110 kV Lines	Ckt-km	4528.08
4	66 kV Lines	Ckt-km	2154.63
5	33KV lines	Ckt-km	1943.51
6	400 kV Substations	Nos	5* + 1
7	220 kV Substations	Nos	22
8	110 kV Substations	Nos	154
9	66KV Substations	Nos	76
10	33 KV Substations	Nos	148
11	Total transmission capacity	MVA	19994.70
	(MVA)		
	*PGCIL owned		

3.64 The details of performance of capital works as given in the petition is shown below:

Table 21
Assets Commissioned under SBU-T for 2017-18

SI.	Name of Substation /Line	Start	Date	Commissioning date		Commissioning date AS Actual		Remarks						
No	Name of Substation / Line	Scheduled	Actual	Scheduled	Actual	amout	Expenditure	Remarks						
	Erumeli	21/12/2006	02/03/2007	20/12/2008	15/05/2017	18.12	16.97	Delay due to litigation by						
1	Kanjirappally - Erumeli SC line	,,	,,	==,==,===	,,			land owners.						
	Manimala	09/05/2011	21/07/2011	28/2/2015	27/5/2017	8.75	7.65	Delay due to litigation over						
2	Ranni -Manimala 33 kV SC line	03/03/2011	21/0//2011	20/2/2013	20/2/2013	20/2/2013	20/2/2013	20,2,2013	==, =, =010	20, 2, 2013	27/3/2017	0.75	7.03	land
	Veli	27/07/2017	15/08/2017	20/03/2018	28/03/2018	20.68	6.56	Project partially						
3	TERLS -Veli	27/07/2017	13/00/2017	20/03/2018	20/03/2018	20.00	0.50	commissioned						
	Aryanadu	5/9/2016	15/09/2016	15/09/2017	31/03/2018	8.41	5.4							
4	Nedumangad - Aryanadu (OH +UG)	3/3/2010	13/03/2010	13/03/2017	31/03/2018	0.41	5.4							
	Pattoor	15/02/2016	10/3/2016	15/02/2017	18/05/2017	7.42	5.63							
5	Medical College, TVM - Pattoor 33 kV SC UG	13/02/2016	10/3/2010	15/02/2017	16/05/2017	7.42	5.05							
	Kattakkada							Original contract of PTCD-						
6	Pothencode - Kattakkada DC	7/11/2009	27/11/2009	6/11/2011	24/07/2017 11	24/07/2017	6/11/2011 24/07/2017	07/2017 112.15	112.88	KTDA line terminated at the risk and cost of the contractor and the work completed by inviting new tender				
	Kacheri	2/10/2016	17/10/2016	5/6/2017	7/10/2017	6.6	4.61							
7	Attingal - Kacheri UG Cable	2/10/2016	17/10/2016	5/6/2017	//10/2017	0.0	4.01							
	Cyber Park	17/05/2016	18/05/2016	19/12/2016	30/06/2017	8.95	4.84							
8	LILO Nallalam - Kuttikkattoor to Cyber Park	17/03/2016	18/03/2016	19/12/2010	30/00/2017	0.93	4.04							
	Kinaloor	15/01/2016	15/01/2016	26/11/2017	26/11/2017	9.5	4.34							
9	LILO of Kakkayam-Chevayur line to Kinaloor	13/01/2016	15/01/2016	20/11/2017	20/11/2017	9.5	4.54							
	Vadakara - Meppayur 2nd Ckt							Delay in supply of						
10	Meppayur – Koyilandy	24/01/2015	12/02/2015	26/01/2016	26/01/2018	3.3	7.33	materials. Time extended up to 28/2/2018						
11	Manjeri	04/01/2016	04/01/2016	31/03/2018	03/01/2018	8.21	5.89	CP 10 13/2/2010						
		2 ., 22/2020	1,,	,,	,,		2.00	_						

	Malappuram- Manjeri			<u> </u>	I			T
	Walappuram- Wanjeri	+						Delay due to Material
12	Perinthalmanna	30/11/2011	30/11/2011	22/04/2017	22/04/2017	7.35	4.1	shortage
	Kalpakanchery							311011050
13	LILO of Malaparamba-Melattur DC line	04/04/2016	04/04/2016	04/05/2017	04/05/2017	3.47	2.45	
	Thammanam							
14	Kaloor Thammanam UG cable	12/01/2016	20/12/2016	31/03/2017	28/03/2018	12.52	5.12	
15	Maradi S/s	29/01/2016	01/01/2016	31/03/2018	29/03/2018	17.9	9.57	
16	Odakkali S/s	29/01/2016	01/12/2016	31/03/2018	31/03/2018	11.4	6.3	
17	Muttom S/s	29/01/2016	01/03/2016	31/03/2017	21/01/2018	5.3	3.1	
18	Solar park, Ambalathara LILO of Kanhirode - Mylatty	26/04/2016	26/04/2016	31/05/2017	31/05/2017	32.9	31.81	Total cost31.81 includes Overhead charges, errection and commissioning and transportation and insurance charges apportioned.
19	Valiavelicham	25/07/2016	25/07/2016	27/03/2018	27/03/2018	11.85	7.55	Administrative Sanction was for 3.5 km of 110 kV OH Line whereas only 2.4 km was necessitated. Asset capitalized on 18-19 and Total cost 7.55 includes Overhead charges, errection and commissioning and transportation and insurance charges apportioned.
20	Kuthuparamba - Nedumpoil	09/08/2016	09/08/2016	27/03/2018	27/03/2018	13.55	4.862	AS amount include up gradation of 66 KV S/s Nedumpoil to 110 KV and Line construction. This amount include line for 19 km only . Hence difference.
21	Kubanur - Traction Uppala SC UG 3x300 Sq mm Total	20/09/2016	20/09/2016	24/12/2017	24/12/2017	21.45	19.15 276.11	Asset capitalized on 18-19 and Total cost 19.15 includes Overhead charges,errection and commissioning and transportation and insurance charges apportioned.

3.65 As per the details mentioned above, the total assets capitalized in SBU-T of Rs.499 crore. Out of this, Ind AS addition considered in the accounts for 2016-17 to the tune of Rs.113.29 has to be deducted. Further an amount of Rs.18.34 crore represents part capitalization is also deducted. The Commission has excluded the part capitalized assets while approving the asset addition for 2016-17, and these projects commissioned in this year. Hence KSEB Ltd submitted that an amount of Rs. 17.00 crore on account of the same is to be added to the GFA. Thus, the total GFA for SBU-T added as per the Regulations is Rs.384.37 crore out of Rs.499 crore capitalized as per the accounts. The details are given below:

Table 22

Details of assets addition to be considered for true up as per petition

Particulars	SBU G	SBU T	SBU D	TOTAL
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Capitalized during the year-As per Accounts	182.98	499.00	707.30	1389.28
Less: IND AS addition considered in 2016-17, now withdrawn	141.75	113.29	7.85	262.89
Add: GFA addition of KAES not capitalized at ARU level in 17-18.	16.46	0	0	16.46
Less: Part capitalization in 2017-18	1.99	18.34	0	20.33
Add: Part capitalization in 2016-17 commissioned in 2017-18	5.23	17.00	0	22.23
Add: Perumthenaruvy SHE Scheme commissioned in 2017-18	56.73			56.73
GFA addition as per Tariff Regulation	117.66	384.37	699.45	1201.48

Objections of the stakeholders

3.66 The Association also pointed out that the asset addition in 2016-17 and 2017-18 is to be examined closely, before allowing it considering the observation made by the Commission in its order in the Truing up of accounts for 2016-17. Considering the claims, and allowing asset addition of Rs.899 crore in 2016-17 and depreciation for the year Rs.369.87 crore, the opening normative loan according to estimate of the objector is Rs.890.07 crore. Considering the depreciation of Rs.369.87 crore for the year 2017-18, the closing normative loan is Rs.520.20 crore. Accordingly, the interest charges at 9.47% is Rs.66.78 crore only. Since the Commission has not approved any capital expenditure in 2017-18, there is no addition to normative loan for the year 2017-18.

Analysis and decision of the Commission:

- 3.67 KSEB Ltd had submitted that the asset additions for SBU-T as per Accounts was Rs.499.00 crore. KSEB Ltd has given the list of 21 projects commissioned under SBU-T. In many of the projects in the list, there is huge time delays and also cost escalation. In the case of Veli /TERLS the project is only partly commissioned. The total expenditure for the above 21 projects works out to be Rs.276.11 crore, as against Rs.499 crore mentioned in the petition. The reason for delay among other things mentioned as material shortages. In the case of items 18 & 21, the asset is stated to be commissioned in 2018-19. KSEB Ltd has not furnished complete details on these items. The sanctioned project cost was Rs.349.78 crore whereas the expenditure so far booked is Rs. 276.11 crore crore only. Such huge difference was not explained properly. KSEB Ltd also not furnished the asset addition details for the existing assets so as to cross verify the total assets added as per the accounts.
- 3.68 The details for examination of the time and cost over run of the projects commissioned in 2017-18 is neither available not has been provided. Hence,

the same is not considered in this truing up. The same will be appropriately taken up after seeking balance details from KSEB Ltd.

3.69 In the petition, the total asset addition claimed is Rs.384.37 crore as against Rs.499 crore booked in the Accounts. Out of this, Rs.113.29 crore was withdrawn on account of asset additions considered in 2016-17. The part capitalization of assets made in 2017-18 is Rs.18.34 crore, which is to be removed. The part capitalization of assets pertaining to previous years, but commissioned in 2017-18 claimed in the petition is Rs.17.00 crore. The Commission had, while approving the capital addition in 2016-17 removed Rs.5.89 crore worth partly capitalised assets from 2011-12 to 2015-16. KSEB Ltd in their letter dated 04-01-2021 requested that an amount of Rs.4.45 crore pertaining to Muvattupuzha SS is to be included since the same was commissioned in the year 2017-18. Accordingly, out of Rs.5.80 crore disallowed in 2016-17, Rs.4.45 crore is included under the asset addition for 2017-18. Thus, the net capital additions for 2017-18 is Rs.388.82 crore for SBU-T and Rs.1159.69 crore for KSEB Ltd as shown below:

Table 23
Asset addition approved for the year 2017-18

	SBU-G	SBU-T	SBU-D	KSEB Ltd
	Rs. Crore	Rs. crore	Rs. crore	Rs. Crore
Addition As per IND AS Accounts-2017-18	182.98	499.00	707.30	1,389.28
Less: IND AS addition considered in 2016-17, now withdrawn	141.75	113.29	7.85	262.89
Add: GFA addition of KAES not capitalized at ARU level in 17-18.	0.00-	-		0.00
Less: Part capitalization in 2017-18	1.99	18.34	-	20.33
Add: Part capitalization in 2016-17 commissioned in 2017-18	5.23	17.00	-	22.23
Add part capitalisation 2011-12 to 2015-16 (Perunthenaruvi/ muvta 110kv)	26.95	4.45		31.40
Add: Perumthenaruvy SHP 2017-18 (Since not in the accounts, not included)	0.00			0.00
GFA addition for 2017-18	71.42	388.82	699.45	1,159.69

3.70 Based on the above, the summary of the asset addition approved under SBU-T is as shown below:

Table 25
Summary of approved Asset addition in 2017-18 and GFA

	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Opening level of Approved GFA (as on 01-04-2017)	4,658.32	4,628.56	7,530.50	16,817.38
Asset Additions approved in 2017-18	71.42	388.82	699.45	1,159.69
Closing balance of GFA (as on 31-03-2018)	4,729.74	5,017.38	8,229.95	17,977.07

3.71 The total approved Asset additions for for KSEB Ltd in 2017-18 is Rs. 1159.69 crore of which share of SBU-T is Rs.388.82 crore.

Interest and financing charges

- 3.72 In their petition, KSEB Ltd sought Rs.204.75 crore towards interest and financing charges for SBU-T. Interest charges include interest on secured loans, master trust interest, interest on working capital, interest on PF balance etc., in the case of SBU-T.
- 3.73 KSEB Ltd stated that the Commission in the Suo motu ARR&ERC Order had approved the interest and financing charges of Rs.286.58 crore which included the interest on loans, interest charges on GPF, other interest charges and interest on Master Trust. The claim of KSEB Ltd on interest and financing charges for the year 2017-18 is as shown below:

Table 26
Interest and financing charges claimed for 2017-18 as per petition

	interest and invarion g charges standed for 2017. To do per polition									
			As per Accounts			True up claim				
SI No	Item	Approval	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total
1	Interest on Loan	412.85	136.65	133.92	340.41	610.98	87.75	91.03	138.93	317.70
2	Security Deposit Interest	129.64			175.33	175.33	0	0	174.95	174.95
	Master Trust Bond									
3	Interest	814.06	42.9	80.55	690.95	814.4	42.9	80.55	690.95	814.4
	Working capital/ OD									
4	interest	0	5	9.4	80.6	95	7.07	17.23	0	24.3
5	PF interest	140	8.23	15.46	132.57	156.26	8.23	15.46	132.57	156.26
6	Other interests	10	3.26	2.08	23.77	6.83	0.76	0.49	5.58	6.83
7	Interest on fair valuation	0				22.28	0	0	0	0
	Carrying cost on past									
8	approved revenue gap								444.49	444.49
	Carrying cost on current									
9	year revenue gap								61.12	61.12
10	Total	1506.55	196.04	241.41	1443.63	1881.08	146.71	204.75	1648.59	2000.05

3.74 Each of the items is dealt with as given below:

Interest on long term loans and advances

3.75 In the ARR, the Commission has considered a loan amount of Rs.1667 crore for SBU-T at the end of 2017-18. However as per the methodology adopted by KSEB Ltd, the actual loan amount allocated in the accounts for SBU-T is Rs.1488.18 crore at an interest rate of 9.47%. The interest charges as per the Accounts for SBU-T is Rs.133.92 crore. Out of this, Rs.18.12 crore was capitalized and the net interest for the year is Rs.115.80 crore. As against this, KSEB Ltd has claimed Rs.91.02 crore as the interest charges on normative loan in the petition. The details are given below:

Normative loan as on 1-4-2017

- 3.76 KSEB Ltd in the petition stated that the Commission, as per Truing up orders for 2016-17 has determined the normative loan at Rs.1951.51 Crore as on 31.03.2017 by considering GFA addition till 31.03.2016. Addition to normative loan for 2016-17 was not approved for want of details as stipulated in the Tariff Regulation. In compliance to the direction, KSEB Ltd submitted additional details along with computation of normative loan applicable for GFA addition in 2016-17 amounting to Rs.916.65 Crore. Further, according to KSEB Ltd, after deducting depreciation for the year, the closing balance of additional normative loan for 2016-17 is Rs. 899.91 Crore for SBU-T.
- 3.77 However, KSEB Ltd was aggrieved on the determination of normative loan balance as on 01.04.2015 (Rs.2276.22 Crore) by the Commission and sought review for an additional claim of Rs.467.60 Crore, which was turned down as per order dated 16.05.2019 of the Commission. Considering the long-lasting financial implication, KSEB Ltd has filed an appeal before the Hon'ble APTEL. In view of the above, the quantum of normative loan at the beginning of the year has been considered in this petition at Rs. 3319.02 Crore as detailed below:

Table 27
Normative loan as on 1-04-2017 as per petition

SI. No	Description	Amount	
	·	Rs.crore	
1	Closing balance of Normative loan as per True up order for 2016-17	1951.51	
2	Add: Additional normative loan claimed by KSEBL as per separate submission	899.91	
3	Add: Claim towards normative loan as on 01.04.2015 pending disposal before APTEL.	467.60	
4	Opening balance of Normative loan as on 01.04.2017 considered in this petition (1+2+3)	3319.02	

3.78 Depreciation on Fixed assets till 01.04.2017 amounted to Rs.520.47 Crore considered as normative repayment. Normative interest for opening balance of loans for 2017-18 (as on 01.04.2017) amounted to Rs.288.45 Crore as detailed below:

Table 28

Normative loan and interest charges as claimed in the petition for 2017-18

SI. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
	Normative loan as on 01.04.2017 as per TU				
1	order	564.38	547.59	839.54	1951.51
2	KSEBL claim before Hon'ble APTEL	135.23	131.21	201.16	467.60
3	Additional normative loan for 2016-17	291.21	241.44	367.26	899.91
4=(1+2+3)	Opening normative loan considered in petition	990.82	920.24	1407.96	3319.02

5	Normative repayment	142.39	149.15	228.93	520.47
6=(4-5)	Closing normative loan	848.43	771.09	1179.03	2798.55
7=(4+6)/2	Average normative loan	919.63	845.67	1293.50	3058.79
8	Average rate of interest (Actual)	9.33%	9.25%	9.62%	9.47%
9=(7*8)	Normative interest	85.80	78.22	124.43	288.45

3.79 As per the Accounts, the share of interest charges for SBU-T is Rs.133.92 crore out of the total interest charges of Rs.610.98 crore. The interest charges as per the accounts is as shown below:

Table 29 Interest on loan as per accounts for 2017-18

		Add: additions	Less:				Average
	Opening	during the	Repayments	Closing	Interest	Average	interest
SBU	(01/04/17)	Year	during the year	(31/03/18)	on loan	loan	rate (%)
	Rs.crore	Rs.crore	Rs.crore	Rs.crore	Rs.crore	Rs.crore	Rs.crore
SBU G	1460.19	1293.72	1285.45	1468.47	136.65	1464.33	9.33
SBU T	1488.18	1460.43	1542.03	1406.58	133.92	1447.38	9.25
SBU D	3475.36	2595.99	2467.05	3604.30	340.41	3539.83	9.62
Total	6423.73	5350.14	5294.53	6479.35	610.98	6451.54	9.47

3.80 However, KSEB Ltd in their truing up petition has claimed Rs.91.02 crore as interest on normative loan net of capitalisaiton for the year 2017-18. As per the details furnished in the petition, the gross normative loan and interest charges for the year is as shown below:

Table 30

Normative loan and average rate of interest as per the petition.

Troffilative loan and average rate of interest as per the petition							
Sl. No	Particulars	SBU G	SBU T	SBU D	Total		
		Rs.crore	Rs.crore	Rs.crore	Rs.crore		
1	Normative loan as on 01.04.2017 as per TU order	564.38	547.59	839.54	1951.51		
2	KSEBL claim before Hon'ble APTEL	135.23	131.21	201.16	467.60		
3	Additional normative loan for 2016-17	291.21	241.44	367.26	899.91		
4=(1+2+3)	Opening normative loan considered in petition	990.82	920.24	1407.96	3319.02		
5	Normative repayment	142.39	149.15	228.93	520.47		
6=(4-5)	Closing normative loan	848.43	771.09	1179.03	2798.55		
7=(4+6)/2	Average normative loan	919.63	845.67	1293.50	3058.79		
8	Average rate of interest (Actual)	9.33%	9.25%	9.62%	9.47%		
9=(7*8)	Normative interest	85.80	78.22	124.43	288.45		

- 3.81 As shown above, KSEB Ltd has claimed interest charges on normative loan for KSEB Ltd as on 1-4-2017 at Rs.288.25 crore and out of which Rs.78.22 is for SBU-T.
- 3.82 KSEB Ltd in their petition claimed that on the basis of the above submission, entitlement of additional normative loan eligibility for 2017-18 works out to Rs.643.41 Crore and normative interest for the asset addition for the year 2017-18 Rs.29.25 Crore as detailed below:

Table 31
Computation of normative loan for the GFA addition during 2017-18 as per petition

SI No	Particulars	SBU G	SBU T	SBU D	TOTAL
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA addition eligible for normative loan	117.66	384.37	699.45	1201.48
2	Consumer contribution, Grants and Subsidies received during the year	75.31	103.99	394.15	573.45
3	Equity infusion during the year	0	0	0	0
4=(1-2-3)	Additional normative loan for 2017-18	42.35	280.38	305.30	628.03
5	Less: Normative repayment for 2017-18 (Depreciation on				
	assets added in 2017-18 at half the normal rate (@ 5.14%/2=2.57%)	1.09	7.21	7.85	16.14
6=(4-5)	Net additional normative loan	41.26	273.17	297.45	611.89
7 =(6/2)	Average additional normative loan	41.81	276.78	301.38	619.96
8	Average rate of Interest % (Actual)	9.33	9.25	9.62	9.47
9 =(7*8%)	Normative interest on GFA addition for 2016-17	1.95	12.80	14.50	29.25

3.83 Therefore, KSEB Ltd claimed interest on normative loan for 2017-18 amounts to Rs 317.70 Crore and that of SBU-T is Rs.91.02 crore as summarized below

Table 32

Normative interest on loan for 2017-18 as per petition

SI. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Normative interest on loan as on 01.04.2017	85.80	78.22	124.43	288.45
2	Normative interest on loan during 2017-18	1.95	12.80	14.50	29.25
3	Total	87.75	91.02	138.93	317.70

Objection of stakeholders

3.84 The HT-EHT Association had objected to the claims of KSEB Ltd regarding Normative loan. According to the Association, the normative loan as on 1-4-2015 is only Rs.314.82 crore. The objections in detail along with the reply of KSEB Ltd and the views of the Commission are discussed in Chapter -2, under the heading 'Interest and financing charges'. Hence, the same is not repeating under this section.

Provisions in the Regulation

3.85 Regulations provide detailed procedure for the approval of interest and financing charges. Regulation 27 provides for the debt : equity ratio and the relevant portions are given below:

"27.Debt-equity ratio. – (1) For the purpose of determination of tariff, debtequity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

- (2)Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (3)Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.

(4) If any fixed asset is capitalised on account of capital expenditure incurred
prior to the First day of April, 2015, debt-equity ratio allowed by the
Commission for determination of tariff for the period ending the Thirty Firs
day of March, 2015 shall be considered.

23	,
•••••	

Regulation 30 provides for interest and financing charges, which is given below:

- **30.Interest and finance charges**. (1) (a) The loans arrived at in the manner indicated in regulation 27 shall be considered as gross normative loan for calculation of interest on loan.
- (b) The interest and finance charges on capital works in progress shall be excluded from such consideration.
- (c)In the case of retirement or replacement of assets, the loan amount approved by the Commission shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.
- (2) The normative loan outstanding as on the First day of April, 2015, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission up to the Thirty First day of March, 2015, from the normative loan.
- (3)Notwithstanding any moratorium period availed by the generating business/company or the transmission business/licensee or the distribution business/licensee, the repayment of loan shall be considered from the first financial year of commercial operation of the project and shall be equal to the depreciation allowed for that financial year.
- (4) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each financial year applicable to the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre:

Provided that if there is no actual loan for a particular financial year but normative loan is still outstanding, the weighted average rate of interest on the last available loan shall be considered: Provided further that if the regulated business of the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre does not have actual loan, then interest shall be allowed at the base rate.

- (5) The interest on loan shall be calculated on the normative average loan for the financial year by applying the weighted average rate of interest.
- (6)The generating business/company or the transmission business/licensee or the distribution business/licensee or the state load despatch centre, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and any benefit from such refinancing shall be shared in the ratio 1:1 among,-
 - (i) the generating business/company and the persons sharing the capacity charge; or
 - (ii) transmission business/licensee and long-term intra-State open access customers including distribution business/licensee; or
 - (iii) distribution business/licensee and consumers.
 - (7) The changes to the terms and conditions of the loans during the financial year, if any, shall be effective from the date of coming into force of such changes.
 - (8)Interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on the First day of April of the financial year in which the application is filed:

Provided that interest on security deposit actually paid to the users of the transmission system or distribution system and to the consumers during the financial year, shall be considered at the time of truing up for the financial year."

3.86 As per the provisions of the Regulations, while allowing interest on loans, interest charges for capital works in progress is not allowable. Further, the Regulation provides that funds received in the form of grants and contributions to be deducted from the fund requirements. In the case of assets during construction, the same is to be treated as part of fixed assets only when the assets are put into use.

Analysis and decision of the Commission

3.87 As per the petition, the KSEB Ltd sought Rs.91.02 crore towards interest and financing charges apportioned for the SBU-T. The Commission has examined the claims of KSEB Ltd and the objections of the stakeholders in detail. Each of the items is examined separately below:

Interest on long term loans

3.88 Concurrent reading of the provisions of Regulations 27 and 30 show that interest charges applicable to assets created up to 01-04-2015 and after 01-04-2015 (i.e., assets addition during the year 2016-17) shall be provided. Regulation 30(1) (b) specifies that, interest charges for capital works in progress are not allowable. As per the proviso to Regulation 27(1) funds received in the

form of grants and contributions are to be reduced from the fund requirements for asset creation. Further, in the case of assets during construction, the same is to be treated as part of fixed assets only when the assets are put into use.

- 3.89 The Commission has examined in detail the claims towards interest charges apportioned to SBU-T. The Regulation provides for treatment of loans and interest charges thereon on a normative basis. The normative loan amount required to meet the value of fixed assets as on 01-04-2015 (i.e., the date of effect of control period), in the books of the licensee is taken as the funding requirement. Further, the Regulation requires that funds received in the form of grants and contributions is to be reduced from the fund requirements. Similarly, for operational purposes, interest on working capital is also provided separately on normative basis. In the case of assets during construction, the same is to be treated as part of fixed assets only when the assets are put into use. Thus, the funding requirements for fixed assets are to be considered normatively, so that the consumers are required to pay only what is to be funded for fixed assets and put into intended use
- 3.90 Rate of interest for the loan is specified in Regulation 30(4). As per this, the rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio of each financial year applicable to the generating business, transmission business or distribution business as the case may be. As mentioned in the previous chapter, the average interest for 2017-18 is 9.47%
- 3.91 The Commission had arrived at the existing normative loan (opening levels) as per the Regulations for the year 2016-17 in the Order on Truing up of accounts for 2016-17 as shown below:

Table 33

Normative existing loans for the year 2016-17 as per true up Order

		Rs. Crore
1	Net Fixed Assets as on 1-4-2015	8483.82
2	Equity as per accounts	3,499.05
3	Grants and Contribution	2 709 60
	(after depreciation)	2,708.60
4=1-2-3	Normative Loan as on 1-4-2015	2,276.17
5	Repayment equivalent to depreciation for the year	334.87
6=4-5	Normative loan as at the end of the year	1,941.30
7	Addition to loans in 2015-16 (738.44-358.35)	380.08
8=6+7	Opening levels of Loan (as on 1-4-2016)	2,321.38

3.92 The Commission in the truing up order for 2015-16 had considered for the purpose of estimating the normative loans, the net fixed assets as on 01-04-

2015 at Rs.8483.82 crore. After deducting the funds from grants and contribution (Rs.2708.60 crore after depreciation) and equity (Rs.3499.05 crore), the normative loan as on 1-4-2015 was Rs.2276.17 crore. After deducting the normative repayment of Rs.334.87 crore equivalent to the depreciation, the net normative loan at the end of 2015-16 was Rs.1941.30 crore. The addition to normative loan ie., net increase in fixed assets excluding grants and contribution, was Rs.380.08 crore. Thus level of normative loan as on 31-03-2016 and the opening level as on 01-04-2016 was Rs.2321.38 crore.

3.93 In the initial truing up Order for 2016-17 dated 14-09-2018 the Commission did not allow the addition to capital assets for the year for want of details. However, KSEB Ltd subsequently filed the details and as per the Order in OA 64/2019 dated 12-10-2020, the Commission has allowed Rs.1459.87 crore the addition to capital assets for the year 2016. Accordingly, the revised Asset addition for the year 2016-17 is as shown below:

Table 34
Approved Asset additions for 2016-17

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. crore	Rs. crore	Rs. crore
Asset addition as per accounts 2016-17 (IndAs)	450.22	410.19	908.25	1,768.66
Less: Duplication	81.98	53.31	ı	135.29
Less: Part capitalization	37.80	31.98	1	69.78
Less: Part capitalization during previous years	81.28	5.80	ı	87.08
Less: Decommissioning Liability	-	-	16.64	16.64
GFA addition under SBU D wrongly included under SBU G	-31.69	-	31.69	1
GFA addition approved for 2016-17	217.47	319.10	923.30	1,459.87

3.94 The asset addition of Rs.1768.66 crore as per the accounts for the year 2016-17 was inclusive of the additional asset addition pertaining to previous years (Rs.282.73 crore out of the total Rs.414.82 crore) made as part of the cleaning up of accounts during the first-time adoption of Ind AS. The full effect of these adjustments was made in the Accounts for 2017-18, by withdrawing Rs.398.18 crore (Rs.414.82 crore-Rs.16.64 crore decommissioning liability) from GFA of 2017-18. The normative loan for the asset addition made during the year 2016-17 was allowed after deducting the grants and contribution for the year 2016-17 (Rs.646.94 crore) and depreciation for the addition of assets (Rs.12.56 crore). The effect of asset additions for the previous years were not considered while allowing addition to normative loan for 2016-17, since complete effect of the adjustments were reflected in the accounts of 2017-18 only. Hence addition to normative loan for 2016-17 was approved at Rs.517.64 crore only. However, the full effect of these additions from 2017-18 is available since the same has been fully included in the Accounts.

- 3.95 KSEB Ltd had filed a review petition against the Order dated 12-10-2020 in OA 64/2019 on approval of addition to assets for the year 2016-17 as part of truing up. In the said review petition, KSEB Ltd had sought to review the Commissions' decision on approval of depreciation and normative loan and to approve additional interest on normative loan to the tune of Rs.14.71 crore and additional depreciation to the tune of Rs.0.92 Crore. The Commission has admitted the petition. The first hearing of the petition was conducted on 31-03-2021. Vide daily Order dated 31-03-2021, the Commission sought the following additional details:
 - (a) Whether the valuation of fixed assets under Ind AS is based on the cost model or revaluation model. If so, the adjustments made in the fixed assets due IndAS towards fair value adjustments/revaluation adjustments to be provided
 - (b) Net addition of land under SBU-G for a year 2016-17 is -ve (Rs.(-)8.16 crore) after removing the part capitalization and duplication. Reasons for negative value may be furnished
 - (c) Whether any fair value adjustments included in the claims under the asset additions during 2015-16 and 2016-17.
 - (d) Whether the interest rate booked under the accounts for 2016-17, any fair value adjustments are included. If so the details, and the processing of the same is in progress. Since the matter has not been disposed of the impact if any on the same will be considered separately.

In their response, KSEB Ltd has furnished the details and based on the same and to obtain greater clarity on the issue so as to facilitate a considered decision, the Commission has decided to hold another hearing. In the meantime, due to the intensification of Covid-19 pandemic severe restrictions were announced by the Government on the functioning of the offices including lockdowns and triple lockdowns in Thiruvananthapuram among other districts. The next hearing is expected to be held shortly. Since the matter is not been disposed off the impact if any on the same will be considered separately.

3.96 As mentioned above, the Commission has approved the asset addition of Rs.1159.69 crore for 2017-18. The grants and contribution for SBU-T is Rs.103.99 crore and that of KSEB Ltd is Rs.573.45 crore Based on the above, the normative loan approved for the year is as shown below:

Table 35
Normative loan approved for the year 2017-18

Normative Ioan Summary	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Normative loan as on 1-4-2015	789.34	628.83	857.99	2,276.17
Add Asset additions approved 2015-16	34.79	212.24	491.41	738.44
Less Grants & contributions	13.11	12.93	332.31	358.35

Less Depreciation-2015-16	122.05	132.84	79.98	334.86
Net Normative Ioan As on 1-4-2016	688.97	695.30	937.11	2,321.40
Add Asset Additions approved 2016-17	217.47	319.1	923.3	1459.87
Less Grants & contributions	13.05	79.12	554.77	646.94
Less Depreciation 2016-17	129.11	151.14	102.18	382.43
Normative loan As on 1-4-2017	764.28	784.14	1,203.46	2,751.90
Add Asset Additions approved 2017-18	71.42	388.82	699.45	1,159.69
Less Grants & contributions	75.31	103.99	394.15	573.45
Less Depreciation 2017-18	132.61	151.74	69.12	353.47
Closing normative loan As on 31-3-2018	627.78	917.23	1,439.64	2,984.67

- 3.97 The Commission in the truing up order for 2015-16 had for the purpose of estimating the normative loans arrived at , the net fixed assets as on 01-04-2015 as Rs.8483.82 crore. After deducting funds such as grants and contribution and equity, the normative loan as on 1-4-2015 was Rs.2276.17 crore. Thereafter the asset addition for the year 2015-16 was Rs.738.44 crore and after deducing the grants and normative repayment equivalent to the depreciation amounting to Rs.334.86 crore the net normative loan closing level (31-03-2016) was Rs.2321.38 crore for KSEB Ltd as a whole and for SBU-T is Rs.695.30 crore
- 3.98 The Asset addition for the year 2016-17 is Rs.1459.87 crore after removing the part-capitalization and duplication of assets as per the details furnished by KSEB Ltd. The Normative repayment for the year 2016-17 was equivalent to the depreciation is Rs.382.43 crore.
- 3.99 The asset addition approved for the year 2017-18 is Rs.1159.69 crore and net additions after considering the grants (Rs.573.45 crore), depreciation (353.47 crore) etc., is Rs.232.77 crore. The net closing normative loan is thus, Rs.2984.67 crore. Out of this, the closing loan for SBU-T is Rs.917.23 crore.
- 3.100 The weighted average rate of interest on the actual loan portfolio is 9.47% and the interest on existing normative loan is estimated as shown below:

Table 36
Interest charges for normative loan approved for 2017-18

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Opening level of Normative loan (as on 1-4-2017)	764.28	784.14	1,203.46	2,751.90
Closing level of Normative loan (as on 31-3-2018)	627.78	917.23	1,439.64	2,984.67
Average Normative Ioan	696.03	850.69	1,321.55	2,868.29
Rate of Interest	9.47%	9.47%	9.47%	9.47%
Interest charges for 2017-18	65.91	80.56	125.15	271.63

3.101 The interest charges of Rs.271.63 crore so arrived at and the share of SBU-T is Rs.80.56 crore.

Interest on working capital

3.102 KSEB Ltd has claimed interest on working capital for each of the SBUs separately. For SBU-T the interest charges claimed for working capital is Rs.17.23 crore as shown below:

Table 37
Interest on working capital claimed as per petition for SBU-T

SI. No	Particulars	Amount (Rs.
		Crore)
1	O&M expense for 1 month	31.04
2	1% of GFA towards maintenance spares	47.19
3	Receivable 1 month	77.00
4	Total	155.23
5	Less: Security deposit	0.00
6	Net working capital	155.23
7	Base rate as on 01.04.2017	9.10%
8	Interest rate @2% above base rate	11.10%
9	Interest on Working capital (6*8)	17.23

3.103 As per the provisions of the Regulations, interest on working capital is allowed on a normative basis and separately for each business.

Provisions in the Regulations

- 3.104 Provisions in the Regulation regarding estimation of working capital are as shown below:
 - 33 (1) (d) In the case of transmission business/licensee the working capital shall comprise of, -
 - (i)operation and maintenance expenses for one month; plus
 - (ii)cost of maintenance spares at one per cent of the historical cost; plus
 - (iii)receivables equivalent to transmission charges for one month calculated at target availability:

Provided that the amount, if any, held as security deposits except the security deposits held in the form of bank guarantee from users of the transmission system shall be reduced while computing the working capital requirement.

Objection of stakeholders

3.105 Regarding interest on overdraft from the Banks, the Association worked out the interest charges as per the Regulations as Rs.7.10 crore for SBU-T.

Analysis and decision of the Commission

3.106 The Commission has worked out the interest on working capital as per the provisions of the Regulations. Accordingly, the working capital is estimated as shown below:

O&M expenses for SBU-T - Rs.313.39 crore
Historical cost of assets - Rs.4628.56 crore

Receivable for 1 month - Not considered as there is no actual flow of transfer cost

Base rate - 9.10% Interest rate for working capital - 11.10%

3.107 Based on the above, the interest on working capital is estimated as follows:

Table 38
Estimation of interest on working capital for SBU-T

	SBU-T
	(Rs. crore)
O&M expenses for one month	26.12
Cost of maintenance of spares 1% of historical cost	46.29
Total	72.40
Less Security deposits	0
Total Normative Working capital Requirement	72.40
Base rate as on 1-4-2016	9.10%
Interest rate on working capital	11.10%
Interest on working capital	8.04

3.108 The interest on working capital for SBU-T as per the provisions of the Regulations is Rs.8.04 crore, which is approved for the year 2017-18

Interest on security deposits

3.109 In the case of SBU-T, since the SBU does not hold any security deposit and hence no amount is assigned on this account.

Interest charges for GPF

3.110 As per the petition, KSEB Ltd has apportioned interest on GPF to SBU-T is Rs.15.46 crore considering the actual GPF balance of Rs.2029.93 crore. The actual rate of interest was 7.9% which later reduced to 7.6%.

Objections of the stakeholders

3.111 The HT -EHT Association stated that interest on GPF is to be allowed as per the Note 29 of the audited accounts at Rs.156.26 crore and accordingly, Rs. 15.46 crore is to be allowed

Analysis and decision of the Commission

3.112 As per the Accounts, the interest charges booked for GPF is Rs.156.26 crore. Out of this, the share of SBU-T is Rs.15.46 crore, which is allowed for 2017-18.

Interest on Master Trust Bonds

- 3.113 KSEB Ltd has sought Rs.80.55 crore on account of interest on Master Trust Bonds for SBU-T. In the petition KSEB Ltd stated that the State Government, as per notifications dated 31.10.2013 and 28.01.2015, ordered creation of a Master Trust for meeting the unfunded liability of pension, gratuity and leave surrender as on 31.10.2013, in respect of the personnel transferred from erstwhile KSEB to KSEB Ltd. The total liability as on 31.10.2013 was estimated at Rs.12,418.72 Crore and necessary funding arrangements were put in place through issue of 2 series of Bonds. The Commission has recognized the unfunded pension liabilities as above and approved recovery of interest on KSEB Ltd submitted share of Bonds as per Tariff Regulations, 2014. KSEB Ltd that in the *Suo motu* Order dated 17-4-2017 of the Commission had approved the interest charges of Rs.814.06 crore for 2017-18. KSEB Ltd has now requested that the actual share of expenses for SBU T is Rs. 80.55 Crore, which may be approved.
- 3.114 KSEB Ltd further submitted that the operationalization of the Master Trust was delayed due to non-receipt of the Income tax exemption and the actual date of operationalization of the Master Trust is only from 01.04.2017. Actuarial valuation has been done on 31.03.2017 and the assessed unfunded pension liability, gratuity liability and leave surrender liability as on 31-03-2017 stood at Rs.16,147.70 Crore i.e., an increase of Rs.3,728.98 Crore liability for the period from 01.11.2013 to 31.03.2017

3.115 In the petition KSEB Ltd stated that the Kerala Service Rules as applicable in the Government are applicable to employees of KSEB Ltd. The details of terminal benefits paid to retired employees in FY 2017-18 through Master Trust amounts to Rs.1341.36 Crore as detailed below:

Table 39
Amount paid to pensioners by Trust in 2017-18

Month	Rs. Crore	Month	Rs. Crore
Apr-17	107.17	Nov-17	112.94
May-17	153.04	Dec-17	99.82
Jun-17	124.60	Jan-18	99.48
Jul-17	98.14	Feb-18	95.83
Aug-17	219.54	Mar-18	94.30
Sep-17	25.68	Total	1341.36
Oct-17	110.82		

3.116 KSEB Ltd as per their audited accounts for 2017-18 has not claimed pension and terminal liabilities under employee cost by virtue of operationalization of Master Trust and provisioned 10% interest on Bonds (Rs.8144.40 Crore) amounting to Rs.814.40 Crore among the SBUs as detailed below:

Table 40
Interest on Master Trust Bonds

Item	SBU G SBU T		SBU D	Total
	Rs. crore	Rs. crore	Rs. crore	Rs. crore
Interest on Bonds	42.90	80.55	690.95	814.40

Objections of the stakeholders

3.117 The HT-EHT association stated that the Commission should approve interest on Master Trust Bonds strictly as per the audited accounts for the year 2017-18

Analysis and decision of the Commission

3.118 The Commission has examined the submissions of KSEB Ltd regarding interest on bonds issued to Master Trust. As per the submissions of KSEB Ltd, the Master Trust is operational only from 2017-18 and in the first year of the Trust itself the fund has become unsustainable considering the fact that the actual pension payments (Rs.1341.36 crore) is more than the interest allowed on bonds (Rs.814.40 crore). KSEB Ltd sought to bridge the gap in pension outflow (Rs.526.96 crore) for the year 2017-18 by recovery through consumer's tariff in the form of interest on unfunded actuarial liability of Rs.531.39 crore.

- 3.119 The Commission noted that as per the original scheme of issue of Bonds, the actuarial liability as on 31-10-2013 was assessed at Rs. 12418.72 crore. This liability was as per transfer scheme apportioned in the ratio of 35:65 between the Government of Kerala and KSEB Ltd. The Commission notes that the scheme envisages the flow of funds from the Government in the form of interest and repayments to the tune of Rs.586.10 crore and Rs.52.40 crore for 10 years, in addition to the interest on Bonds issued to the Master Trust at the rate of 10% for 20 years @814.40 crore for the first year. Further, a substantial portion of funds inflow was envisaged by the increase in the ROE, through increase in equity from Rs.1553 crore to Rs.3499.05 crore in the transfer scheme which would also contributed to fund the Master Trust. The Commission has examined this issue as part of the Tariff Order dated 08-07-2019 and noted that payments are not being remitted by KSEB Ltd as envisaged in the Scheme for creation of a corpus fund and to make this fund self-sustaining over a period of 20 years. Instead, KSEB Ltd has been operating the Trust Accounts like a "Current Account" by remitting money into the account on requirement basis for dispersal and fulfilment of retirement benefits. Hence, the payments into the Trust account by KSEB Ltd is not as per the original scheme envisaged but only as per the fund requirements to disburse the pension. The Commission has also sought a copy of the audited accounts of the Trust and KSEB Ltd has furnished the same vide letter dated 20-10-2020. In the Note to the accounts of said audited accounts, (schedule 12.2.2.) it is mentioned that no income and expenditure account has been prepared as the trust is only acting as the intermediary institution for effecting disbursement of pension, gratuity and other retirement benefits of the employees of erstwhile KSEB and receipts /payments are accordingly credit/debited to the fund account. There is no revenue earning activity for the Trust in view of the above. Based on this, the statutory auditors have qualified their opinion.
- 3.120 It is pertinent to note that the Auditors had noted that the Trust was not being managed as envisaged. The Commission notes that the proposal of KSEB Ltd for additional funds is also not in line with the scheme of operation of the Fund. The deficit in the Master Trust is on account of not providing the funds to the Trust on a yearly basis as envisaged. The Commission notes that KSEB Ltd did not constitute the Trust till the financial year 2017-18 claiming that they were not exempted from Income Tax liability. This according to the Commission is a The Master Trust could have been constituted and lame excuse. operationalized and IT exemption petition could have been moved simultaneously. KSEB Ltd however did not act accordingly. Since the Master Trust was not constituted and operationalized by KSEB Ltd as originally envisaged, no provision was made by the Commission in the Truing up orders till 2016-17, but Rs.814.40 crore was allowed for payment of terminal liabilities. It is also important to note that even the increase in income from ROE is being utilized by KSEB Ltd to fund their working capital requirements and no amount

from this is being apportioned to the Master Trust as envisaged. The contribution from the Government to the tune of Rs.586.10 crore and Rs.52.40 crore is also not included in the Fund. *This is a very serious lapse and threatens the very sustainability of the Master Trust.*

3.121 The above facts very clearly reveal that from the first year itself the fund is not functioning as envisaged. This is highly objectionable and contrary to the very intent of setting up of the Master Trust. The Commission cautions KSEB Ltd that they are required to take urgent corrective action to overcome this serious deviation from the Scheme. The Commission also opines that if KSEB Ltd does not urgently take corrective action, the very payment of the pension will be jeopardized and the retirement financial security of the retirees of KSEB Ltd shall be compromised. KSEB Ltd also submitted that they will place a proposal in this regard with consultation from the Government. With the above caution and with the proposed submission and consultation with the Government, the Commission hereby approves the interest on bonds on Master Trust as per the initial scheme approved by the Government. Since 2017-18 is the first year of effective establishment of the Trust, an amount of Rs.814.40 crore is allowed as per SBU wise details as shown below:

Table 41
Interest on Master Trust Bonds approved for 2017-18

Item	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Interest on Master Trust Bonds	42.90	80.55	690.95	814.40

3.122 Thus, for 2017-18, the share of interest on master trust for SBU-T is approved as Rs.80.55 crore.

Other Interest Charges

3.123 Other interest charges are inclusive of guarantee commission and bank charges. Since the amount assigned to SBU-T is Rs.0.49 crore against the approval of Rs.1.07 crore. The same is approved as per the petition.

Summary of Interest and financing charges

3.124 Summary of the total interest charges allowable for the SBU-T is for the year 2017-18 is as shown below:

Table: 42
Interest charges allowable for SBU-T

Particulars	Approved	As per accounts	As per petition	Approved in truing up
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Interest on Loan	183.39	115.8	91.02	80.56
Interest on Working capital	-	9.40	17.23	8.04
Interest on security deposits		-		-
Interest on GPF	14.98	15.46	15.46	15.46
Interest on Master Trust Bonds	87.14	80.55	80.55	80.55
Other Interests	1.07	2.08	0.49	0.49
Total	286.58	223.29	204.75	185.10

3.125 Thus, the total interest and financing charges approved for the year 2017-18 for SBU-T is Rs.185.10 crore against Rs.223.29 crore booked as per the accounts and Rs.204.75 crore as per the petition.

Interest on unfunded actuarial liability

- 3.126 KSEB Ltd has sought Rs.52.56 crore for SBU-T on account of interest on unfunded additional actuarial terminal liability. In the petition, KSEB Ltd stated that as per the actuarial valuation as on 31.03.2018, the liability on this account has been assessed at Rs. 17,732.57 Crore. The increase of Rs.1584.87 Crore over the previous year according to KSEB Ltd has been captured in audited accounts as follows:
 - (v) Liability pertaining to 2017-18 amounting to Rs.509.42 Crore has been booked under employee cost for the year and
 - (vi) Remaining portion, pertaining to earlier years Rs.1075.46 Crore under other comprehensive income in P&L account.
- 3.127 However, KSEB Ltd has not claimed the liability pertaining to 2017-18 of Rs.509.42 crore booked under employee cost. KSEB Ltd while seeking approval of employee cost in the petition had excluded this Rs.509.42 crore. Instead in the petition KSEB Ltd stated that the claim is made through interest charges on unfunded actuarial liability.
- 3.128 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore i.e., an increase of Rs. 5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. KSEB Ltd has decided to issue 20-year bonds at a coupon rate of 10% to the Master Trust. Claiming the entire additional contribution to the Master Trust in one-go is likely to result in tariff shock. Therefore, KSEB Ltd

proposes to claim 10% interest on unfunded liability to the tune of Rs.531.39 crore and the share of SBU G on this count is Rs.27.99 Crore.

3.129 KSEB Ltd has requested to approve the interest on unfunded portion of actuarial liability since the pension and terminal benefits pay out cannot be met from the existing arrangement. Actual pension and terminal benefit disbursement during the year exceeded interest on bonds by Rs. 526.96 Crore. (Rs.1341.36 Crore-Rs.814.40 Crore). Hence, KSEB Ltd requested the Commission to approve provisionally, an additional amount Rs.531.39 Crore (being 10% of the unfunded liability as on 31.03.2018 Rs.5313.85 Crore) in view of the fact that KSEB Ltd has no other source to meet this expense and charging the entire additional liability in the ARR for one year may result in tariff shock. Therefore, KSEB Ltd requested the Commission to approve Rs.531.39 Crore as detailed below:

Table 43
Interest on unfunded terminal liability sought in the petition for 2017-18

			•	
Item	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Interest on Bonds	27.99	52.56	450.84	531.39

- 3.130 According to KSEB Ltd, Tariff Regulations, 2014 also provide that, the annual pension contribution by KSEB Ltd to the Master Trust based on the actuarial valuation is also allowed to be recovered through tariff on annual basis. KSEB Ltd further stated that claiming the entire additional contribution to the Master Trust in one-go is likely to result in huge accumulation of Regulatory Asset and subsequent tariff shock. Therefore, KSEB Ltd has already taken up the matter of unfunded liability till 31.03.2018 with the Government and a detailed scheme in consultation with the Government is proposed to be prepared and submitted before Hon Commission separately.
- 3.131 KSEB Ltd also pointed out that the Commission as per MYT order for the control period from 2018-19 to 2021-22 appraised the matter in detail and provisionally allowed Rs. 200 Crore in addition to Bond interest and decided to take up the matter through separate proceeding to examine the working of the Master Trust

Objections of the stakeholders

3.132 Regarding unfunded actuarial liability, the Association stated that as per clause 31 the licensee shall issue bonds to service terminal liabilities. The interest on bonds issued by KSEB Ltd to service the terminal liabilities shall be recovered through tariff at the rates specified by State Government. The Association argued that till such time the licensee furnishes a detailed scheme for the maintenance and disbursal of the fund, the proposed 10% interest amounting to Rs.531.39 crore is to be disallowed.

Analysis and decision of the Commission

- 3.133 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore i.e., an increase of Rs. 5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. In order to fund this additional liability, KSEB Ltd proposes to issue bonds for the said amount at an interest rate of 10% That is additional requirement to the tune of Rs.531.39 crore in the form of interest to additional liability on account of actuarial valuation. Out of which Rs.52.56 crore pertains to SBU-T.
- 3.134 The Commission notes that the proposal of KSEB Ltd is not at all in line with the governing principles of the Fund. The deficit in the Master Trust is on account of not appropriately providing the funds to the Trust as envisaged. The share of Government through adjustment of electricity duty and portion of RoE envisaged to fund the Trust is not being credited to the Trust fund but being diverted for funding other expenses. The shortfall on account of funds is not being transferred to the fund at the appropriate time. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year. If this arrangement is continuing on a year on year, there is no doubt that the entire scheme will be a failure in no time and the financial security of KSEB Ltd pensioners will be jeopardized.
- 3.135 The approach taken by KSEB Ltd in this case is not correct and also not in line with the provisions of the Government order dated 31-10-2013 and 28-1-2015. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year which is an unsustainable proposal and will seriously impact consumers tariff for KSEB Ltd's fault.
- 3.136 After examining the issue, the Commission in the MYT Tariff order dated 08-07-2019, had allowed Rs.200 crore provisionally for the control period from 2018-19 to 2021-22, and proposed to review the scheme holistically. With the available details, the Commission is not in a position to assess the exact commitment required for funding the terminal liabilities. KSEB Ltd in the petition has proposed to submit a proposal in this regard in consultation with the Government.
- 3.137 However, the Commission has also given due consideration to the stated difficulty of KSEB Ltd in obtaining income tax exemption till 2017, hindering the roll out of the Master Trust. The Commission has also noted that against the total provision of Rs.814.40 crore, the actual disbursement during the year was Rs.1341.36 crore ie., an additional amount of Rs.526.96 crore (without

accounting for the contribution from the Government and increase in ROE as envisaged in the original scheme). The Commission is also duty bound to ensure that the licensee is also able to fulfill its commitments to its pensioners. As pointed out earlier, the Commission is also not in a position to assess the requirement of funds for funding the terminal liabilities with available information. Hence, after considering the scenario holistically and keeping in view of the financial viability of the licensee, the Commission is inclined to provisionally allow an additional amount of Rs.200 crore in the current year as in the case of MYT Period 2018-19 to 2021-22. This amount is allowed additionally on the condition that the same is to be transferred to the Trust fund and the proof is to be placed before the Commission within three months. The amount is allocated to the SBUs in the same ratio as proposed by KSEB Ltd. Thus, the additional amount allowed to SBU-T is as shown below:

Table 44
Unfunded actuarial liability provisionally approved for 2017-18

	SBU G	SBU T	SBU D	Total
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
As per Petition	27.99	52.56	450.84	531.39
As approved	10.54	19.78	169.68	200.00

3.138 Accordingly, the Commission approves provisionally Rs.19.78 crore for SBU-T as unfunded actuarial liability for the year 2017-18 as against Rs.52.56 crore sought by KSEB Ltd.

Depreciation

- 3.139 KSEB Ltd in the truing up petition has claimed a total depreciation of Rs.536.62 crore for the year 2017-18, of which the share of SBU-T was Rs.156.36 crore.
- 3.140 In the audited accounts, KSEB Ltd has booked a depreciation of Rs.803.70crore and claw back of depreciation was at Rs.112.29 crore. Further, the depreciation as per the accounts has been calculated using the rates as per Tariff Regulation 2014 for the entire assets. This has in the resulted overstatement of depreciation in the accounts as against the provisions of the Regulations. Since the depreciation as per the accounts violates the provisions of the Regulations, KSEB Ltd had worked out depreciation separately for the purpose of truing up in the petition.
- 3.141 As shown above, KSEB Ltd as part of the Ind AS restatement of accounts has retrospectively added assets for the year 2014-15 and 2015-16. The depreciation as per the petition includes the depreciation for asset additions made for the year 2014-15 and 2015-16 on account of Ind AS adjustments.

KSEB Ltd in their petition has estimated the depreciation as per the provisions of the Regulations as shown below:

Table 45
Depreciation estimated by KSEB Ltd for the purpose of truing up for 2017-18

01	T	1		l	I
SI. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA as on 31.03.2017	16,880.05	4,719.64	7,515.45	29,115.14
2	Less: Enhancement in value while re vesting	11,988.98	0	0	11,988.98
	GFA as on 31.03.2017 excluding value				
3	enhancement	4,891.07	4,719.64	7,515.45	17,126.16
4	Less: GFA addition for 2016-17 as per accounts	450.22	410.19	908.25	1768.66
5	GFA as on 01.04.2016	4,440.85	4,309.45	6,607.20	15,357.50
6	Add: Additions during the year 2016-17	298.75	324.90	939.94	1563.59
7	Closing GFA as on 31.03.2017 (A)	4,739.60	4,634.35	7,547.14	16,921.09
	Assets more than 12 yrs old GFA as on				
8	01.04.2005 (B)	2,655.68	2,230.21	2,174.08	7,059.97
9	Assets less than 12yrs old C=(7-8)	2,083.92	2,404.14	5,373.06	9,861.12
10	Less fully depreciated assets (01.04.1987)	192.33	90.89	252.03	535.25
11	Assets with life from 13 to 30 years (D)=(8-10)	2,463.35	2,139.32	1,922.05	6,524.72
12	Land value GFA 13-30 yrs GFA (2.80%* of D)	68.97	59.9	53.82	182.69
13	-DO- On < 12 years (2.80%* of C)	58.35	67.32	150.45	276.11
14	GFA excl land on 13-30 years GFA (11-12)	2,394.38	2,079.42	1,868.23	6,342.03
15	GFA excl land < 12 years (9-13)	2,025.57	2,336.82	5,222.61	9,585.01
16	GFA eligible for depreciation (14+15)	4,419.95	4,416.24	7,090.85	15,927.04
	Depreciation on assets <12 years (Av 5.28% on				
17	15 above)	106.95	123.38	275.75	506.09
	Depreciation on assets >12 years (Av 1.48 % on		00.70		
18	14 above)	35.44	30.78	27.65	93.86
19	Total depreciation for 2017-18 (15+16)	142.39	154.16	303.4	599.95
20	Combined average rate (19/16)*100	3.22	3.49	4.28	3.77
24	Consumer contribution & Grants as on		04.04	4440.40	4505.4
21	01.04.2017	0	94.94	1410.46	1505.4
23	Disallowance of depreciation (@5.28% on 21)	0	5.01	74.47	79.49
24	Allowable depreciation on GFA till 01.04.2017 (19-23)	142.39	149.15	228.93	520.47
24	Depreciation on GFA addition in 2017-18 as per	142.39	143.13	220.93	520.47
25	Table 5.12 above	1.09	7.21	7.85	16.14
26	Total depreciation for the year 2017-18	143.48	156.36	236.78	536.62
20	1 Total doprodiction for the your 2017 10	1-0.40	100.00	200.70	000.02

^{*}Land value has been determined at 2.80% being value of land before value enhancement as a % GFA)

3.142 As shown above, the depreciation for SBU-T is estimated as Rs.156.36 crore.

Objections of the stakeholders

3.143 The Association has separately worked out the depreciation. As per their estimates the depreciation allowable for 2017-18 is Rs.147.71 crore only. The Association has worked out the depreciation as per the methodology mentioned

in the truing up for 2016-17. As per the calculations, the total depreciation to be approved against for KSEB Ltd claim of Rs.536.62 crore is Rs.369.87 crore only and that of SBU-T is Rs.147.71 crore as against the claim of KSEB Ltd of Rs.156.36 crore

Provisions in the Regulations

- 3.144 Regulation 28 provides for determination of depreciation for the purpose of tariff determination. The relevant provisions are reproduced below:
 - 28. Depreciation. (1) The value base for the purpose of depreciation shall be the original capital cost of the asset approved by the Commission:
 - Provided that no depreciation shall be allowed on revaluation reserve created on account of revaluation of assets.
 - (2) The generation business/company or transmission business/licensee or distribution business/licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective business, computed in the following manner:-
 - (a)depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure-I to these Regulations for the first twelve financial years from the date of commercial operation;
 - (b)the remaining depreciable value as on the Thirty First day of March of the financial year ending after a period of twelve financial years from the date of commercial operation shall be spread over the balance useful life of the assets as specified in Annexure- I;
 - (c)the generating business/company or transmission business / licensee or distribution business/licensee, shall submit all such details and documentary evidence, as may be required under these Regulations and as stipulated by the Commission from time to time, to substantiate the above claims;
 - (d)the salvage value of the asset shall be ten per cent of the allowable capital cost approved by the Commission and depreciation shall be a maximum of ninety per cent of the approved capital cost of the asset.
 - (3)The generating business/company or transmission business/licensee or distribution business/licensee shall be allowed to claim depreciation to the extent of financial contribution in the form of loan and equity, including the loan and equity contribution, provided by them:
 - Provided that depreciation shall not be allowed on assets funded through consumer contribution, deposit works, capital subsidies and grants.
 - (4)In the case of existing assets, the balance depreciable value as on the First day of April, 2015, shall be worked out by deducting the cumulative depreciation as approved by the Commission up to the Thirty First day of March, 2015, from the gross depreciable value of the assets.

Analysis and decision of the Commission

3.145 As quoted above, the depreciation is to be calculated at the rates provided in the Regulations. The rate of depreciation in the Regulations is the same as the depreciation rates notified by CERC. The depreciation for an asset for the first 12 years is to be at the rates notified by the Commission and the balance value if any shall be spread over the useful life of the assets. Further,

- depreciation shall not be provided to the assets created out of consumer contribution and grants.
- 3.146 Regulation 35 provides the principles to be adopted for treating the transfer scheme under Section 131 of the Act.
 - "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";
- 3.147 Regulation 35 (a) mandates that any increase in the value of assets consequent to its revaluation shall not qualify for computation of depreciation or for return on net fixed assets. Similarly depreciation shall also not be provided for the assets created out of consumer contribution and grants. Further, the reduction in contribution from consumer contribution and grants made as part of the transfer scheme shall not be considered for computing depreciation. The Commission notes that KSEB Ltd has removed depreciation only for the assets created from grants and contribution added after the transfer scheme. This has resulted substantial overstatement of depreciation. As per Regulation 35(c) depreciation for the entire grants have to be removed.
- 3.148 Since the depreciation as per the accounts and as per the petition is not conforming to the provisions of the Regulations, the Commission has no other alternative, but to resort to estimating the depreciation as per the provisions of the Regulations. Accordingly, the depreciation for the year 2017-18 is worked out as shown below:

Table 46
Depreciation approved for the year 2017-18

	Depreciation for Assets 2017-18		SBU-T	SBU-D	KSEBLtd
		Rs. crore	Rs.crore	Rs.crore	Rs.crore
1	Opening GFA as on 1-4-2017	4,658.32	4,628.56	7,530.50	16,817.38
2	Assets >12 years old (GFA as on 1-4-2005)	2,655.68	2,230.21	2,174.08	7,059.97
3	Fully depreciated Assets (assets upto 1-4-1987)	192.33	90.89	252.03	535.25

4=(2-3)	Assets having life 12-30 yrs	2,463.35	2,139.32	1,922.05	6,524.72
5=(4*2.8%)	Value of land (Average 2.8% of GFA)	68.97	59.90	53.82	182.69
6	Grants and contributions (upto 1-4-2005)		-	1,413.12	1,413.12
7=(4-5-6)	Assets having life 12-30 yrs eligibel for depreciation	2,394.38	2,079.42	455.11	4,928.91
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	34.00	29.53	6.46	69.99
9=(1-2)	Assets < 12 years old (1-4-2005 to 31-3-2017)	2,002.64	2,398.35	5,356.42	9,757.41
10=(9*2.8%)	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
11	Grants and contributions (1-4-2005 to 31-3-2017)	26.16	95.95	4,140.05	4,262.16
12=(9-10-11)	Opening balance of Assets < 12 years old	1,920.41	2,235.25	1,066.39	5,222.04
13	Total asset addition approved	71.42	388.82	699.45	1,159.69
14	Grants and Contributions for 2017-18	75.31	103.99	394.15	573.45
15=13+14	Total Grants and Contributions (1-4-2005 to 31-3-2018)	101.47	199.94	4,534.20	4,835.61
16	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
17=(12+13-15- 16)	Closing balance of Assets <12 years Old (1-4-2005 to 31-3-2018)	1,916.52	2,520.08	1,371.69	5,808.28
18=(12+17)/2	Average Value of Assets <12 Years old	1,918.46	2,377.66	1,219.04	5,515.16
, ,,	=				
19=(18*5.14%)	Depreciation for assets <12 years (@5.14%)	98.61	122.21	62.66	283.48

^{*}The total value of land out of the total approved capital additions for the year 2017-18 is Rs.10.46 crore (Rs.1.24 crore for SBU-G, Rs.9.15 crore for SBU-T and Rs.0.07 crore for SBU-D). Out of this, land included in the part capitalized which were commissioned in **2017-18 itself** is Rs.8.75 crore. Since the net value of land as part of capitalized assets for the year 2017-18 is very low, the Commission has not made any adjustments on the value of land while estimating depreciation for the assets added during the year.

- 3.149 As shown above the opening value of GFA as on 01-04-2017 as per truing up order 2016-17 is Rs.16817.38 crore, which lower by Rs.103.72 crore as per KSEB Ltd petition on account of asset addition approved during 2016-17. The difference is due to the fact that asset addition approved by the Commission for 2016-17 is Rs.1459.87 crore, which is arrived at after removing the part capitalized assets (Rs.87.08 crore) and decommissioning liability (Rs.16.64). The value of land is taken at 2.80% of the GFA. The asset addition approved for the year 2017-18 is Rs.1159.69 crore. After deducting the depreciation for grants and contribution, at the average rate of 5.14%, the depreciation for the year is arrived at.
- 3.150 Based on the above, the total depreciation approved for SBU-T for 2017-18 is Rs.151.74 crore. *The Commission approves the depreciation of Rs.151.74 crore for SBU-T for the purpose of truing up as against the claim of Rs.156.36 crore.*

Other expenses:

3.151 Under SBU-T, other expenses booked is Rs. 3.84 crore. This includes the prior period expenses and Other debits. Hence after examining the details the Commission hereby approves the other expenses as per accounts.

3.152 Accordingly, the Commission approves the other expenses of Rs.3.84 crore as per the petition.

Return on equity

3.153 KSEB Ltd in their petition claimed return on equity at the rate of 14% for the SBUs. The equity as per accounts is Rs.119.99 crore for SBU-T.

Objections of the stakeholders

3.154 According to the Association, return on equity shall be as per the equity base approved by APTEL in the Order dated 18-11-2015 in Appeal No.247 of 2014. Accordingly, RoE of Rs.46.65 crore only to be given

Provisions in the Regulations

- 3.155 The relevant provisions in the Regulations are given below:
 - **28. Debt-equity ratio.** (1) For the purpose of determination of tariff, debt-equity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

- (5) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (6) Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.
- (7) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending the Thirty First day of March, 2015 shall be considered.
- 3.156 Regulation 29 provides for return on equity. As per the said Regulation, RoE of 14% shall be allowed on the equity on the paid-up equity capital as shown below:

29. Return on investment. – (1) Return on equity shall be computed in rupee terms, on the paid-up equity capital determined in accordance with the Regulation 27 and shall be allowed at the rate of fourteen percent for generating business/companies, transmission business/licensee, distribution business/licensee and state load despatch centre:

Provided that, return on equity for generating business/company, transmission business/licensee, distribution business/licensee and state load despatch centre, shall be allowed on the amount of equity capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity capital portion of the approved capital cost for the investment put to use during the financial year:

Provided further that at the time of truing up for the generating business/company, transmission business/licensee, distribution business/licensee and state load despatch centre, return on equity shall be allowed on pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year.

Analysis and decision of the Commission

- 3.157 The Commission has examined the details furnished by KSEB Ltd and the objections of stakeholders. The determination of the equity and the rate of return allowed shall be as per the provisions of the Regulations.
- 3.158 The Commission examined the details furnished by KSEB Ltd. It is seen that the Commission was compelled to adopt the equity figures in the *Suo motu* order due to lack of details from KSEB Ltd. However, now the actual apportionment of equity as per audited accounts has been made available by KSEB Ltd, the Commission has adopted these figures as given in the audited accounts for consistency. Further, Regulation 35(b), requires that for the purpose of computation of return on equity, the equity of Government of Kerala as per the transfer scheme published under Section 131 is to be followed. The amount of equity notified as part of the Transfer Scheme is Rs.3499 for KSEB Ltd as a whole. Hence, the objections of the Association cannot be sustained. Accordingly, the RoE allowable for the SBUs for the year 2017-18 is as shown below:

Table :47
Return on equity approved for the year 2017-18

Particulars	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Equity Capital	831.27	857.05	1810.73	3499.05
RoE @14% on above	116.38	119.99	253.50	489.87

3.159 As shown above, the Rs. crore RoE approved for SBU-T for 2017-18 for the purpose of truing up is Rs.119.99 crore.

Non-Tariff income

3.160 As per the petition, the non-tariff income reported by SBU-T is Rs.28.06 crore. The Non- Tariff Income includes income from sale of scrap, interest on advances made to contractors, interest on staff loans and advances, Rent from buildings etc. As per the details furnished in the petition, the non-tariff income for SBU-T is Rs.28.06 crore as shown below:

Table 48
Non-Tariff income of SBU-T for 2017-18

	2017-18		
Particulars	Audited Accounts	Truing Up requirement	
	Rs. Crore	Rs,crore	
Non Tariff Income			
Interest on staff loans and advances	0.01	0.01	
Income from statutory investments	0.03	0.03	
Income from rent of land or buildings	0.30	0.30	
Income from sale of scrap	3.97	3.97	
Income from staff welfare activities		-	
Rental from staff quarters	0.10	0.10	
Excess found on physical verification	-	-	
Interest on investments, fixed and call deposits and bank balances	1.61	1.61	
Interest on advances to suppliers/contractors	0.17	0.17	
Income from hire charges from contractors and others	-	-	
Income due to right of way granted for paying fibre optic cables/co-axial cables on transmission system		-	
Income from advertisements, etc.		-	
Miscellaneous receipts	21.87	21.87	
Interest on delayed or deferred payment of bills		-	
Total Non-Tariff Income	28.06	28.06	

Objections of Stakeholders

3.161 HT-EHT Association stated that against KSEB Ltd petition figure of Rs.28.06 crore, Rs.31.28 crore is to be adopted as non- Tariff income. However, no details were furnished to substantiate the estimates proposed.

Provisions in the Regulations

- 3.162 As per Regulation 62, the amount of non tariff income of SBU-T is to be deducted from annual fixed charges. The provision is quoted below:
 - 62. Non-tariff income.— (1) The amount of non-tariff income of the transmission business/licensee as approved by the Commission shall be deducted from the aggregate revenue requirement while determining the annual transmission charges of the transmission business/licensee

Regulation 62(2) provides the indicative list of items under non tariff income.

"62(2)The indicative list of items to be considered as non-tariff income are as under:-

- (i) interest on staff loans and advances;
- (ii) income from statutory investments;
- (iii) income from rent of land or buildings;
- (iv) income from sale of scrap;
- (v) income from staff welfare activities;
- (vi) rental from staff quarters;
- (vii) excess found on physical verification;
- (viii)interest on investments, fixed and call deposits and bank balances;
- (ix) interest on advances to suppliers/contractors;
- (x) income from hire charges from contractors and others;
- (xi) income due to right of way granted for laying fibre optic cables/co-axial cables on transmission system;
- (xii) income from advertisements, etc.;
- (xiii)miscellaneous receipts; and
- (xiv) interest on delayed or deferred payment on bills.
- 3.163 KSEB Ltd has in the petition for truing up claimed Non-tariff income of Rs.28.06 crore for SBU-T.
- 3.164 The Commission after considering the details, approves Rs.28.06 crore the non-tariff income of SBU-T for the year 2017-18 as claimed by KSEB Ltd.

System availability

3.165 As per Regulation 58, SBU-T target availability for full recovery of annual transmission for AC system shall be 98.5% and recovery of annual transmission charges below the level of target availability shall be on a pro rata basis and no transmission charges shall be payable at zero availability. Further, the availability shall be calculated in accordance with the procedure specified in the

Regulations and shall be certified by State Load Despatch Centre. There shall be incentive applicable if the actual availability is above the target availability Annexure-II (ii) of the Regulations provides for detailed methodology for calculating the availability of transmission system.

3.166 The Commission has sought the target availability of transmission system for the year 2017-18 as certified by SLDC as per the provisions of the Regulations. KSEB Ltd has furnished the following details for the availability of transmission system.

Table 49
Actual Availability of transmission reported by KSEB Ltd for 2017-18

	Target	Actual
Transmission elements	availability	Availability
400kV system		98.57%
220kV System	98.5%	98.54%
110kV system	98.5%	98.77%
66kV system	98.5%	98.80%
System availability	98.5%	98.64%

3.167 The Commission has sought the details of the availability estimations and KSEB Ltd vide letter dated 20-10-2020 has furnished the following details

Table 50
Transmission availability for 2017-18

Feeders		Consolidated for 2017-18			
Voltage Level	400	220	110	66	System
No. of feeders		53.75	310.67	191.92	555
Weightage factor (Wi) = SIL* ckt km		584150.5	238544.22	37298.64	859993.39
Wi*((Tav)=Ti-Tnai/Ti)		567469.3	235594.31	36821.3	839884.91
Availability		97.14%	98.76%	98.72%	97.66%
Transformers					
No. of transformers	7	104	457	176	737
Weightage factor (Wi) = MVA	945	8746.94	11167.5	2981.13	23840.56
Wi*((Tav)=Ti-Tnai/Ti)	931.52	8681.39	11030.46	2948.58	23640.91
Availability	98.57%	99.25%	98.77%	98.91%	99.16%
Transmission availability	98.57%	98.54%	98.77%	98.81%	98.63%

3.168 The availability reported by KSEB Ltd is 98.63% against the target level of 98.5%. Hence, the target level has been achieved by KSEB Ltd. Since no transfer price mechanism has been taken place, no adjustment is made on this head.

Transmission charges or Transfer Cost of SBU-T

- 3.169 Based on the above provisions, the various components of the ARR of SBU-T are determined as shown below:
 - (a) O&M expenses:

O&M expenses approved for SBU-T is Rs.313.39 crore

- (b) Unfunded actuarial liabilities approved for SBU-T is Rs.19.78 crore
- (c) Interest and finance charges
 Interest and financing charges including interest on working capital for SBU-T is Rs.185.10 crore
- (d) Depreciation:

The Approved level of depreciation for SBU-T is Rs.151.74 crore

(e) Return on equity:

The approved level of RoE for SBU-T is Rs.119.99 crore

- (f) Other expenses approved is Rs.3.84 crore
- (g) Non-Tariff income

The approved level of non-tariff income for SBU-T is Rs.28.06 crore

Summary and Transfer Cost of SBU-T

- 3.170 The primary role of SBU-T envisaged in the Transfer Scheme is to transmit electricity to SBU-D. All expenses incurred for the transmission of electricity by SBU-T is recovered from SBU-D as Transfer Cost, which is treated as the income from operations of SBU-T. As against an ARR&ERC approved cost of Rs.905.20 crore KSEB Ltd in their truing up petition has claimed the SBU-T transfer cost as Rs.881.87 crore i.e., a decrease of Rs.23.33 crore over the approved ARR&ERC figures.
- 3.171 SBU-T does not have any separate tariff income. Instead, its tariff income is derived considering expenses such as interest and finance charges, depreciation, O&M expenses, Return on Equity, etc., and after deducting the non-tariff income. This amount is considered as the transfer cost which it charges from the SBU-D. The approved transfer cost is approved at Rs.765.77 crore as shown below:

Table 51
Approved Transfer Cost of SBU-T for 2017-18

Particulars	Approved in Suo motu order (Rs. Crore)	Petition (Rs. Crore	Approved in Truing up (Rs. Crore)
Employee expense		247.47	221.24
R&M expenses		42.27	74.73
A&G expenses		82.70	17.41

Total O&M expenses	216.78	372.44	313.39
Unfunded Actuarial Liabilities	87.14	52.56	19.78
Interest and financing charges	199.44	204.75	185.10
Depreciation	184.25	156.36	151.74
RoE	217.59	119.99	119.99
Other expenses		3.84	3.84
Gross Expenses	905.20	909.94	793.83
Less Non-Tariff income	0	28.06	28.06
Transfer Cost of SBU-T	905.20	881.88	765.77
Revenue gap/Surplus	0.00	0.00	0.00

3.172 As shown above the gross transfer cost of SBU-T is Rs.793.83 crore. After deducting Rs.28.06 crore on account of Non-Tariff Income the net transfer cost of Rs.765.77 crore is arrived at. This amount is the internal transmission cost.

Revenue Gap/Surplus of SBU-T

3.173 The Commission after analyzing the petition and the arguments of the petitioner KSEB Ltd and the stakeholders, arrives at a net transfer cost of Rs.765.77 crore which is transferred as internal cost of transmission to SBU-D. Since the entire cost of SBU-T is transferred to SBU-D as internal transmission cost, there is no revenue gap or surplus for SBU-T for 2017-18.

CHAPTER -4 ENERGY SALES AND T&D LOSS

Energy Sales

- 4.1 The Commission in the *Suo motu* Order on ARR&ERC for the year 2017-18 dated 17-08-2017 had approved an energy sale of 21840 MU. The actual energy sale within the State in the year 2017-18 was 20880.70 MU. The embedded open access consumers availed 269.86 MU through open access purchases and 108.16 MU was consumed from captive generation. Further RGCCPP has availed 8.63 MU during non operative period as auxiliary consumption during 2017-18. Thus, the total energy consumption at the consumer end was 21267.34 MU. The actual energy sale by KSEB Ltd was 959.30 MU less than approval. Considering the impact of open access and banking adjustments, the difference between approval quantum and actual quantum was only 572.66 MU (2.62%).
- As per the details furnished in the petition, the energy sales increased from 20038.25 MU in 2016-17 to 20880.70 MU in 2017-18 i.e., an increase of 842.45 MU compared to 2016-17. The total energy consumption (including open access and captive generation) at consumer end for the year 2017-18 was 21258.71 MU against 20479.80 MU during 2016-17. The overall growth in energy sale by KSEB Ltd in 2017-18 over 2016-17 was 4.20%. The overall growth in energy consumption at consumer end including open access and captive generation compared to that of previous year was 3.80%. Details in respect of sale by KSEB Ltd to different categories of consumers during the year 2017-18 over the previous year is given below

Table 1
Energy sale for the year 2017-18

Category	Tariff code	Energy in MU		Change
		2016-17	2017-18	in %
LT category				
Domestic	LT I	10,274.70	10,569.99	2.87
Colonies	LT II	6.03	4.85	-19.57
Temporary Connections	LT III	1.65	1.47	-11.14
Industrial	LT IV	1,131.91	1,112.33	-1.73
Agriculture	LT V	321.98	346.03	7.47
General	LT VI	1,523.87	1,525.03	0.08
Commercial	LT VII	1,430.66	1,534.99	7.29
Public Lighting	LT VIII	375.77	373.48	-0.61
Adv and Hoardings	LT IX	1.78	1.99	12.06

LT total		15,068.35	15,470.15	2.67
HT Category				
HT Industrial	HT I	1,952.53	2,062.99	5.66
HT General	HT II	722.18	761.64	5.46
HT Agriculture	HT III	9.22	9.61	4.22
HT Commercial	HT IV	604.23	644.82	6.72
HT Domestic	HT V	13.67	14.97	9.52
EHT category				
EHT 66 KV Industrial	EHT I	187.96	247.34	31.59
EHT 110 KV Industrial	EHT II	507.72	631.13	24.31
EHT 220 KV Industrial	EHT III	65.97	77.99	18.22
EHT General		64.73	70.14	8.35
Railway Traction		229.59	265.80	15.77
KMRL			15.35	
Bulk Licensees		612.10	608.77	-0.54
HT &EHT & Bulk Supply		4,969.90	5,410.55	8.87
Total		20,038.25	20,880.70	4.20
Open Access Drawal		414.66	269.86	
Captive Consumption		26.89	108.16	_
Energy availed by RGCCPP		8.04	8.63	
Grand Total		20,487.84	21,267.34	3.80

- 4.3 According to KSEB Ltd, the energy consumption in 2017-18 in respect of certain categories of consumers has shown significant changes when compared to the consumption in previous year. Domestic consumption increased by only 2.87% against 7% estimated (CAGR from 2009-10 to 2015-16). KSEB Ltd attributed this, mainly to the DSM programme- Domestic Efficient Lighting Programme (DELP), through which two 9 Watts LED bulbs were distributed to the domestic consumers and captive solar generation. About 452 MU was the annual expected savings in consumption for one crore LED bulbs and 1.27 Crore bulbs were distributed during 2016-17.
- Total energy sales by KSEB Ltd show an increase of 4.20% during the year 2017-18 against 3.69 % in 2016-17. But the total consumption (including drawal through open access and captive generation) was 21267.34 MU, that is, an increase of 3.80%. During the year 2017-18, 117 MU had been sold outside the state. Embedded open access consumers imported about 269.86 MU and energy injected by IPPs into the grid for sale outside the State through open access was 45.15 MU. The import and export of energy through open access is as shown below:

Table 2
Energy export and import for 2017-18 as per petition

Particulars	Energy at Kerala Periphery	Energy at injection/drawal point	Loss on accounting of wheeled units
Energy (Import)	284.96	269.86	15.11
Energy (Export)	-43.07	-45.15	2.08

4.5 After examining the details furnished by KSEB Ltd, the Commission approves the energy sale of 20880.70MU as per the accounts.

T&D Loss

- 4.6 In the *Suo motu* ARR Order for the year 2017-18 dated 17-04-2017, the Commission had approved a T&D loss level for the year 2017-18 as 13.65% and a loss reduction target of 0.25% (over the approved level of 13.90% for 2016-17). Of this, the transmission loss was estimated at 4.5%. In the distribution side, HT level loss was approved at 5.5% and the loss for providing supply at LT voltage was approved at 11.39% (HT loss+LT loss corresponding to LT sales), aggregating to a total T&D loss of 13.65%.
- 4.7 The actual loss after truing up for 2016-17 was 13.98% as against the target level of 13.90%. In the petition, KSEB Ltd stated that as against the T&D loss target of 13.73% for 2017-18 (i.e., 0.25% reduction over 13.98%), the total loss level achieved in the year 2017-18 is 13.07%. As against the approved loss reduction target of 0.25%, KSEB Ltd could achieve a loss reduction target of 0.91% in 2017-18. The T&D loss for the year 2017-18 is worked out by KSEB Ltd as shown below:

Table 3
T&D loss calculation for the year 2017-18 as per petition

SI No	Particulars	Quantum (MU)
а	Total Generation(excluding auxiliary consumption) by KSEBL	5474.47
b	Total Power Purchase excl external PGCIL losses	18717.23
c=a+b	Total generation and power purchase at Kerala periphery by KSEBL	24191.70
d	Energy generated by private IPP for sale thru open access	45.15
	Energy wheeled from outside the State through open access by embedded	
е	consumers	284.96
f=c+e	Total generation and power purchase at Kerala periphery	24521.81
	Interstate sale	
g	Inter State energy sale by KSEBL including swap	123.82
h	Inter State energy sale by IPPs through open access	43.07
i	Substation auxiliary consumption	14.12
j=f-g-h-i	Total generation and power purchase for sale by Distribution SBU	24340.79
	Energy used within the State	
k	Energy sales by KSEBL	20880.70
1	Energy wheeled by embedded open access consumers at consumer end	269.86
m	Energy used by RGCCPP for aux consumption during non operative period	8.63
n=k+l+m	Total energy used by consumers	21159.19
o=j-n	Transmission & Distribution loss	3181.61
р	Transmission & Distribution loss in %	13.07

4.8 As shown above, the T&D loss for the State as per KSEB Ltd's petition is 13.07%. According to KSEB Ltd the transmission loss corresponding to the peak demand up to 66kV level was 4.06% (previous year 2016-17 estimate was 4.27%). Hence, the distribution loss for the year is as shown below:

Table 4
Segregation of distribution loss for 2017-18

SI No	Particulars	Quantum	Unit
(i)	Total Generation and Power Purchase at Kerala periphery	24340.79	MU
(ii)	Transmission loss @4.06%	988.2362	MU
(iii)	Total energy input into the distribution system (i)-(ii)	23352.56	MU
(iv)	Sale of energy at EHT level	2031.19	MU
(v)	Distribution loss associated with sale at EHT level	0	MU
(vi)	Energy available for sale at HT< levels (iii)-(iv)-(v)	21321.36	MU
(vii)	Sale of energy at HT level	3657.85	MU
(viii)	Sale of energy at LT level	15470.15	MU
(ix)	Distribution loss (vi)-(vii)-(viii)	2193.37	MU
	Total distribution loss if EHT sales of energy is also taken as		
(x)	energy sales by SBU-D (xx)*100/(iii)	9.39	%

4.9 As per the above Table, the distribution loss after considering the transmission loss of 4.06% is 9.39%. According to KSEB Ltd, it is for the first time that the, distribution loss is brought down to a level below 10%. KSEB Ltd claimed that this reduction in T&D loss was achieved due to consistent efforts and steps taken by KSEB Ltd as shown below:

Table 5
Addition physical infrastructure in the electrical system

Particulars	Achievement during 2017-18
Substations Commissioned	
220 kV	2
110 kV	6
66 kV	3
33 kV	5
Total	16
Lines Commissioned(Ckt km)	
220 kV	54.1
110 kV	71.76
66 kV	0.44
33 kV	41.08
Total	167.38
Capacity addition/enhancement(MVA)	
220 kV	400
110 kV	285.5
66 kV	47.4

33 kV	77
Total	809.9
11 KV line constructed(km)	1744
11 KV feeder outlets added	175
LT line constructed(km)	3130
No. of distribution transformers	2353
HT re conductoring (km)	950
LT re conductoring (km)	9880
1 phase to 3 phase conversion(km)	1478
Meter Replacement (Nos)	12,37,110

- 4.10 As per the petition, KSEB Ltd stated that they could achieve a loss reduction of 0.91% against the loss reduction target of 0.25%.ie an additional achievement of 0.66%.ie; KSEB Ltd was able to save 183.84 MU due to this additional achievement of loss reduction. Taking the average power purchase cost for 2017-18 of Rs 4.02 per unit for the year 2017-18, KSEB Ltd was able to save Rs.73.90 crore under cost of power purchase.
- 4.11 As per Regulation 14 of Tariff Regulations, 2014 the aggregate gain on account of controllable factors shall be dealt with the following manner:
 - a. One-third of the amount of such gain shall be passed on to consumers as a rebate in tariffs.
 - b. The remaining two third of the amount of such gain may be utilised at the discretion of licensee
- 4.12 Thus according to KSEB Ltd, the gain to be retained by KSEB Ltd amounts to Rs.49.27 Crore as detailed below:

Table 6
Gain to be retained by KSEB Ltd for excess achievement of T&D loss for 2017-18

Particulars	Quantum	Unit
Energy sales by KSEBL	20880.70	MU
Energy consumed by RGCCPP during non operative periods	8.63	MU
Total energy	20889.33	MU
Energy input needed at 13.73% loss	24213.90	MU
Energy input needed at 13.07% loss	24030.06	MU
Energy savings (average power purchase cost of @4.01/kWh)	183.84	MU
Power Purchase cost saved due to over achievement of loss	73.90	Crore
2/3 of savings	49.27	Crore

Objections of the Stakeholders

4.13 The HT-EHT Association stated that KSEB Ltd claim of 13.07% as T&D losses for the year 2017-18 is not true and it is not calculated properly. According to the Association, since KSEB Ltd has included in their calculation the open

access import and export, the sales is skewed towards HT-EHT level and thus lowers the distribution loss. The Association also pointed out that KSEB Ltd is recovering the wheeling charges and system losses from the open access consumers using its network and the energy balance computation has to be exclusively for the quantum of sales catered to by KSEB Ltd only. Accordingly, the system losses as per their calculation is 13.72% against the claim of 13.07%. As per the estimation of the Association, there is an increase of 0.07% from the approved T&D loss in the year 2017-18 and has resulted in additional purchase of 19.99MU.

- 4.14 The Association stated that the gain as stated by KSEB Ltd attributed to the over achievement of T&D loss target for the year 2017-18 and the savings of energy purchase to the tune of Rs.49.72 crore towards true up of distribution business. In this matter the Association stated that over achievement of loss target was not attained by the licensee hence the said claim is to be rejected.
- Association pointed out that it can be observed from the CAG report that (Table 1.14: parameter wise achievements vis-à-vis targets of operational performance upto 30th September 2018) various targets given/agreed upon under UDAY scheme towards feeder metering, DTR metering, rural feeder audit are not being complied by petitioner. The impact of this will be reflecting in the system loss levels claimed for HT and LT voltages and have an impact on the average tariff/Cost of supply at each voltage levels. The objector submits to the Commission that they being the cross-subsidizing category, HT consumers are paying for the HT system losses also which might be getting claimed at higher than actuals loss levels. Only, efforts like complete feeder metering and DTR metering can throw clarity on this. The Commission is requested to give a directive to petitioner to comply with the deadlines and increase the operational efficiencies.
- 4.16 In reply to the comments of the Association, KSEB Ltd vide letter dated 08-04-2021 objected to the methodology of the Association for estimation of T&D loss. According to KSEB Ltd the total energy which pass through the grid, whether through open access or otherwise is to be accounted for to arrive at the distribution loss. KSEB Ltd stated that since the base figures taken by the objector for calculation is wrong, the objection may be rejected.

Provisions in the Regulations

14.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.

Analysis and decision of the Commission

- 4.17 The Commission examined the details furnished by KSEB Ltd and the objections of the Association. The Association has objected to the claim of KSEB Ltd on the over achievement of the T&D loss target. Their objection is mainly on the issue of removing the energy through open access from the calculation since the loss compensation for open access transaction is already included in the transaction. The Commission has carefully examined this issue. The Commission is not convinced on the argument. Though in actual practice, open access transactions are taken place through displacement, while doing the energy accounting the same is to be taken care of in the sense that the same is passing through the grid.
- 4.18 KSEB Ltd stated that the total loss reduction achieved in 2017-18 was 0.91%, which is better than the target of 0.25% fixed by the Commission. The loss reduction target and actual loss reduction achieved by KSEB Ltd in previous years are given below:

Table 7
Comparison of loss reduction approved and achieved

	ı			
Year	Proposed in the ARR (%)	Approved by the Commission (%)	Actual achieved by KSEB (%)	Actual T&D loss (%)
2005-06	2.72	2.72	1.99	22.96
2006-07	1.76	2.50	1.50	21.47
2007-08	1.83	2.00	1.45	20.02
2008-09	1.63	1.63	1.19	18.83
2009-10	1.27	1.00	1.12	17.71
2010-11	0.92	0.92	1.62	16.09
2011-12	0.69	0.69	0.44	15.65
2012-13	0.25	0.50	0.35	15.30
2013-14	0.32	0.50	0.34	14.96
2014-15	0.25	0.50	0.39	14.57
2015-16			0.20	14.37
2016-17		0.30	0.44	13.98
2017-18		0.25	0.91	13.07

4.19 According to KSEB Ltd the total energy input at the KSEB Ltd periphery is 24191.70 MU. After accounting the open access energy sale, purchase and interstate sales, the net energy available for sale by SBU-D is 24340.79MU. The total energy use including sales and energy wheeling is 21159.19MU. Thus, the total loss for the year is 3181.61MU. Thus, the T&D loss as a percentage of energy input is 13.07%. Since the actual T&D loss in 2016-17 is 13.98%, the T&D loss reduction achieved is 0.91% (13.98%-13.07%). The

loss reduction approved by the Commission for the year 2017-18 was 0.25%. Hence KSEB Ltd stated that the loss reduction achieved is higher than the target approved for the year 2017-18.

4.20 The Commission has examined the details furnished by KSEB Ltd with respect to the approved figures. Accordingly, T&D loss for the year is worked out as shown below:

Table 8
T&D loss approved for the year 2017-18

	As	s per Petit	ion	P	As approved	
	Gross	Aux	Net Gen	Gross	Aux	Net Gen
Hydel Generation	5,488.95	29.93	5,459.02	5,488.95	29.93*	5,459.02
BDPP	0.46	0.65	-0.19	0.46	0.65	-0.19
KDPP	1.39	0.66	0.73	1.39	0.66	0.73
Wind	1.48	0.00	1.48	1.48	0.00	1.48
Solar	13.45	-	13.45	13.45	-	13.45
Total Internal	5,505.73	31.24	5,474.49	5,505.73	31.24	5,474.49
Purchases	19,426.74	709.51	18,717.23	19,426.74	709.51	18,717.23
Total	24,932.47	740.75	24,191.72	24,932.47	740.75	24,191.72
Private IPP generation			45.15			45.15
Open access wheeling			284.96			284.96
Total Energy at periphery			24,521.83			24,521.83
Interstate sale+swap			123.82			123.82
Open access sale outside			43.07			43.07
Substation auxiliary consumption			14.12			14.12
Energy available for sale in the State			24,340.82			24,340.82
Energy sale within the state			20,880.70			20,880.70
Energy wheeled for open access			269.86			269.86
RGCCP use			8.63			8.63
Total energy use			21,159.19			21,159.19
T&D Loss			3,181.63			3,181.63
T&D Loss (%)			13.07%			13.07%
Approved T&D Loss			13.73%			13.73%
Energy input for approved loss			24,213.90			24,213.90
Energy input for actual loss			24,030.38			24,030.38
Energy savings			183.52			183.52
2/3rd of Savings			122.35			122.35
Average Power purcahse cost			4.02			3.938
(Rs,/kWh)			7.02			
Saving attributable to KSEB Ltd			49.27			48.17
(Rs.crore)	L <u> </u>					

^{*}since higher auxiliary consumption is already adjusted under SBU-G, the same is not considered here.

4.21 Thus, as per the Commission's estimate above, the T&D loss level for the year is 13.07%, which is lower than the previous year actual T&D loss of 13.98%. The T&D loss reduction for the year is 0.91% (13.98%-13.07%). The T&D loss reduction is 0.66% higher than the target level of 0.25%. The total energy saving is 183.52MU and 2/3 of the energy cost as per average power purchase cost (worked out in Power Purchase Section) is to be given as incentive for KSEB Ltd over achievement of loss target. Accordingly, at the approved average power purchase rate of Rs.3.938/kWh, the excess savings to KSEB Ltd is Rs.48.17 crore.

CHAPTER -5 TRUING UP OF ACCOUNTS OF STRATEGIC BUSINESS UNIT DISTRIBUTION (SBU-D)

As per the details furnished by Kerala State Electricity Board Limited in their petition, KSEB Ltd supplies electricity to about 122.76 lakh consumers in the State, of which domestic consumers account for more than 80% The key statistics of KSEB Ltd's distribution network is given below:

Table 1
Key parameters of SBU-D

Particulars	Statistics
Area Sq.km.	38863 km ²
Districts No's	14
Electrical Circle Offices	25
Population in Crore	3.47
Consumers (Nos)	12276321
Distribution transformers (Nos)	77724
HT lines (Ckt. Kms)	62855.31
LT lines (Ckt. Kms)	286784
Energy sales in MU	20880.70
Energy consumption (incl open access & captive	
consumption) in MU	21267.34
Per capita consumption in units	613
Consumption per consumer in units	1731.69
Distribution loss in %	9.39%
AT & C loss in %	12.11%
T&D loss in % (including transmission loss)	13.07%

- As per the petition, the total revenue from sale of power for the year 2017-18 was Rs.11967.05 crore. In order to service the consumers, SBU-D has 77,724 distribution transformers and 62,855 circuit kilometers of HT lines and 2.87 lakh ckt kms of LT lines.
- As per the details furnished by KSEB Ltd in the petition, the Aggregate Revenue Requirements and the revenue gap for SBU-D for 2017-18 are as shown below:

Table 2
Expenses and Revenue gap for SBU-D for the year 2017-18 claimed in the petition

Expenses and Nevende gap for 380-8 for the year 2017-10 claimed in the petition									
Particulars	Approved In the Suo motu Order	Actual As per Accounts	As per True up petition						
	Rs.crore	Rs.crore	Rs.crore						
Cost of Generation (SBU-G)	677.48	680.62	581.91						
Cost of Power Purchase	7,339.34	7,526.03	7,398.67						

Cost of Intra-State Transmission (SBU-T)	905.20	1,003.82	881.87
Interest & Financial Charges incl Carrying cost	998.68	1,406.89	1,648.59
Depreciation	58.12	390.83	236.78
O&M Expenses	1,440.36	2,828.80	2,328.07
Return on equity (14%)	68.64	175.12	253.50
Other Expenses	-	-17.09	-17.09
Income under FV Adjustments	-	-108.68	ı
Claim on additional achievement of loss reduction target	1	1	49.27
Interest on un funded Master trust liability			450.84
Total ARR	11,487.82	13,886.34	13,812.41
Less Tariff Income	11,529.74	12,057.26	11,967.05
Less Non-Tariff Income	449.00	555.14	513.55
Total ERC	11,978.74	12,612.40	12,480.60
Net Revenue Gap(-)/Surplus(+)	490.92	-1,273.94	-1,331.81

5.4 The Commission has examined each item of expenses separately and is detailed in the subsequent sections:

Expenses of SBU-D

Cost of Generation (Transfer cost of SBU-G)

5.5 Cost of generation claimed by KSEB Ltd is the transfer cost passed on by SBU-G. As per the petition, the net transfer cost of SBU-G (cost of internal generation -Hydel and LSHS Stations) is Rs.581.91 crore. *Against the claim the Commission has in Chapter 2 of this Order approved the Transfer cost of SBU-G as Rs.497.50 crore.*

Cost of Intra State Transmission (Transfer Cost of SBU-T)

Cost of intra state transmission is the transfer cost of SBU-T to SBU-D. As per the petition, the net transfer cost of SBU-T or cost of intra state transmission is Rs.881.87crore. Against this claim, the Commission in Chapter 3 has approved the Transfer cost of SBU-T as Rs.765.77 crore.

Generation and power purchase in 2017-18

5.7 As per the petition, the total energy requirement for the sale of 20880.70MU, is 24053.75MU. The details of source wise generation and power purchase is as shown below:

Table 3
Energy generation and purchase for 2017-18

	Approved	Actual
Particulars	MU	MU
Internal Generation in MU (excl aux)		
Hydro	6473.62	5458.99
Thermal	0.00	0.55
Solar	0.00	13.45
Wind	0.00	1.48
Subtotal hydro	6473.62	5474.47
Power Purchase in MU at Kerala periphery		
CGS	11000.05	10150.98
RGCCPP	0.00	4.05
BSES	0.00	62.12
IPP-wind & SHPs CPPs &solar prosumers	142.00	258.56
Traders/IPPs approved in Suo motu order	5729.80	5573.47
Short term purchase	1946.98	2668.05*
Substation auxiliary consumption (MU)		14.12
Sub Total generation & Power Purchase by KSEBL	25292.45	24177.57
External sale/swap return		123.82
Grand Total	25292.45	24053.75

- KSEB Ltd in the petition stated that the energy input for the year was less by 1239 MU from the approved quantity. In comparison with the approved quantity of power, the actual Hydro generation was less by 1014.63 MU, availability from CGS and IPPs outside the State was less by 849 MU and 156.33 MU respectively. According to KSEB Ltd, the shortfall was compensated by purchasing power from IPPs outside the State/traders, which were not originally approved in *Suo motu* order. KSEB Ltd further stated in the petition that the Commission however has granted permission for scheduling of power from these stations subsequently. It may be seen from the Table that out of 2668.05 MU purchased from short term sources, 1176.54 MU was purchased from DBFOO contracts whose schedule was permitted by the Commission.
- KSEB Ltd in their petition submitted that the Commission had approved a cost of Rs. 7339.36 Crore for the purchase of 18819.25 MU from various sources in the *Suo motu* ARR&ERC Order dated 17-04-2017. The actual power purchase quantum was 18717.23 MU at Kerala periphery at a cost of Rs 7526.03 Crore as per the Accounts. However, KSEB Ltd has made adjustments in the power purchase costs in the petition and sought a lower amount of Rs.7398.67 crore.
- 5.10 Thus the actual expenses were more than the approved expenses by Rs 186.67 crore, predominantly because of the fixed cost component of RGCCPP, Kayamkulam amounting to Rs 200 Crore. The summary of the power purchase for the year 2017-18 is as shown below:

Table 4
Summary of power purchase for 2017-18 as per petition

		Approved As per petition		Var	iation		
			Cost		Cost		Cost
		Energy	(Rs	Energy		Energy	
No	Particulars	(MU)*	Crore)	(MU)*	(Rs Crore)	(MU)*	(Rs Crore)
1	Central Gen. Stations	11000.05	3755.98	10150.98	3561.66	-849.07	-194.32
2	Small IPPs within the State	142.42	45.87	258.56	90.88	116.14	45.01
3	RGCCPP, Kayamkulam						
	(net)	0	0	4.05	201.15	4.05	201.15
4	BSES**			62.12		62.12	
5	IPPs / Traders outside state	5729.80	2195.02	5573.47	2036.20	-156.33	-158.82
6	Traders / Exchanges/UI	1946.98	843.04	2668.05	956.77	721.07	113.73
7	Transmission charges		499.45		542.52	0.00	43.07
8	Others				1.59		1.59
9	Total	18819.25	7339.36	18717.23	7398.67	-102.02	59.31
* En	ergy at KSEB Bus						
** M	atter before Hon. APTEL						

Note: It is noted that the total cost of power added up to Rs.7390.77 crore only instead of Rs.7398.67 crore mentioned in the table given in the petition. The difference is on account of power purchase cost of Inox claimed during the year, but not included in the accounts, which should be included in Small IPPs within the state, hence the same would have been Rs.98.77 crore instead of Rs.90.88crore mentioned.

Provisions in the Regulations

5.11 The provisions relating to purchase of power by distribution licensee are governed by Regulations 78 and 79. Relevant portion of the Regulations are reproduced below:

"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.

Regulation 79 provides for approval for the short term procurement of power.

79. Additional short-term power procurement.— (1) The distribution business/licensee may undertake additional short-term power procurement during the financial year, over and above the power procurement plan approved by the Commission, in accordance with this regulation.

- (2) (a) Where there has been a shortfall or failure in the supply of electricity from any approved source of supply during the financial year, the distribution business/licensee may enter into agreement or arrangement for additional short-term procurement of power.
- (b) If the total power purchase cost for any quarter including such short-term power procurement exceeds by five percent of the power purchase cost approved by the Commission for the respective quarter, the distribution business/licensee shall have to obtain approval of the Commission.
- (3) The distribution business/licensee may enter into a short-term power procurement agreement or arrangement without the prior approval of the Commission under the following circumstances:
- (a) where the distribution business/licensee has identified a new shortterm source of supply from which power can be procured at a tariff that reduces its approved total power procurement cost;
- (b) when faced with emergency conditions that threaten the stability of the distribution system or when directed to do so by the state load despatch centre to prevent grid failure;
- (c) where the tariff for power procured under such agreement or arrangement is in accordance with guidelines for short-term procurement of power by distribution licensees through tariff based bidding process issued by the Central Government:

Provided that the Commission shall indicate a tariff for procurement of short-term power which shall be considered as the approved ceiling tariff for short-term power procurement under bidding guidelines:

- (d) when the Commission has specified the maximum ceiling price for power procurement under any contingency situation and power purchase price is within such ceiling price;
- (e) procurement of short-term power through power-exchange; and
- (f) procurement by way of exchange of energy under 'banking' transactions.
- (4) The Commission may stipulate the ceiling quantum and ceiling rate for purchase of power from short-term sources.
- (5) Within fifteen days from the date of entering into an agreement or arrangement for short-term power procurement for which prior approval has not been obtained, the distribution business/licensee shall obtain the approval of the Commission by submitting full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection and such other details as the Commission may require with regard to such agreement or arrangement to assess that the conditions specified in this regulation have been complied with:

Provided that where the Commission has reasonable grounds to believe that the agreement or arrangement entered into by the distribution business/licensee does not meet the criteria specified in this regulation, the Commission may disallow the net increase in the cost of power on account of such procurement.

- 5.12 As per the details furnished in the petition, the power purchase cost for SBU-D is under following heads, and the same is examined separately:
 - a. Purchase of power from Central Generating Stations
 - b. Purchase of power from wind and small IPPs within the State
 - c. Power Purchase from Thermal IPPs
 - d. Power purchase from IPPs/Traders outside the state through approved contracts
 - e. Power purchase considered under short term contracts including Traders, exchanges and Deviation Settlement Mechanism (DSM) and DBFOO contracts not approved vide *Suo motu* Order
- 5.13 Based on the above provisions, the purchase of power from each source is analyzed separately.

a. Power Purchase from Central Generating Stations:

5.14 A comparison of approved and actual energy purchased from the CGS and its costs are given in the table below.

Table 5
Power Purchased from Central Generating Stations for 2017-18 as per petition

	Approved			A	Actual/Accour	nts	Difference	
Station	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)	Energy* (MU)	Cost (Rs Crore)
Talcher	2,998.03	672.70	2.24	3,154.47	714.25	2.26	156.44	41.55
NLC Exp Stage I	436.32	157.58	3.61	471.53	169.26	3.59	35.21	11.68
NLC II Stage I	374.38	113.66	3.04	418.59	156.32	3.73	44.21	42.66
NLC II Stage II	534.94	163.08	3.05	638.38	228.63	3.58	103.44	65.55
RSTPS I & II & III	1,711.65	549.51	3.21	1,777.10	538.94	3.03	65.45	-10.57
RSTPS III	430.55	155.32	3.61	467.86	142.82	3.05	37.31	-12.50
Maps	125.66	26.79	2.13	130.34	36.38	2.79	4.68	9.59
Kaiga Stage I & II	436.05	136.51	3.13	567.08	206.09	3.63	131.03	69.58
SimhadriExp	640.60	277.91	4.34	609.66	271.39	4.45	-30.94	-6.52
Kudamkulam	1,572.86	631.17	4.01	1,089.26	445.10	4.09	-483.60	-186.07
NLC II exp	413.91	182.80	4.42	303.87	172.78	5.69	-110.04	-10.02
NTECL Vallur JV	351.93	132.28	3.76	273.70	129.93	4.75	-78.23	-2.35
NTPL Tuticorin	511.49	183.17	3.58	456.95	229.44	5.02	-54.54	46.27
Kudgi Unit I	226.88	95.11	4.19	211.49	120.34	5.69	-15.39	25.23
Kudgi Unit II	226.88	81.73	3.60	-	-		-226.88	-81.73
Kudgi Unit III	113.44	64.57	5.69	-	0		-113.44	-64.57
Bhavini	240.42	91.05	3.79	-	0		-240.42	-91.05
NLC New	54.40	41.04	7.54	-	0		-54.40	-41.04
Total	11,400.39	3,755.98	3.29	10,570.27	3,561.66	3.37	-830.12	-194.32

^{*} Energy at ex Bus

5.15 KSEB Ltd in the petition stated that while proposing the availability from CGS, it was expected that Bhavini Nuclear Power Plant, Unit II & III of Kudgi Power Plant and NLC New station would be commissioned in 2017-18. But these plants were not commissioned during the year resulting in less supply by 635.14 MU from these approved sources. Further, actual PLF of NLC-II-Expansion and NTECL Vallur plant, NTPL Tuticorin had been very low viz., 48.2%, 67.52% and 80% respectively against normative availability factor of 85%. Thus, there was shortage of 242.80 MU from the approved quantum from these stations. In addition, there was shortage of 483.60 MU from Kudamkulam power Station owing to the shutdown of Unit I from May to August. There was an overall reduction in availability from CGS to the extent of 830.12 MU from the approved quantum during the year 2017-18. Accordingly, actual power purchase cost from CGS was less by Rs 194.32 crore from the amount approved by the Commission as shown in the Table above.

Objections of stakeholders

- 5.16 The Association stated that there is discrepancy in the claim of the petitioner regarding the total quantity of power and the audited accounts. As per the accounts the total power purchase is to the tune of 19426MU whereas in the petition it is 18717MU. Association demanded that the Commission should call for the details to have clarity in the details. The Association stated that there are variations in source wise power purchase from what the Commission has approved in their *Suo motu* Order. The CGS stations have resulted in an additional power purchase cost of Rs.224.93 crore over the approved cost.
- 5.17 In reply to the objections, KSEB Ltd in their letter dated 08-04-2021 stated that the difference between the cost approved in ARR and the actual is on account of many factors. The fixed charges is paid based on the actual availability. Further, CERC has issued tariff orders for CGS subsequent to the *Suo motu* order and revised the fixed charges. Further, variable charges depend on the cost of coal and transportation costs, which also changes in actual terms. Further, there will also be changes due to RLDC charges, incentives, and other various supplementary claims corresponding to the Regulations and Orders of CERC. Hence the variation for the approved cost, which is based on the normative availability and the previous year variable charges.

Analysis and decision of the Commission

5.18 The Commission notes that in 2017-18, KSEB Ltd sourced 10570.27MU of power from Central Generating Stations at a cost of Rs.3561.66 crore. The

average rate of purchase at Rs.3.51/unit is slightly more than the approved level. Though there was shortage in the availability of energy on account of non-commissioning of certain plants such as Bhavini, NLC new etc., there was also an increase in the energy drawal from some of the other plants. Since the tariff for these stations are approved CERC, the Commission is required to adopt the same for the purpose of truing up.

5.19 After examining the details furnished by KSEB Ltd the Commission approves the purchase of power from CGS of Rs.3561.66 crore for the year 2017-18.

b.Power Purchase from Wind and small IPPs within the state:

5.20 KSEB Ltd had purchased 259.69 MU for Rs.90.73 Crore from various IPPs against the approved quantum of 142.42 MU for Rs 45.87 Crore. KSEB Ltd submitted that the Commission had subsequently approved the power purchase from wind IPPs viz. M/s Ahalya Alternate Energy Pvt Ltd, M/s INOX Renewables Ltd, solar IPPs such as IREDA, small hydel IPPs such as Pathamkayam. Further wind IPP such as M/s Kosamattom Finance Ltd, Solar IPP at Kuzhalmannam owned by ANERT for which PPA is under process had also injected power during 2017-18. Hence, the increase in the quantum of the power and the power purchase cost compared to the approved level. Captive non solar power plants had drawn a net energy of 5.19 MU from the grid during the financial year 2017-18. Solar prosumers injected 4.06 MU during 2017-18 and the cost involved during 2017-18 was Rs 0.15 Crore. The purchase of power from Independent Power Producers as well as captive SHP/solar/co generation power producers such as Maniyar, Kuthungal, PCBL and solar prosumers as per the petition is given in table below:

Table 6
Power Purchase from Wind and other small IPPs as given in the petition

	KSERC approval			Au	dited Accour	nts	Difference	
Station	Energy* (MU)	Cost (Rs Crore)	Rs./kWh	Energy* (MU)	Cost (Rs Crore)	Rs./kWh	Energy* (MU)	Cost (Rs Crore)
Wind- Ramakkalmedu&Agali	65	20.07	3.09	70.15	22.02	3.14	5.15	1.95
Wind Ahalya				20.98	13.24	6.31	20.98	13.24
INOX	0	0		16.33		-	16.33	
Kosamattom	0	0		0.01		-	0.01	
Ullunkal	19.44	4.74	2.44	17.79	4.23	2.38	-1.65	-0.52
Iruttukanam Stage-I	18	4.86	2.70	24.69	6.5	2.63	0.69	0.02
Iruttukanam Stage-II	6	1.62	2.70					
Karikkayam HEP	28	11.65	4.16	37.56	15.43	4.11	9.56	3.78
Meenvallom	5.56	2.71	4.87	8.44	3.75	4.44	2.88	1.04
Kallar of Idukki District Panchayat	0.13	0.07	5.38	0.08	0.08	10.00	-0.05	0.01

Mankulam of Grama Panchayat	0.29	0.14	4.83	0.09	0	-	-0.2	-0.14
Pathamkayam				11.09	3.15	2.84	11.09	3.15
Solar IREDA				49.69	22.32	4.49	49.69	22.32
Solar IPP ANERT				2.79		-	2.79	
Subtotal IPPs	142.42	45.87	3.22	259.69	90.73	3.49	117.27	44.86
Captive Power plants								
SHEP & Cogeneration plant				-5.19		-	-5.19	
Solar Prosumers				4.06	0.15	0.37	4.06	0.15
Total	142.42	45.87	3.22	258.56	90.88	3.51	116.14	45.01

^{*} Energy at ex bus

Wind IPPs:

- KSEB Ltd had purchased 107.47 MU at a cost of Rs 35.26 Crore from Wind IPPs against approved quantum of 65 MU for a total cost of Rs 20.07 Crore. The increase in quantum of energy against the approval was on account of procurement from sources which were not included in the *Suo motu* order but later on approval were granted. Power procurement from M/s Ahalya Alternate Energy Pvt Ltd (AAEPL) a wind IPP, which was not considered in *Suo motu* Order dated 17.04.2017, was on approved by the Commission vide Order dated 22-02-2017 at a rate of Rs 5.34 per unit. As the tariff approved was high compared to recent market price of wind power, KSEB Ltd after discussions with AAEPL arrived at a negotiated price of Rs 5.24 per unit. The firm started commercial operation on 22-02-2016 and declared CoD on 23.03.2016. KSEB Ltd purchased 20.98 MU for a total amount of Rs.13.24 Crore.
- In reply to the objections of the stakeholders, KSEB Ltd in their letter dated 08-04-2021 stated that in the case of Ahalya India private Limited, PPA with the generator was entered into on 16-02-2018 at Rs.5.23 per unit. The generator has injected power from 2016 onwards and KSEB Ltd was paying a provisional tariff of Rs.3.95/unit from 22-02-2016 to 31-01-2018. The difference invoice for Rs.2.264 crore for the period prior to 2017-18 was included in the power purchase for 2017-18, which is the reason for higher per unit cost. In the case of Wester Kallar also the claim prior to 2017-18 is included in the power purchase cost. In the case of IREDA also cost of previous years from 15-12-2016 is included.
- 5.23 Further, the procurement of power from M/s INOX Renewables Ltd, a wind IPP commissioned on 28.03.2017 was also approved by the Commission vide order dated 03.10.2018. The power injected during 2017-18 was 16.33 MU. As PPA was not entered into during 2017-18, provision for power purchase cost was not created in the accounts for 2017-18. An amount of Rs.7.89 Crore has been provided in the annual accounts for the year 2018-19 towards

- purchase cost 2017-18 and 2016-17. KSEB Ltd requested to approve Rs. 7.89 Crore in 2017-18 itself.
- M/s Kosamattom Finance Ltd, a wind IPP, was connected to the grid on 20.03.2018 and injected 0.01 MU for FY 2017-18. KSEB Ltd initialed the draft PPA with M/s Kosamattom Pvt Ltd on 27.10.2018 @ interim tariff of Rs 3.07 per unit and submitted before the Commission for approval. Since PPA was not entered into during the 2017-18, neither any payment was made nor provision created during the year.

Small Hydro IPPs:

5.25 KSEB Ltd has procured 99.74 MU at a cost of Rs 33.14 Crore. from small hydro IPPs against approved quantum of 77.42 MU for a total cost of Rs 25.79 Crore.

Solar IPPs:

5.26 The Commission has not approved any purchase from solar IPPs in 2017-18. Later on, the Commission vide Order dated 14.02.2018 has approved an interim tariff of Rs 3.90 per unit for power from IREDA. KSEB Ltd has purchased 49.69 MU from IREDA. It is stated by KSEB Ltd that 7.55 MU was injected in the grid by IREDA during 2016-17, for which cost was neither provided in the accounts nor claimed in truing up for 2016-17. Therefore a total cost of Rs 22.32 Crore is accounted in 2017-18. In addition to the above 2.79 MU was procured from solar project of Anert at Kuzhalmannam. The PPA with M/s Anert is under process and hence the cost of the same is not accounted in 2017-18. KSEB Ltd requested to approve the power purchase cost on the basis of approved PPAs.

Captive power producers (CPPs):

5.27 There was a net drawal of 5.19 MU from CPPs such as Maniyar, Kuthungal, PCBL etc during the financial year 2017-18. However, this quantity is considered only for loss calculation purpose.

Solar prosumers:

5.28 A net injection of about 4.06 MU has been made by various solar prosumers including project at Chalayur colony and the corresponding cost is Rs 0.15 Crore.

Analysis and decision of the Commission

- 5.29 The Commission has noted that the cost of power from small IPPs in the State as per the accounts is Rs.90.88 crore. In addition, KSEB Ltd has claimed Rs.7.89 crore towards Inox Renewables Limited, for which provision was created only in the accounts of 2018-19. KSEB Ltd had claimed this amount in the year 2017-18, thus the total cost under the head is Rs.98.77 crore. Though KSEB Ltd has included the energy from Kosamattom, Mankulam GP SHP, Solar IPP ANERT etc. since payment was not made, the cost has not been included under the power purchase cost
- 5.30 The Commission notes that KSEB Ltd procured 258.56MU from the various small IPPs within the State for an average rate of Rs.3.51/kWh. KSEB Ltd has included in the accounts, only the sources in which PPA has been entered into. The average rate of power excluding the projects for which payment is not made (Inox renewables, Solar Anert) works out to Rs.3.77/kWh. Inox Renewables commissioned in 28-03-2017, has injected 16.33MU in 2017-18. KSEB Ltd has claimed Rs.7.89 crore for Inox Renewables, though no such expenditure was booked in the accounts in the year 2017-18 since PPA was not entered into in the year 2017-18. The provision for the same was included only in the accounts for 2018-19 only.
- 5.31 The Commission notes that it is not a desirable practice to claim an amount which is not included in the accounts. Hence, the Commission cannot allow the cost of power purchase from Inox Renewables (Rs.7.89 crore) in the truing up for 2017-18. KSEB Ltd may claim the amount as and when the same is included in the accounts and for the year in which the same is included in the accounts.
- 5.32 KSEB Ltd has not claimed the cost of power purchase from Kosamattom, Mankulam GP SHP, Solar IPP ANERT etc. since payment was not made and the same is not included in the Accounts. Since the claim is not sought and not included in the accounts, the same has not been considered by the Commission in the Truing up.

Table 7
Approved Cost of Purchase of power from Renewable IPPs for 2017-18

Approved Cost of Faronase of power from Renewable if Foreign 2017 16									
	KSERC a	approval		lited s/petition	Approved in Truing up				
Station	Energy (MU)	97 1R6		Cost (Rs Crore)	Energy (MU)	Cost (Rs Crore)			
Wind & SHEP	142.42	45.87	207.21	68.40	207.21	68.40			
Solar-IREDA and ANERT*	-	-	52.48	22.32	52.48	22.32			
Captive power plants/ solar prosumers (Net)	-	-	-1.13	0.15	-1.13	0.15			

Subtotal	142.42	45.87	258.56	90.87*	258.56	90.87
Cost of Inox				7.89		
Total			258.56	98.77		

^{*}KSEB Ltd sought cost of power from Inox of Rs.7.89 crore separately, since the same is not included in the accounts, the same is not allowed

5.33 After examining the details, the Commission approves the cost of power from the renewable IPPs of Rs.90.87 crore for 258.56MU as sought in the petition, excluding the cost of power from Inox.

c. Thermal IPPs - Power purchase from RGCCPP- Kayamkulam:

- 5.34 The Commission in the Suo motu order dated 17-04-2017 has not approved any schedule from RGCCPP for the year 2017-18. However, KSEB Ltd scheduled 150 MW for two days on 12-08-2017 and 13.08.2017 to the extent of 4.0478 MU because of the following reasons.
 - 1. Reduction in CGS availability of 242 MW due to annual maintenance of Talcher II Unit IV, Kudamkulam Unit I and NLC Exp Unit 5.
 - 2. Reduction in CGS availability of 379 MW due to forced outage of Talcher II Unit VI , Kudamkulam Unit II , NLC Exp Unit I&II,NTECL Unit I&III,RSTPS Unit VII.
 - 3. Non availability of URS power due to the outage of CGS stations resulted in acute shortage of power in SR region
 - 4. Due to the above reasons the availability of CGS stations was 854 MW against 1600 MW.
 - 5. Power exchange rates were high during peak hours due to acute shortage of power in SR region.
 - 6. ER SR corridor reduced to zero on 12.08.2017 and 13.08.2017 as a result of Talcher Kolar pole being shut down. Due to this LTOA power from Jhabua could not be scheduled.
 - 7. LTOA from DVC was also reduced due to forced outage which results in the reduction of power availability from LTOA. Only 454 MW was available out of 687 MW through LTOA.
 - 8. 2 units of Idukki and one machine at Sabarigiri were not available due to annual maintenance.
 - 9. As there was no rain on these days the demand was slightly higher.
 - All these results in the shortage of power and therefore KSEB Ltd was constrained to schedule 150 MW from RGCCPP, 22 MW from KDPP and 52 MW from BDPP.
- 5.35 RGCCPP has drawn 8.63 MU of power during non-operative period as auxiliary consumption during 2017-18. The Commission, while approving ARR of KSEB Ltd for 2016-17 and 2017-18, disallowed the fixed charges for RGCCPP and directed KSEB Ltd to approach CERC for lowering the tariff by applying relaxed norms considering the special case of RGCCPP. KSEB Ltd

filed a petition before CERC for a review of the Tariff order. CERC directed KSEB Ltd and NTPC to undertake mutual discussions for settlement of issues and report the outcome. After discussions at various levels NTPC has agreed for a negotiated AFC of Rs 200 Crore for the tariff period 2014-19. The Commission approved the annual fixed charges of Rs.200 Crore for RGCCPP at the time of truing up for the year 2016-17. Actual power purchase cost for 2017-18 had been Rs.201.15 Crore (inclusive of variable and other charges). KSEB Ltd requested to approve the cost of RGCCPP...

Objections of the Stakeholders

5.36 Regarding Power purchase from RGCCPP, the Objector stated that the Commission to retain its stand on RGCCPP being a costly power purchase source for licensee and not burden the consumers for the sake of retaining it as a standby power plant for licensee. Accordingly, the fixed cost of Rs 200 Crore is proposed to be disallowed.

Analysis and decision of the Commission

- 5.37 The Commission examined the purchase of power from RGCCPP. KSEB Ltd has sought to approve the cost towards RGCCPP at Rs.201.15 crore. Of this Rs.200 is towards the fixed cost and total variable charges is Rs.3.00 crore and adjustments of Rs.(-)1.85 crore. The net variable charges is Rs.1.15 crore. In order to approve the cost of RGCCPP, it is necessary to examine the previous process involved in the transaction. Though the PPA for RGCCPP expired on 28-2-2013, 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. However, though Section 86 of the Act required approval of all PPAs including their extensions by the Appropriate Commission, KSEB did not seek this approval.
- 5.38 Hence, the Commission in November 2016, directed KSEB Ltd to obtain the Commission's approval for extension of PPA with RGCCPP. But this direction was not complied with. Thereafter, the Commission decided to exclude the fixed cost of RGCCPP from the ARR of the KSEB Ltd and also issued directions to take steps effectively to reduce the fixed cost of the plant.
- 5.39 In the order on *Suo motu* determination of tariff dated 17-4-2017, the Commission had observed that considering the interest of the consumers in the State, the Commission is not inclined to accept any fixed cost commitment for RGCCPP Kayamkulam for 2016-17 and 2017-18. Further in the Order dated 27-4-2017, the Commission has decided as follows:
 - (1) The request of KSEB Ltd to approve payment of fixed charges as assessed by the Hon'ble CERC is declined.

- (2) KSEB Ltd is directed to negotiate with NTPC Ltd and to work out minimum fixed charges payable for RGCCPP, in view of the facts, the statutory provisions and the financial propriety explained above.
- (3) KSEB Ltd is directed to obtain 360 MW of cheaper power to bring the cost of power to the range of Rs.2.50 to Rs.2.92 per unit.
- (4) If the recommendations for minimizing the fixed cost of RGCCPP and for allotting 360 MW of cheaper power are not acceptable to NTPC Ltd, the scope for taking over the plant by paying its depreciated value shall be explored and reported.
- In compliance of the directions of the Commission, KSEB Ltd in its letter dated 12-6-2018 furnished the compliance report. In the said compliance report, KSEB Ltd has narrated the steps taken for reducing the fixed charges of RGCCPP. KSEB Ltd stated that a petition was filed before CERC, in which CERC had directed the parties, KSEB Ltd and NTPC to undertake mutual discussions for settlement of issues and report the outcome. Though several round of discussions at various levels were taken place, a settlement was not reached. Hence, KSEB Ltd sought permission of the Government of Kerala for initiating the process of reviewing the PPA with NTPC. KSEB Ltd had taken position that the plant need not be scheduled beyond 01-03-2018 and any claims for the subsequent period would be considered only based on the outcome of the review process. In response, one more round of discussions were held with NTPC and NTPC offered for pre-revised AFC of Rs.207 crore for each year for the current tariff period.
- 5.41 Further, as per the discussions taken by GoK with CMD of NTPC, the annual fixed cost payable by KSEB Ltd was further reduced to Rs.200 crore for the control period with a liberty to review in 2018-19. It was also been informed that NTPC has consented to provide the difference of the amount to Rs.7.13 crore per year directly in the adjustment of the current payment or reimburse the amount by way of CSR funding to KSEB Ltd. GoK in its letter dated 10-5-2018 directed KSEB Ltd to reimburse the amount rather than accepting CSR funding.
- The fixed cost of the plant is now lower than the pre-revised rates or rates applicable to the previous control period as per CERC. Based on the above decision, the Commission admitted Rs.200 crore towards the fixed charges of RGCCPP for 2016-17. Accordingly, the Commission approves the fixed cost of Rs.200 crore arrived at the settlement and also the variable charges of Rs.1.15 crore for the year 2017-18 also. Thus, the total cost of RGCCPP for the year is approved at Rs.201.15 crore as sought in the petition.

Power injected from BSES:

In compliance to the Order of the Hon. High Court of Kerala in Petition WP(C) No. 540/17 filed by M/s BKPL for exhausting the Naphtha stock, 62.12 MU was injected into the KSEB Ltd grid during the months of May and June 2017 (19.47 MU and 42.65 MU respectively). KSEB Ltd informed M/s BKPL that, by virtue of the Orders of Hon'ble High Court and the Commission, Unscheduled Interchange rate will be paid for the power so injected. M/s BSES challenged this decision of KSEB Ltd before the Commission and the Commission, vide Order dated 05.10.2018, ordered to pay the average RTC clearing price of exchanges during that period. The Order was challenged by both KSEB Ltd and BKPL before the Hon'ble Appellate Tribunal of Electricity. Since the matter is pending before the Hon'ble APTEL, payment was neither made nor expenses provided in Annual Accounts for 2017-18. Accordingly, no claim was made in the petition.

Analysis and decision of the Commission

- The Commission notes that KSEB Ltd has not claimed any amount towards the fuel charge for BSES since the matter is before the Hon. APTEL. Hence, the Commission is not in a position to approve any expenditure on this count for 2017-18.
- 5.45 Summary of the power purchase from IPPs inside the State for Rs.292.02 crore as claimed by KSEB Ltd in their truing up petition 2017-18 is hereby approved for 2017-18 as shown below:

Table 8
Power purchase cost from IPPs

	KSERC approval		Audited Accounts/petition		Approved in Truing up	
Station	Energy (MU)	Cost (Rs Crore)	Energy (MU)	Cost (Rs Crore)	Energy (MU)	Cost (Rs Crore)
Wind & SHEP	142.42	45.87	207.21	68.40	207.21	68.40
Solar-IREDA and ANERT*	-	-	52.48	22.32	52.48	22.32
Captive power plants/ solar prosumers (Net)	-	-	-1.13	0.15	-1.13	0.15
Subtotal	142.42	45.87	258.56	90.87	258.56	90.87
RGCCPP	-	-	4.05	201.15	4.05	201.15
BSES injection**	-	-	62.12		62.12	
Total	142.42	45.87	324.73	292.02	324.73	292.02

^{*}Cost of Solar ANERT (2.76MU) not included, but energy is only included

^{**}Matter before Hon. APTEL

d. Power Purchase from IPPs / Traders outside state through approved contracts:

5.46 According to KSEB Ltd, since the power demand for the year could not be met fully from the resources within the State, KSEB Ltd stated in their petition that, with the approval of the Commission, KSEB Ltd entered into agreements with various generators/traders outside the state. According to KSEB Ltd, against the Commission's approval for the total 5964.59 MU at for a cost of 2195.02 Crore from various generators (inclusive of power contracted through DBFOO basis) KSEB Ltd had purchased 5778.90 MU for a total cost of Rs.2128.36 crore as detailed below:

Table 9
Power purchase through various contracts as per *Suo motu* order for 2017-18 as per accounts

	KSERC approval		Act	tual	Difference	
	Energy*	Cost (Rs	Energy*	Cost (Rs	Energy*	Cost (Rs
Source	(MU)	Crore)	(MU)	Crore)	(MU)	Crore)
Maithon Power Ltd-I	1044.3	374.38	1055.04	333.85	10.74	-40.53
Maithon Power Ltd-II	1044.3	374.38	1042.53	339.33	-1.77	-35.05
DVC Mejia	705.51	278.47	562.66	210.20	-142.85	-68.27
DVC RTPS	339.91	141.56	133.35	54.85	-206.56	-86.71
Jindal Power Ltd	1346.41	458.5824	1467.44	566.07	121.03	107.48
Jhabua Power Ltd	777.8	306.2119	770.67	346.54	-7.13	40.33
BALCO	335.08	137.7819	316.49	133.85	-18.59	-3.93
Jindal through PTC	371.28	123.65	430.73	143.68	59.45	20.03
Subtotal	5964.59	2195.02	5778.90	2128.36	-185.69	-66.66
* Energy at ex bus						

- 5.47 In the petition, KSEB Ltd had suggested certain adjustments regarding the payments made to DBFOO projects. An amount of Rs 29.48 Crore towards various claims such as energy charges, fixed charges, transmission charges etc has been provided in the audited accounts for 2017-18 against Jindal Power Ltd -200 MW. However, the provision was reversed in the accounts for FY-19. Thus the actual cost of Jindal Power Ltd-200 MW for FY 2018-19 was Rs.536.58 crore.
- 5.48 A sum of Rs. 62.67 Crore claimed by Jhabua Power Ltd (115 MW under Bid I) and Rs.27.95 Crore claimed by Jhabua Power Ltd (100 MW under Bid II) towards fixed charges and variable charges was not admitted by KSEB Ltd for the years 2016-17 and 2017-18. This is mainly due to difference in value of Station Heat Rate (SHR) taken by the utility and the generator for the computation of fixed charges and fuel charges and the difference in methodology adopted for the calculation of fuel charges. M/s Jhabua Power Ltd has since filed a petition before Hon CERC on the matter. Also, M/s Jhabua Power Ltd has claimed fixed charge on account of non-availability of

concessional fuel in certain months which is under dispute and hence is not admitted.

Further, KSEB Ltd is deducting the SRLDC fees and charges from the monthly 5.49 bill of M/s Jhabua Power Ltd as per clause 5.7 of PSA has been objected to by M/s Jhabua Power Ltd. Further M/s Jhabua Power Ltd while not accounting for the Short-Term Open Access (STOA), Medium Term Open Access (MTOA) credits passed on by M/s PGCIL in their monthly bills, has not disputed the Point of Connection bill claim. As a result, Rs.90.62 Crore towards fixed and variable charges for 2017-18 had not been admitted for the variation of fixed charges and variable charges due to this difference in methodology of computation. However, the expenses have been provided in accounts. KSEB Ltd has claimed these charges of Rs. 90.62 Crore (Rs.62.67 Crore+ Rs.27.95 Crore) in the Truing up petition for 2017-18, as the same has not been paid. KSEB Ltd requested that the Commission to consider truing up of these claims, if any materializes on a later date. Thus, the cost of M/s Jhabua Power Ltd (115 MW under Bid I) sought for true up in this petition is Rs 283.87 Crore. KSEB Ltd further submitted the cost details for these stations are given below

Table 10
Power purchase cost claimed for the power from Jindal and Jhabua power Ltd (Bid-I) in the true up petition

	ARR approval		Actual/Petition		Difference	
Source	Energy* (MU)	Cost (Rs Crore)	Energy* (MU)	Cost (Rs Crore)	Energy* (MU)	Cost (Rs Crore)
Jindal Power Ltd-200 MW	1346.41	458.58	1467.44	536.59	121.03	78.00
Jhabua Power Ltd-115 MW	777.80	306.2119	770.67	283.87	-7.13	-22.34

5.50 There was significant reduction in energy from DVC Mejia and DVC RTPS. The availability of power from DVC Mejia TPS was affected due to forced shut down of Unit 8 and the availability of the Station was only 64% in the month of July 17, which came down to 50% in August 2017. The availability of the running unit has been reducing consistently since then, falling to 33% for the month of October 2017. The availability of power from DVC Mejia TPS computed from April 17 to October 2017 was only about 68%. Power availability from Raghunathpur station of DVC was also not reliable from the very beginning. However, in the month of May-17, the availability from the station went up to 98% but the availability was 43% in June 2017. There was no availability for a month from 28.09.2017 on account of coal shortage. The frequent outage of the unit and the reduction in Declared capacity due to coal shortage and other reasons has resulted in drastic reduction of power availability from the station. The availability of power from the RTPS computed

from April 17 to October 2017 was about 36%. Hence, KSEB Ltd claimed that there is reduction in energy availability from these stations.

Analysis and decision of the Commission

5.51 KSEB Ltd has sought approval of power purchase through long term agreements. In the case of DVC and Maithon, the Commission has given approval for these purchases before 2016 and the tariff for these projects are determined by CERC under section 62 of the Electricity Act. Further, the purchase from these projects are also approved in the *Suo motu* ARR Order dated 17-4-2017. Accordingly, the purchase from these projects are to be approved for the truing up for 2017-18. The details are given below:

Table 11
Details of power purchase approvals given

Source	Contracted Capacity (MW)	Date of approval	Period of contract	Approved Tariff	
Maithon Power	150	No.2158/C.Engg/Maithon/2013/1398 dated 26.12.2013	25 years	Approved under Section	
Maithon Power	150	Order dated 08 - 07- 2015	25 years	62 of	
DVC Mejia	100	No.500/C.Engg/DVC/2014/348 dated	25 years	Electricity Act	
DVC RTPS	50	28.03.2014 & Order dated 21.01.2016	25 years	2003	

5.52 In the case of projects under DBFOO, the Commission has taken a position in *the Suo motu* order dated 17-04-2017, as shown below:

"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

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

	Contracted	Contracted capacity in MW Date of commencement		y (MU)	Charges (Rs crore)	
Source	, ,			KSEB L end	Fixed	Total
Maithon Power Ltd	150	Dec-16	1,044.30	1,010.18	165.52	374.38
Maithon Power Ltd	150	Apr-16	1,044.30	1,010.18	165.52	374.38
DVC Mejia	100	Jun-16	705.51	683.99	116.20	278.47
DVC RTPS	50	Apr-16	339.91	329.54	63.38	141.56
Power contracted through DBFOO						
Jindal (DBFOO)	200	Jun-16	1,346.41	1,273.84	349.03	458.58
Jhabua (115 MW)	115	Dec-16	777.80	737.86	177.39	306.21
Balco	100	Oct-16	335.08	321.17	104.38	137.78
Sub Total			5,593.31	5,366.76	1,141.42	2,071.37

5.53 As shown above, the Commission had approved the energy and cost from the Maithon Power limited, DVC Mejia and DVC RTPS in the Suo motu Order dated 17-04-2017. In the case of projects under DBFOO, the Commission has approved the PPA and the tariff under Section 63 of the Act as per the Order dated 30-08-2016 for the L1 of Bid I and Bid II namely Jindal (200MW) and Balco (100MW). only. Subsequently, in the Order dated 22-12-2016 the Commission has issued *only conditional approval* for the purchase of power from of Jhabua Power (115MW) under Bid-I. In the *Suo motu* Order dated 17-04-2017, while approving the purchase of power from Jhabua-I, the Commission has specifically mentioned that *as per the Order dated 22-12-2016 purchase of 115MW of power from M/s Jhabua Power Ltd is subject to the clearance of Government of India and subject to the final decision of the Hon'ble High Court in Writ Petition No. WP(C) 33100/2014.*

5.54 However, the Commission notes that KSEB Ltd has not been able to get the clearance of Govt. of India for the 115 MW of power from M/s Jhabua Power Limited. In fact, in reply to Govt of Kerala letters Limited dated 15-09-2016 and 20-01-2018, Government of India through Ministry of Power vide letters dated 18-11-2016 and 11-12-2019, categorically stated that the deviations pointed out by the Commission should have been vetted and approved by the Central Government, before issuance of RFQ, RFP and PSA and not after the bids were issued, processed and finalized. Further it was also mentioned that as per the Guidelines deviations in the bidding documents ae to be approved by the Government of India and not the action of the Utility taken as per practice or precedent in selecting the bidders other than L-1. The details of approval given for the PSAs under DBFOO is as shown below:

Table 12

Details of power purchase approvals given for projects under DBFOO

Source	Contracted Capacity (MW)	Date of approval	Period of contract	Approved Tariff
Jindal Power Ltd-Bid I (DBFOO)	200	Order dated 30.8.2016	25 years	Approved under
BALCO -Bid-I (DBFOO)	100	Order dated 30.8.2016	25 years	Section 63 of
Jhabua Power Ltd-Bid-I (DBFOO)	115	Conditional approval Order dated 22.12.2016	25 years	Electricity Act 2003.

- 5.55 The Commission further noted that KSEB Ltd in their petition stated that certain payments relating to Jhabua and Jindal projects were withheld on account of disputes and requested to allow only the actual payment for these projects in the truing up for 2017-18. In their petition, KSEB Ltd stated that an amount of Rs.29.48 crore towards various claims of energy charges, fixed charges and transmission charges pertains to Jindal Power Ltd (200MW) was included in the audited accounts for 2017-18, but these provisions was reversed in 2018-19. Further an amount of Rs,62.67 crore claimed by Jhabua (115MW in bid I) and Rs.27.95 crore claimed by Jhabua power Ltd (100 MW bid II) towards fixed charges, variable charges and other heads were not admitted by KSEB Ltd and accordingly not paid. KSEB Ltd hence requested to allow only Rs.283.87 crore for Jhabua power (115MW Bid I).
- 5.56 Subsequent to this, KSEB Ltd in the letter dated 20-10-2020 revised the cost details furnished in the petition. As per the letter, KSEB Ltd reported that stated that while providing the details for Jindal I & II certain monthly bills and supplementary bill amounts (*amounting to Rs.4.68 crore*) were wrongly entered into i.e., supplementary bill for Jindal Bid-I was taken as supplementary bill of Jindal in Bid II and vice versa. Hence on correcting the same, the power purchase cost of Jindal Bid-I and Jindal II for 2017-18 as per the Accounts may be modified as Rs.570.75 crore (instead of Rs.566.07 crore)

and Rs.241.912 crore (instead of Rs.246.59 crore) respectively. Since an amount of Rs.29.63 crore and Rs.14.99 crore was reversed during the financial year 2018-19 and hence the modified amount after reversal for Jindal Bid-1 and Jindal Bid-II for 2017-18 was Rs.541.11 crore (570.75-29.63 crore) and Rs.226.92 crore (241.912-14.99 crore) respectively. The actual amount paid till date against this is Rs.539.88 crore and Rs.225.52 crore. Thus, in the case of Jindal I, the corrected figures are as shown below:

Table 13
Revisions made in the claims of Jindal -I and Jhabua -I as per letter dated 20-10-2020

	Cost claimed in the Truing up petition	Revised Claim as per letter dated 20- 10-2020*	Actual payment till date	Remarks
Jindal Power Ltd - Bid-1	536.59	541.11	539.88	Inadvertent error as explained. The difference between the revised claim and actual payment is due to various unadmitted claims in monthly bills and supplementary bills
Jhabua Power Bid-1	283.87	283.87	290.72	Fixed charges for deemed availability on account of fuel shortage subsequently released in December 2019 as per the provisions of PSA
Balco – Bid-II	133.85	133.85	133.85	

^{*} Revision in claimed amount due to inadvertent error in Jindal

Thus, KSEB Ltd has revised the claims for Jindal-I as shown above. The Commission has examined the details given by KSEB Ltd and noted that KSEB Ltd has subsequently released various claims earlier objected to as per the provisions of PSA. It is also noted that even in the admitted claims the amount is not fully paid in the case of Jindal-I and excess payments in the case of Jhabua-I. In the revised statement, in the case of Jhabua-I the actual payment is more than the provisions made. Considering this discrepancy, the Commission is approving only the admitted claims as per the petition and not the actual payments made, subject to the conditions made in the Order dated 22-12-2016. The Commission accordingly approves the revised claims for the above projects for 2017-18 as shown below:

Table 14
Details of power purchase cost approved

	•					
	As per petition		Re	vised	Approved	
Source	Energy*	Cost (Rs	Energy*	Cost (Rs	Energy*	Cost (Rs
	(MU)	Crore)	(MU)	Crore)	(MU)	Crore)
Maithon Power Ltd-I	1055.04	333.85	1055.04	333.85	1055.04	333.85
Maithon Power Ltd-II	1042.53	339.33	1042.53	339.33	1042.53	339.33
DVC Mejia	562.66	210.2	562.66	210.2	562.66	210.20

DVC RTPS	133.35	54.85	133.35	54.85	133.35	54.85
Jindal Power Ltd- Bid-I	1467.44	536.59	1467.44	541.11*	1467.44	541.11
Jhabua Power Ltd-Bid-I	770.67	283.87	770.67	283.87**	770.67	283.87
BALCO-Bid-II	316.49	133.85	316.49	133.85	316.49	133.85
Jindal through PTC	430.73	143.68	430.73	143.68	430.73	143.68
Subtotal	5778.91	2036.22	5778.91	2040.74	5778.91	2040.74
* Energy at ex bus						

^{*}Actual payment made so far is Rs.539.88 crore **Actual payment made is Rs.290.71 crore

Power purchase considered under short term contracts:

- The Commission vide Order dated 17.04.2017 has approved power purchase of 1946.98 MU from short term markets at an average rate of Rs 4.00 per unit and transmission charges @ Rs.0.33 per unit at Kerala periphery (Rs.843.04 Crore). According to KSEB Ltd, due to the short fall in hydro generation and reduction in availability from CGS and IPPs, KSEB Ltd was constrained to procure power from other sources. Therefore, KSEB Ltd actually procured 2668.05 MU at Rs.956.77 Crore from the unapproved DBFOO contracts in *Suo motu* order, short term contracts and power exchanges at an average rate of Rs.3.59 per unit. Each of these items are discussed under the following heads:
 - a. Purchase of power from DBFOO contracts not approved by the Commission
 - b. Power purchased through short term contracts
 - c. Power purchased from energy exchange
 - d. Power purchased through overarching agreement/DSM/SWAP

a. Power purchase from DBFOO contracts where PPAs have not been approved by the Commission

- 5.59 KSEB Ltd had entered into long term contracts with various IPPs under DBFOO mechanism for buying 865 MW of power by floating two separate bids for within a span of 50 days. The Commission had approved vide order dated 30-08-2016, the following:
 - 1. M/s Jindal India Pvt Ltd (200 MW) i.e., L1 of Bid-I,
 - 2. M/s BALCO (100 MW) i.e., L1 of Bid-II.

Further from M/s Jhabua Power Ltd (115 MW) i.e., L2 of Bid-I vide order dated 22-12-2016 was approved 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.

KSEB Ltd stated in the petition that the Commission has not approved the balance 450 MW of power contracted through DBFOO basis as detailed in Table below.

Table 15

Details of contracted quantum for which approval is not given

Name of generator	Quantum contracted
Jindal Power Ltd Bid-II,	150 MW
Jhabua Power Ltd-Bid II	100 MW
Jindal India thermal power Limited-Bid-II	100 MW
East coast energy Pvt Ltd-Bid-II	100 MW
Total	450 MW

In the petition, KSEB Ltd stated that since the purchase of power was indispensable, KSEB Ltd availed 350 MW of power from October 2017 onwards out of the unapproved contracts referred above, after appraising the compelling circumstances before the Commission and Government of Kerala. Government of Kerala, vide order 21.10.2017, has given permission to draw the contracted power with effect from 01.10.2017 and ordered that final orders in the matter shall be issued in due course. KSEB Ltd further stated in the petition that the Commission, in due consideration of the Government order dated 21-10-2017 accorded sanction to draw contracted power through DBFOO from 01.10.2017 as per letter dated 22.12.2017. M/S East Coast Energy Pvt Ltd had not commissioned the project as expected and requested to extend the scheduled commissioning date. Thus, the actual quantum purchased from the above contracts was 350 MW. The summary of power purchase from these sources is furnished below.

Table 16
Power purchase from DBFOO contracts not approved in the *Suo motu* order

	Energy at ex	Energy at Kerala	Cost
Source	bus (MU)	periphery (MU)	(Rs Crore) *
Jindal Power Ltd-Bid II	524.81	502.57	246.59
Jhabua Power Ltd -Bid II	298.21	283.97	164.42
Jindal India Thermal Power Ltd-Bid II	403.29	390.01	172.28
Sub total	1226.31	1176.54	583.29

^{*}inclusive of transmission charges

5.61 In the case of Jindal Power Ltd -150 MW under Bid-II, an amount of Rs.15.14 Crore towards various claims such as energy charges, fixed charges, transmission charges etc., provided in the audited accounts for 2017-18, was reversed in the audited accounts for 2018-19. Thus, the actual cost of Jindal Power Ltd-150 MW for 2017-18 as per the claim in the petition is Rs.231.45 Crore.

In the case of Jhabua Power Ltd 100 MW under Bid II, about Rs.27.95 Crores are claims on fixed charges and variable charges which was not admitted by KSEB Ltd during the period from 2017-18 due to the reasons such as disputes in heat rate etc., Thus the actual cost of Jhabua Power Ltd -100 MW Bid-II for 2017-18 was Rs 136.46 Crore. As KSEB Ltd has paid only the admitted amount for the above sources, KSEB Ltd is claiming only the remitted amount in this petition.

Table 17
Power purchase cost claimed in the true up petition

			Cost As per	Revised
	Energy at ex	Energy at Kerala	accounts	Claim
Source	bus (MU)	periphery (MU)	(Rs. Crore)	(Rs Crore) *
Jindal Power Ltd-Bid II	524.81	502.57	246.59	231.45
Jhabua Power Ltd -Bid II	298.21	283.97	164.42	136.46
Jindal India Thermal				
Power Ltd-Bid II	403.29	390.01	172.28	172.28

^{*}Inclusive of transmission charges

Objections of the Stakeholders

- 5.63 Regarding power purchase from DBFOO contracts, the Association stated that during the year the licensee has purchased a quantum equivalent to 350MW from Jindal Power Ltd (through Bid II), Jhabua Power Ltd (through Bid II) and Jindal India thermal power limited (Bid II) which is not approved by KSERC. Hon'ble Commission is requested to allow power purchase cost from these sources at L1 rate of the Tranche II bidding which is BALCO (Rs 4.07 per unit). Accordingly, an amount of Rs 62 Crore from the power purchase cost is proposed to be disallowed.
- In reply to the objections, KSEB Ltd stated that the increase in energy purchase is on account of reduction in availability of own generation and central generating stations. The rate of purchase is very well within the limits. Hence, KSEB Ltd requested to reject the comments of the objector.

Provisions in the Regulations

In this context, it is to be noted that provisions regarding purchase of power is mentioned in Regulation 79. Regulation 79(3) specifies that in the following situations, a distribution licensee may enter into short term procurement of power without the prior approval of the Commission:

"a)where the distribution business/licensee has identified a new shortterm source of supply from which power can be procured at a tariff that reduces its approved total power procurement cost; (b) when faced with emergency conditions that threaten the stability of the distribution system or when directed to do so by the state load despatch centre to prevent grid failure;

(c)where the tariff for power procured under such agreement or arrangement is in accordance with guidelines for short-term procurement of power by distribution licensees through tariff based bidding process issued by the Central Government:

Provided that the Commission shall indicate a tariff for procurement of short-term power which shall be considered as the approved ceiling tariff for short-term power procurement under bidding guidelines:

- (d)when the Commission has specified the maximum ceiling price for power procurement under any contingency situation and power purchase price is within such ceiling price;
- (e)procurement of short-term power through power-exchange; and (f)procurement by way of exchange of energy under 'banking' transactions. "
- 5.66 The relevant portion of the Regulation 79(5) is given below:
 - "(5) Within fifteen days from the date of entering into an agreement or arrangement for short-term power procurement for which prior approval has not been obtained, the distribution business/licensee shall obtain the approval of the Commission by submitting full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection and such other details as the Commission may require with regard to such agreement or arrangement to assess that the conditions specified in this regulation have been complied with:

Provided that where the Commission has reasonable grounds to believe that the agreement or arrangement entered into by the distribution business/licensee does not meet the criteria specified in this regulation, the Commission may disallow the net increase in the cost of power on account of such procurement.

Analysis and decision of the Commission

5.67 Subsequent to the filing of the petition, KSEB Ltd vide letter dated 20-10-2020, stated that there is an inadvertent error in the details furnished and the revised the power purchase cost as shown below:

Table 18 Adjustments sought in the power purchase as per clarifications dated 20-10-2020

	Cost claimed		Actual	
	in Truing up	Revised	payment	
	petition	Claim	Rs.	
	Rs. crore	Rs. crore	crore	Remarks
				In advertent error as explained. The
Jindal Power Ltd -				difference between the revised claim and
Bid-II	231.45	226.92	225.52	actual payment is due to various unadmitted
DIU-II				claims in monthly bills and supplementary
				bills

Jhabua Power Bid-II	136.46	136.46	138.69	Fixed charges for deemed availability on account of fuel shortage subsequently released in December 2019 as per the provisions of PSA
JITPL-Bid-II	172.28	172.28	170.83	Rs.68.88 lakh withdrawn during 2019-20 towards STOA and SRLDC charge. Remaining Rs.75.55 lakh towards unadmitted claims due to disputes in towards fixed charge annual reconciliation, transmission losses, and SHR compensation

^{*} Revision in claimed amount due to inadvertent error in Jindal cost estimation

Table 19
Revised cost as per letter dated 20-10-2020

Source	Energy at ex bus (MU)	Energy at Kerala periphery (MU)	Cost as per accounts Rs. Crore	Claimed in Truing up Rs. Crore	Revised claim Rs.crore	Average Tariff Rs./kWh
Jindal Power Ltd-Bid II	524.81	502.57	246.59	231.45	226.92	4.52
Jhabua Power Ltd -Bid II	298.21	283.97	164.42	136.46	136.46	4.81
Jindal India Thermal Power Ltd-Bid II	403.29	390.01	172.28	172.28	172.28	4.42
Sub total	1226.31	1176.54	583.29	540.19	535.66	4.55

- The Commission has examined the claims of KSEB Ltd regarding the power procurement from contracts entered into through DBFOO, which are not approved by the Commission. KSEB Ltd claim in the petition that the Commission has approved the power purchase, which is incorrect and factually misleading. The Commission is constrained to point out to KSEB Ltd that the difference between "approval of PPA" and "allowing to schedule power" from the DBFOO unapproved generators. The Commission notes that scheduling of power is based on SLDCs assessment of power demand and its availability. Hence 'scheduling of power" is directly dependent upon demand and does not give a free licence to KSEB Ltd to construe it as "approval of PPA or power purchase". Hence the Commission summarily rejects KSEB Ltd contention in this regard. This is made explicitly clear in the Commission's letter to KSEB Ltd dated 22-10-2017.
- Hence the Commission had allowed the scheduling of power considering request of KSEB Ltd on the shortage of power vide letter dated 22-12-2017. In this letter the Commission allowed KSEB Ltd to schedule the contracted power of 350MW from 01-10-2017 from three projects of Bid-II, i.e., 100 MW of power from M/s Jindal India Thermal Power Ltd, New Delhi, 100 MW of power from M/s Jhabua Power Limited and 150 MW of power M/s Jindal Power Limited. It is to be specifically noted that in the said letter, the Commission has made it clear that since the State Government's G.O dated 21-10-2017 is only an interim measure and final orders are yet to

be issued, the Commission may approve the power purchase proposal including the rate for the pending approvals under DBFOO only after State Government accords final approval for the entire power purchase under DBFOO. The details are given below:

Table 20
Details of power scheduling

	Contracted	
Source	Capacity	Date of Commission's Letter
	(MW)	
Jindal Power Ltd-Bid II (DBFOO)*	150	Letter dated 22.12.2017
Jhabua Power Ltd-Bid-II (DBFOO)*	100	Letter dated 22.12.2017
JITPL* - Bid-II (DBFOO)	100	Letter dated 22.12.2017

5.70 The Commission further notes that in the MYT tariff Order for 2018-19 to 2021-22 dated 08-07-2019, the Commission has stated that for the scheduled power from the unapproved PSAs in Bid II, shall be at the rate equivalent to the cost of power of BALCO, which is L1 of Bid-II. The relevant portion of the Order is quoted below:

"5.104 Hence the Commission has considered scheduling power from the three projects of Bid-2, i.e., 100 MW of power from M/s Jindal India Thermal Power Ltd, New Delhi, 100 MW of power from M/s Jhabua Power Limited and 150 MW of power M/s Jindal Power Limited for the limited purpose of estimating the ARR&ERC for the control period. Since the required approvals from GoI and State Government is still awaited, the Commission is constrained to use the rate equivalent to the cost of power from Balco, which is the L1 of Bid 2. The Commission emphasizes that this consideration is only for the purposes of estimating the cost of power provisionally in the ARR and shall not be construed as an approval of the power purchase, rate or of the PPA itself as per Section 63 of the Act which can be considered only after the fulfilment of conditions specified by the Commission in its order dated 31-8-2016."

5.71 In the *Suo motu* Order dated 17-04-2017, the Commission has not approved the purchase of power from the three unapproved DBFOO projects. Instead, the balance energy requirements were treated as short term purchases. The Commission has approved the maximum rate of Rs.4/kWh for the short-term purchases and 0.33/kWh for the transmission charges. Thereafter based on the State Government's G.O. dated 21-10-2017 and KSEB Ltd request the Commission allowed KSEB Ltd to schedule the power from the three unapproved PSAs of Bid-II from 1-10-2017.

- 5.72 Further, in the in the MYT Tariff Order for 2018-19 to 2021-22 dated 8-7-2019, the Commission has stated that for the scheduling of power from the unapproved PSAs in Bid II, the Commission will consider only the rates same as that of BALCO, which is L1 of Bid-II. At this stage, it is important to specifically state as to what the Commission meant by the word 'rate'. It is an established fact in all conventional power purchase that the cost of power has two elements - fixed cost and variable or fuel costs. While the fixed cost is generally predetermined and included in the PPAs the variable in fuel cost will vary based on factors such as cost of fuel, calorific value, transportation cost, heat rate, etc., The Commission notes that KSEB Ltd's bid was for delivery power at Kerala periphery and finalizing the bids, the aggregate of fixed and variable costs were taken as the criteria to determine the L1 bidder. Hence this aggregate cost at Kerala periphery as used by KSEB Ltd to determine the L1 bidder is the same cost at which is referred to by the Commission as "rate". To put it clearly, it is the sum total of the fixed and variable cost at the Kerala periphery. It is also important to note that the Commission has used "rate" and not rates, clearly converging its intent not to allow any amount greater than what is paid to L1 bidder as per their monthly billing.
- 5.73 Hence, it is made very clear that the Commission has only for the limited purpose of approving the power purchase cost for the year 2017-18, considered the cost of power from BALCO, which is L1 of Bid-II. It was also specifically made clear to KSEB Ltd that, such consideration shall not be construed as adoption of the Tariff under Section 63 of the Act or the approval of PSA of these projects under Section 86 of the Act in any manner. It is also pertinent to note that KSEB Ltd themselves have understood and accepted the Commission's intent and accordingly included these procurements under short term contracts in their petition. KSEB Ltd has also not sought fuel surcharge for these projects for the year 2017-18 in terms of the petitions for approval of fuel surcharge in OA 16/2017, OA1/2018, OA7/2018 & OA9/2018.
- 5.74 Thus, as mentioned in the Commission's Order dated 08-07-2019, the consideration of purchase of power from these projects as part of truing up for 2017-18 shall not be construed as an approval of PPA or adoption of tariff under Section 86 or Section 63 respectively of the Electricity Act. The consideration is purely for estimating the power purchase cost for the year 2017-18. Since, the scheduled power has been drawn by KSEB Ltd, the distribution licensee being an instrument cannot refuse payment. Hence the Commission has specifically mentioned that the Commission is constrained to use the rate equivalent to cost of power from BALCO. Based on this Order, the Commission for the purpose of truing up has considered the cost of power purchase from these projects at the actual rate of BALCO under Bid -II for the year 2017-18 incurred by KSEB Ltd based on the monthly rate is used. Since

the BALCO rate is applicable for the energy at the KSEB Ltd periphery, same is also made applicable to the energy from these projects. The monthly rate applicable to the purchase from BALCO as per the details furnished by KSEB Ltd vide letter dated 20-10-2020 are as shown below:

Table 21
Rate of purchase applicable to purchase from BALCO (L1 of Bid-II)

	Balco-Bid-II				
Month	Energy at Kerala periphery	Cost	Rate/Unit		
	MU	Rs.crore	Rs./kWh		
Oct-17	54.773 65.751	23.749	4.336		
Nov-17		26.8815	4.088		
Dec-17	55.368	23.977	4.330		
Jan-18	59.536	25.8659	4.345		
Feb-18	53.174	23.472	4.414		
Mar-18	27.889	9.9085	3.553		
Total	316.491	133.8539			

5.75 Based on the above, the cost of Power purchase from the unapproved DBFOO sources are as given below:

Table 22

Cost of power approved for unapproved DBFOO bids

	Jindal Power -Bid-II			Jhabua-Bid-II			Jindal India Thermal Bid-II		
Month	Energy at Kerala periphery	Rate/ Unit	Cost	Energy at Kerala periphery	Rate/ Unit	Cost	Energy at Kerala periphery	Rate/ Unit	Cost
	MU	Rs./kWh	Rs.crore	MU	Rs./kWh	Rs.crore	MU	Rs./kWh	Rs.crore
Oct-17	91.323	4.336	39.60	22.056	4.336	9.56	68.8	4.336	29.83
Nov-17	95.182	4.088	38.91	50.16	4.088	20.51	63.29	4.088	25.88
Dec-17	94.094	4.330	40.75	44.327	4.330	19.20	68.18	4.330	29.53
Jan-18	92.513	4.345	40.19	67.617	4.345	29.38	68.08	4.345	29.58
Feb-18	76.072	4.414	33.58	45.769	4.414	20.20	57.41	4.414	25.34
Mar-18	53.382	3.553	18.97	54.037	3.553	19.20	64.25	3.553	22.83
Total	502.566		211.996	283.966		118.04	390.01		162.978

Table 23
Summary of the power purchase cost or unapproved DBFOO Bid-II

	As pe			
Source	Energy at ex bus (MU)	Energy at Kerala periphery	Revised claim	Approved in true up
	,	MU)	Rs.crore	Rs.crore
Jindal Power Ltd-Bid II	524.81	502.57	226.92	211.996
Jhabua Power Ltd -Bid II	298.21	283.97	136.46	118.04
Jindal India Thermal Power Ltd-Bid II	403.29	390.01	172.28	162.98
Sub total	1226.31	1176.54	535.66	493.02

b. Power purchased through other short term contracts:

5.76 KSEB Ltd had entered into short term contract through TPTCL for the procurement of 100 MW RTC power and additional 100MW power during peak hours (from 18.00 hrs to 24.00 hrs) from 1.3.2017 to 31.5.2017 on short term basis as per the guidelines for short-term (i.e., for a period less than or equal to one year) procurement of power by Distribution licensees through Tariff based bidding process. The Commission vide Order dated 19.12.2017 has approved the tariff for the same as follows

Table 24
Power purchase through TPTCL

r ever parenaee aneagn in 192							
	Quantum	Rate@ Kerala					
Duration	(MW)	periphery	Trader				
00:00 hrs to 24.00 hrs(RTC)	100	3.25	Tata Power				
			Trading				
18:00 hrs to 24.00 hrs (peak)	100	3.65	Company Ltd				

5.77 KSEB Ltd procured 150.41 MU at ex bus (146.55 MU at Kerala periphery) for a total power purchase cost of Rs 48.81 Crore.

Analysis and decision of the Commission

5.78 The Commission has approved the power purchase from the TPTCL vide order dated 19-12-2017 as shown below:

	Source	Contracted Capacity (MW)	Commission Approval Letter	Period of contract	Approved Tariff
	JITPL through TPTCL	100 MW RTC + 100 MW peak	Order dated 19-12- 2016	March 2017 to May 2017	RTC Power:- Rs 3.25 /unit Peak Power:- Rs 3.65 / unit
-	Jindal Power through PTC 200		Order dated 1-06- 2016	March-17 to June 2017	Rs.3.406/kWh at Kerala periphery

- 5.79 The above Table reveals that JITPL and Jindal Power Limited has supplied short term RTC and peak power at a rate as low as Rs.3.25/unit including the traders commission. During this period it is ironical that KSEB Ltd has paid these generators Rs.4.38/unit and Rs.4.49/unit. Logically a power purchase quote having fixed and variable cost and for a period of 25 years should cost cheaper than these short-term purchases. But as pointed out earlier, KSEB Ltd has paid much more to these generators for the same period in DBFOO and is now proposing to recover it from the consumers through this truing up petition.
- 5.80 After examining the details, the Commission approves for the truing up as per the petition (Rs.48.81 crore).

c.Power purchase from Energy exchanges:

In the Suo motu order, the Commission has permitted 1946.98MU of power through short term purchase at a maximum rate of Rs.4/unit. Based on this, KSEB Ltd procured 554.07 MU at Kerala periphery for a cost of Rs 207.22 Crore from IEX and 87.16 MU at Kerala periphery for a cost of Rs 32.66 Crore from PXIL. The details are as follows

Table 25
Power purchase through exchanges

Source	Energy* (MU)	Cost (Rs Crore)	Average rate
IEX	554.07	207.22	3.74
PXIL	87.16	32.66	3.75
Total	641.23	239.88	3.74

Objections of the stakeholders

5.82 Regarding the purchase from Power Exchanges, HT-EHT Association stated that there are variations in the power purchase rate disclosed by KSEB Ltd as against the disclosures by CERC and IEX. As per CERC – Report on Short term power market in India, 2017-18, the total purchase by Kerala SEB was 530.65MU at a rate of Rs 3.07/unit An amount of Rs 42.50 Crore is being claimed as additional power purchase cost and they requested to be allowed only after necessary prudence check of such expenses claimed by licensee

Analysis and decision of the Commission

5.83 The Commission has approved the 1946.98MU energy from short term sources including energy exchange and traders in the Suo motu order dated 17-04-2017. In the said order the Commission has fixed the ceiling rate as

Rs.4/kWh and also allowed transmission charges of 33 paise. The Commission has noted that the average rate of purchase is Rs.3.74/kWh, which is lower than the approved rate. Hence the same is approved for the purpose of truing up.

d. Power Purchase through overarching agreement /DSM/Swap

(i) Power purchase through overarching agreement:

An overarching agreement was signed among all Southern Regional constituents including KSEB Ltd on 17.08.2017 for optimum harnessing of Renewable Energy without endangering the grid security based on Southern Region council decision and Ministry of Power guidance. KSEB Ltd vide letter dated 25.09.2017 has sought approval for overarching agreement and sanction for making transactions with SR constituents as per the frame work of overarching agreement. Based on this decision, KSEB Ltd availed 1.15 MU at Kerala periphery from KPTCL for a total power purchase cost of Rs 0.52 Crore

(ii) Power purchase through swap arrangement:-

In addition to the above, KSEB Ltd had entered into agreement with GMRETL for availing supply of 100MW from 8.00 hrs to 17.00 hrs from November 2017 to March 2018 through swap arrangement and the power returnable at 100 % energy from 16th June 2018 to 30th September 2018 with time duration from 00.00 hrs to 4.00 hrs and 22.00 hrs to 24 hrs. This matter was brought to the attention of the Commission vide letter dated 01.01.2018. KSEB Ltd has availed 132.90 MU at Kerala periphery through this arrangement. A total expenditure of Rs 2.26 Crore has been expended on this arrangement.

(iii) Power returned through banking arrangement (SWAP):-

5.86 KSEB Ltd entered power swap agreement with GMRETL on 22.04.2017 and as per the agreement BRPL supplied 6.3076 MU to KSEB Ltd in the month of March 2017 and KSEB Ltd returned the same during July and September 2017 through GMRETL.

(iv) Deviation settlement mechanism:

5.87 KSEB Ltd has procured 569.68 MU through deviation settlement mechanism at a cost of Rs.125.12 Crore (Rs.2.20/unit). Thus, according to KSEB Ltd, the shortfall in energy availability from approved sources had been effectively met through procurement of power from various other sources. Further, KSEB Ltd was able to procure this quantum of 2668.05 MU at an average rate of Rs.3.72 per unit.

5.88 KSEB also claimed Rs.1.55 crore towards previous year expenses as mentioned in Appendix D4 of the petition ie., for Aravalli Power limited Rs.1.55 crore and Rs.0.04 crore for NVVN. Thus, the total expenses claimed by KSEB Ltd in their submissions under Swap/DSM etc. is Rs.129.40 crore as shown below:

Table 26
Summary of Cost claimed for Swap/DSM/Overarching arrangement

Source	Source Energy at Kerala periphery (MU)		Average cost (Rs./kWh)
Swap-GMRETL	132.90	2.26	0.17*
DSM	569.68	125.12	2.20
KPTCL-Overarching	1.15	0.52	4.49
NVVN (Previous year)		0.04	
Aravalli power(previous year)		1.55	
Total Swap/DSM	703.74	129.49	

^{*}This is additional cost incurred

Energy sale outside the State: -

5.89 KSEB Ltd was able to sell 117.51 MU for a total amount of Rs 51.18 Crore through power exchange. The expenditure associated with sale is Rs 1.06 Crore (included under IEX and PXIL cost) which is included in the power purchase cost of IEX and PXIL.

Analysis and decision of the Commission

5.90 The Commission has examined the transactions made by KSEB Ltd on the overarching agreement, swap arrangement and purchase through DSM. After examining the details, the Commission approves the above transactions as shown below:

Table 27
Approved Cost under DSM/Swap etc.

	As	s per Petiti	on	As approved in Truing up		
Source	Energy at Kerala periphery (MU)	Cost Rs. Crore	Average cost (Rs./kWh)	Energy at Kerala periphery (MU)	Cost Rs. crore	Average cost (Rs. /kWh)
Swap-GMRETL	132.90	2.26	0.17	132.90	2.26	0.17
DSM	569.68	125.12	2.20	569.68	125.12	2.20
KPTCL-Overarching	1.15	0.52	4.49	1.15	0.52	4.49
NVVN (previous year)		0.04			0.04	
Aravalli power (previous year)		1.55			1.55	
Total Swap/DSM	703.74	129.49		703.74	129.49	

Inter-state Transmission charges paid to PGCIL:

5.91 The Commission vide Order dated 17.04.2017 had approved interstate transmission charges of Rs 499.45 Crore for long term contracts and Rs.64.25 Crore for short term contracts, aggregating to Rs.563.70 Crore. Actual transmission charges incurred by KSEB Ltd during 2017-18 as per audited accounts was Rs 542.52 Crore.

Analysis and decision of the Commission

5.92 The interstate transmission charges are governed by the Regulations and Orders of CERC. After examining the details, the Commission approves the interstate transmission charges incurred by KSEB Ltd (Rs.542.52 crore).

Summary of the power purchase for 2017-18

Thus, the total power purchase cost for the financial year 2017-18 as per audited accounts is Rs 7526.03 Crore. As detailed above, a provision of Rs.7.89 Crore against power procurement of M/s INOX. An amount of Rs.44.63 Crore was withdrawn subsequently in 2018-19 against power purchase from M/s Jindal Power Ltd. Further an amount of 90.62 Crore of unadmitted claims of M/s Jhabua Power Ltd which was given provision in accounts of FY 2018 is also not claimed in the petition. Thus, KSEB Ltd requested to true up the total power purchase cost amounting to Rs 7398.67 Crore as detailed below:

Table 28
Power purchase cost claimed as per petition for 2017-18

4	Add: Provision for purchase from Inox				7.89
3	Less: Provision towards in 2018-19 for Jhabua Power Ltd				90.62
2	Less: Provision reversed in 2018-19 for Jindal Power Ltd				44.63
1	Total as per Table D 11(As per accounts)	18819.25	7339.36	18717.23	7526.03
No	Particulars	Energy (MU)*	Cost (Rs Crore)	Energy (MU)*	Cost (Rs Crore)
		Approved in the Suo motu ARR order		Claimed in the True up	

Analysis and decision of the Commission

5.94 After considering the details as mentioned in the previous paragraphs, the Commission approves the power purchase cost as shown in the summary below for 2017-18

Table 29
Summary of Approved power purchase cost for 2017-18

,		As per petition			Approved in truing up		
Station	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs. /kWh)	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)	
Total- CGS	10,150.98	3,561.67	3.51	10,150.98	3,561.67	3.51	
Total Captive/Co gen	258.57	98.77	3.82	258.57	90.87	3.51	
Total-Thermal	66.17	201.15	30.40	66.17	201.15	30.40	
Total LTA	5,573.47	2,040.74	3.66	5,573.47	2,040.74	3.66	
Total Unapproved PSA	1,176.54	535.66	4.55	1,176.54	493.02	4.19 *	
Total Short term	787.77	288.69	3.66	787.78	288.69	3.66	
Total Swap/DSM	703.74	129.49	1.84	703.74	129.49	1.84	
Transmission charges		542.52			542.52		
Total	18,717.24	7,398.68	3.95	18,717.24	7,348.15	3.93	
Add Provision for Jindal		44.63					
Add Provision for Jhabua		90.62					
Less provision for Inox		7.89					
As per Accounts	18,717.24	7,526.04		-			

^{*}Rate is limited to L1 average rate paid to BALCO

Table 30 Comparison of Actuals as per petition and approved power purchase from various sources

	As per petition As per petition			Approved in truing up		
Station	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)
Talcher	3029.52	714.25	2.36	3029.52	714.25	2.36
NLC Exp Stage I	452.98	169.26	3.74	452.98	169.26	3.74
NLC II Stage I	401.85	156.32	3.89	401.85	156.32	3.89
NLC II Stage II	613.06	228.63	3.73	613.06	228.63	3.73
RSTPS I & II & III	1706.90	538.94	3.16	1706.90	538.94	3.16
RSTPS III	449.39	142.82	3.18	449.39	142.82	3.18
Maps	125.32	36.38	2.90	125.32	36.38	2.90
Kaiga Stage I & II	544.64	206.09	3.78	544.64	206.09	3.78
SimhadriExp	585.24	271.39	4.64	585.24	271.39	4.64
Kudamkulam	1046.15	445.10	4.25	1046.15	445.10	4.25
NLC II exp	291.81	172.78	5.92	291.81	172.78	5.92
NTECL Vallur JV	262.73	129.93	4.95	262.73	129.93	4.95
NTPL Tuticorin	438.71	229.44	5.23	438.71	229.44	5.23
Kudgi Unit I	202.68	120.34	5.94	202.68	120.34	5.94
Total- CGS	10,150.98	3,561.67	3.51	10,150.98	3,561.67	3.51
Wind- Ramakkalmedu&Agali	70.15	22.02	3.14	70.15	22.02	3.14
Wind Ahalya	20.98	13.24	6.31	20.98	13.24	6.31
INOX	16.33	7.89	4.83	16.33		-

Kosamattom	0.005		-	0.005		-
Ullunkal	17.79	4.23	2.38	17.79	4.23	2.38
Iruttukanam Stage-I &II	24.69	6.50	2.63	24.69	6.50	2.63
Karikkayam HEP	37.56	15.43	4.11	37.56	15.43	4.11
Meenvallom	8.44	3.75	4.45	8.44	3.75	4.44
Kallar of Idukki District Panchayat	0.08	0.08	10.59	0.08	0.08	10.13
Mankulam of Grama Panchayat	0.09		-	0.09	-	-
Pathamkayam	11.09	3.15	2.84	11.09	3.15	2.84
Solar IREDA	49.69	22.32	4.49	49.69	22.32	4.49
Solar IPP ANERT	2.79		-	2.79		-
SHEP & Cogeneration plant	-5.19		-	-5.19		-
Solar Prosumers	4.06	0.15	0.37	4.06	0.15	0.37
Total Captiuve/Co gen	258.57	98.77	3.82	258.57	90.87	3.51
RGCCPP	4.05	201.15	496.67	4.05	201.15	496.67
BSES injection*	62.12		-	62.12		-
Total-Thermal	66.17	201.15	30.40	66.17	201.15	30.40
Maithon Power Ltd-I	1022.25	333.85	3.27	1022.25	333.85	3.27
Maithon Power Ltd-II	1009.96	339.33	3.36	1009.96	339.33	3.36
DVC Mejia	545.43	210.20	3.85	545.43	210.20	3.85
DVC RTPS	129.20	54.85	4.25	129.20	54.85	4.25
Jindal Power Ltd-Bid I	1400.07	541.11	3.86	1400.07	541.11	3.86
Jhabua Power Ltd Bid-I	737.79	283.87	3.85	737.79	283.87	3.85
BALCO Bid-I	316.49	133.85	4.23	316.49	133.85	4.23
Jindal through PTC	412.28	143.68	3.48	412.28	143.68	3.48
Total LTA	5,573.47	2,040.74	3.66	5,573.47	2,040.74	3.66
Jindal Power Ltd-Bid II	502.57	226.92	4.52	502.57	212.00	4.22
Jhabua Power Ltd -Bid II	283.97	136.46	4.81	283.97	118.04	4.16
Jindal India Thermal Power Ltd-Bid II	390.01	172.28	4.42	390.01	162.98	4.18
Total Unapproved PSA	1,176.54	535.66	4.55	1,176.54	493.02	4.19
TPTCL	146.55	48.81	3.33	146.55	48.81	3.33
IEX	554.07	207.22	3.74	554.07	207.22	3.74
PXIL	87.16	32.66	3.75	87.16	32.66	3.75
Total Short term	787.77	288.69	3.66	787.78	288.69	3.66
Swap-GMRETL	132.90	2.26	0.17	132.90	2.26	0.17
DSM	569.68	125.12	2.20	569.68	125.12	2.20
KPTCL-Overarching	1.15	0.52	4.49	1.15	0.52	4.49
NVVN (Previous year)		0.04			0.04	
Aravalli power (previous year)		1.55			1.55	
Total Swap/DSM	703.74	129.49	1.84	703.74	129.49	1.84
Transmission charges		542.52			542.52	
Total	18,717.24	7,398.68	3.95	18,717.24	7,348.15	3.93

Average Power Purchase Cost

5.95 Based on the approvals given, the average power purchase cost approved for the year 2017-18 is as shown below:

Table 31 Approved Power Purchase Cost for 2017-18

	1	1
	Energy (MU)`	Rs. crore
Total energy/cost	18,717.24	7,348.15
Less energy not billed	59.82*	1.59
Balance	18,657.42	7,346.56
Average power purchase cost (Rs./kWh)		3.938

^{*}Energy excluded (MU) – BSES-62.12,Anert-2.79,SHEP-Cogen(-5.19),Mankulam-0.09,Kosamattom-0.005.

- 5.96 The average power purchase cost for the year 2017-18 is Rs.3.938/kWh. This rate is used for approving gains from overachievement of T&D Loss
- 5.97 The Commission notes that KSEB Ltd has claimed cost of power purchase of plants which were included in the accounts of 2018-19 have been claimed in the year 2017-18, on the reason that the power purchase was made in the year 2017-18 and included in the accounts later on. Such adjustments are made in the case of other expenses items also.
- The Commission is of the view that such adjustments made in the petition is not desirable. In order to claim an expense which is eligible to be passed on to the consumers, the same has to be incurred and included in the accounts, and claimed in the year in which it is included in the accounts. Unless an amount is included in the accounts, the Commission cannot allow such expenses. This principle has to be necessarily followed to have cross check with the petition figures and accounts entries. Further, any items or adjustments, which have been included in the accounts and subsequently withdrawn or reversed shall also clearly be specified as adjustments. Such claims shall also not be included as pass through costs. Hence, the Commission strongly urge KSEB Ltd to meticulously follow the above principle during the future truing up process.

O&M expenses

5.99 The O&M expenses for SBU-D as per the accounts is Rs.2828.81 crore, as against the amount of Rs.1440.36 crore approved in the Suo motu Order. However, as per the petition, KSEB Ltd has claimed the O&M expenses of

^{**}Cost excluded- NVVN, Aravally Power (previous year dues removed),

SBU-D as Rs.2328.07 crore. The difference is on account of exclusion of cost of LED Bulbs of Rs.41.59 crore and the power factor incentive booked under A&G expenses.

Table 32 Components of O&M Expenses

No	Particulars	Approved in the Suo motu ARR order	As per Accounts	As per truing up petition
		(Rs.crore)	(Rs.crore)	(Rs.crore)
1	Employee Cost		2,200.46	1,831.53
3	R&M Expenses		205.77	205.77
2	A&G Expenses		422.57	290.77
4	Sub total	1,440.36	2,828.80	2,328.07

5.100 The Commission has examined each of these components vis-a-vis the Regulations and the same is brought out separately in the following paragraphs.

Employee cost:

- 5.101 As per the details given in the KSEB Ltd's petition, the employee cost for SBU-D claimed at Rs.1831.53 crore excludes the terminal benefits since the same is met through Master Trust. The employee cost booked under SBU-D in KSEB Ltd Accounts is Rs.2200.46 crore. KSEB Ltd has booked the actuarial liability for the year 2017-18 also in the accounts. The actuarial liability for the year 2017-18 was ascertained as Rs.1584.88 crore and the same is included in the accounts as Rs.509.42 crore booked under employee cost and the remaining Rs.1075.46 crore booked under "Other comprehensive income" in P&L account. KSEB Ltd also stated that the actuarial liability from 01-11-2013 to 31-3-2017 amounting to Rs.3728.98 crore has neither been charged to P&L account and claimed in the truing up till 31-3-2017.
- 5.102 In view of this, KSEB Ltd has also excluded the Rs.509.42 crore from employee cost for the year and claimed only Rs.2195.76 crore for 2017-18 and correspondingly the share of SBU-D at Rs.1831.53 crore as shown below:

Table 33 Employee cost claimed in the petition for 2017-18

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs. crore	Rs. Crore	Rs. crore	Rs. crore
1	Employee cost	202.82	346.81	2488.78	3038.41
2	Capitalized portion of expenses	62.53	49.49	288.32	400.35
3=1-2	Net employee cost as per trifurcated				
	accounts	140.29	297.31	2200.46	2638.06

4	Proportion among SBU (%)	6.675	11.414	81.9107	100
5	Actuarial liability included in employee cost	34.00	58.15	417.27	509.42
6=1-5	Employee cost net of actuarial valuation	168.82	288.66	2071.51	2528.99
7	Less: pro rata capitalization (based on 2				
	above)	52.05	41.19	239.98	333.23
8=6-7	Employee cost claimed in TU	116.77	247.47	1831.53	2195.76

5.103 KSEB Ltd also submitted that the year-to-year increase in employee cost from 2015-16 to 2017-18 both in terms of gross employee cost and net employee cost is very meagre as shown below:

Table 34
Employee cost from 2015-16 to 2017-18

Sl. No	Particulars	2015-16	2016-17	2017-18
1	Basic Pay	2081.04	2134.03	2259.55
2	DA, Other Allowances, bonus, ELS etc	207.27	262.42	269.43
3	Gross employee cost (before capitalization)	2288.31	2396.45	2528.99
4	YOY increase		108.14	132.53
5	YOY increase %		4.73	5.53
6	Employee cost Capitalized	188.29	242.92	333.23
7	Net employee cost sought for true up	2100.02	2153.53	2195.75
8	Increase over previous year		53.51	42.22
9	YOY increase in true up sought (%)		2.34	1.76

- 5.104 In order to comply with the Hon'ble High Court direction in WPC 465/2015, the Commission sought clarifications dated 28-05-2020 from KSEB Ltd for implementing the judgment of Hon. High Court. KSEB Ltd in their submission dated 20-10-2020 furnished the details. The salaries and allowances actually disbursed in 2017-18 to employees recruited after 01-04-2009 (11519 nos in total as on March 2018) works out to Rs.421.18 crore. The employee strength in 2018 was 33542 and has increased by 6367 nos over the 2009 (33542-27175) as part of Government's resolve to fill up all vacancies through PSC. As per the methodology adopted by the Commission on truing up till 2013-14, the employee cost attributable to 6367 employees i.e., over and above the APTEL Judgment is Rs.232.76 crore. The additional financial commitment on account of increased number of employees works out to 9.2% only and considering the business growth over 9-year period it is reasonable. Based on the above, KSEB Ltd stated that Commission may approve the employee cost in full in light of the following:
 - (i) The expenses towards the enhanced strength as a percentage of total employee cost is reasonable and much below in comparison with business growth

- (ii) There has been considerable growth in business over 9 years from 2009 to 2018 and the additional cost is very much comparable to the actual business growth over 2009.
- (iii) The number of sanctioned places as on 31-03-2009 was 30978 and the Commission considered only 27175. The gap between working strength and sanctioned strength is due to administrative delay in Public Service Commission giving advice memo after due process. The Vacant places are to be invariably filled up in due process.
- (iv) Hon'ble APTEL as per judgment dated 10-11-2014 has not fixed any ceiling limit to determine the allowable employee cost
- (v) Maximum MYT time frame is for 5 years. Revision in expenses in consideration of actual expenses during the control period is provided in CERC and State Regulations. 2017-18 is the 9th year in succession from 2008-09.
- 5.105 Since KSEB Ltd has sought for approval of the entire employee cost, the Commission vide letter dated 28-05-2020 had sought from KSEB Ltd the following: (1) copy of the Government of Kerala Orders sanctioning posts in KSEB from 1-4-2009 to 31-10-2013 i.e., when KSEB Ltd was a departmental undertaking under the Power Department. This is also the period prior to revesting of the Board under Section 131 of the Electricity Act and (2) Full Board resolutions of KSEB Ltd sanctioning new posts in KSEB Ltd from 01-11-2013 to 31-03-2018. In reply to the same KSEB Ltd vide letter dated 20-10-2020 has furnished the details which elaborately given in chapter 2.
- 5.106 KSEB Ltd further stated that Hon. APTEL has ordered to allow at least the pay and allowances for the staff strength a on 1-4-2009 and it is not a ceiling limit. Further, revision of other allowances forms an integral part of the agreements reached between the management and trade unions as envisaged in the APTEL Order in Appeal Nos.1 and 19 of 2013.
- 5.107 KSEB Ltd further stated in the petition that the business activity has been continuously increasing over several decades and correspondingly the physical assets have also been increased. The number of employees for maintaining the asset and to provide quality supply to consumers has also increased. The increase in employees is primarily in technical areas and it is seen that more than 90% increase in number of employees are accounted for by technical employees who are essential to maintain the asset and provide quality supply.
- 5.108 KSEB Ltd submitted that the employee cost of KSEB Ltd includes basic pay, DA and other benefits for serving employees, pensionary and terminal benefits etc. for retired employees. The employees are recruited through PSC and

salary and other benefits including earned leave surrender etc., are provided as per Wage Settlement Agreement entered into with the Trade Unions. As per the agreement DA has to be released as and when the same was released by the State Government to its employees, pension and other benefits are as per the rules in force and also as per the directions of court of law. KSEB Ltd further stated citing the observation of Apex Court in WBERC Vs CESC that KSEB Ltd is not in a position to curtail the employee expense incurred under lawful agreement entered into with workmen. The same has been upheld by the APTEL in the judgment dated 27-04-2016, the actual basic pay as per accounts may be seen as expense that cannot be curtained in the short run.

Response of Stakeholders

- 5.109 The HT-EHT Association stated that employee cost of the KSEB Ltd is to be curtailed as per the judgment of the Hon., APTEL. According to the Association, the excess employees as per the petition is 6367 nos. The cost on account of these excess employees works out to be Rs.421.44 crore and accordingly the allowable cost to SBU-D will be Rs.1707.20 crore instead of Rs.1831.53 crore as proposed by the petitioner. Hence an amount of Rs.421.44 crore is to be deducted from the employee cost claimed by KSEB Ltd for SBU-D.
- 5.110 Regarding O&M expenses, the Association mentioned that the per employee expenses in Kerala is the highest in the country and about 3 times the national average. In the case of employee costs, the Association pointed out that the employee cost as a share of total expenses is about 20.82%, which is higher in comparison with PSEB, JSEB etc. In the PFC report for 2017-18 it is mentioned that the high employee cost stood at as high as 24.7% of the total revenue.

Provisions in the Regulations

- 5.111 As per Tariff Regulations, O&M expenses are considered as controllable expenses and the licensee is expected to exercise due caution while incurring such expenses. These expenses are allowed based on norms. The O&M expenses as per the Regulations exclude terminal liabilities since the same is provided separately under Regulation 31.
- 5.112 In the case of SBU-D, the relevant provision of the Regulation specifying the O&M expenses is shown below:

<u>"Annexure-IX"</u> O&M norms for the distribution business/licensees

Table 1: 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

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 the actual number of consumers, distribution transformers, km of HT line and sales for FY 2014-15."

Analysis and decision of the Commission

- 5.113 KSEB Ltd in their truing up petition has sought Rs.1831.53 crore towards employee expenses of SBU-D. Comparing this with the total employee expenses of KSEB Ltd, it works out to 83.41% of the total employee expenses of Rs.2139.72 crore excluding terminal benefits for KSEB Ltd. The Commission has examined KSEB Ltd submission in the petition and the letter dated 20-10-2020 for claiming full employee expenses as per the petition. The Commission has addressed these appropriately in Chapter 2 of this Order.
- 5.114 As per Tariff Regulations, distribution business (SBU-D) is permitted to recover the employee expenses based on the norms fixed for the year i.e., 2017-18. However, as mentioned in the previous paragraphs, after the notification of the Regulations, KSEB Ltd challenged the validity of the said Regulations before the Hon'ble High Court of Kerala. The details on the matter are given below:

Judgment of High Court in Writ Petition WPC No.465/2015(G)

5.115 As mentioned in Chapter 1, the main contention of KSEB Ltd was that the O&M norms for determining the expenditure specified in the Regulations are inadequate, resulting in under recovery of its expenses. Thereafter, KSEB Ltd submitted before the Hon'ble High Court that:

"in case the truing up of Accounts for the year 2014-15 onwards are also considered in the light of the revised Orders passed for the year 2010-11 onwards in tune with the judgments of the APTEL, the difficulties faced by the petitioner on account of the Regulations would be addressed to some extent".

The Commission also submitted before the Hon. High Court that while taking truing up applications of the petitioner for the year 2015-16, 2016-17 and 2017-18, the Commission would take into account the judgment of APTEL and the consequential orders passed thereafter, Hon'ble High Court on 28-02-2018 issued the final judgment and disposed off the petition WP(C) 465/2015, without going into the broad contentions raised in the writ petition as the Regulation under challenge, which is a sub-ordinate legislation issued under the Section 181(2)(d) of the Electricity Act 2003. The Hon. High Court in the judgment, directed the Commission to pass order on the application of the petitioner KSEB Ltd for truing up of accounts for the years 2015-16, 2016-17, 2017-18 with due regards to the findings in APTEL Judgments in Appeal Nos. 1 and 19 of 2013 and consequential orders passed by the Commission for 2010-11 onwards, in the case of KSEB Ltd. The relevant portion of the judgment of the Hon. High Court is quoted below:

"In view of the submission made by learned senior counsel that the Commission would take into account Ext.P6 judgment of the APTEL while taking up the applications for truing up of accounts, I direct the 1st respondent to pass orders on the applications of the petitioner for truing up of accounts for the year 2015-16, 2016-17, and in 2017-18 with due regard to the findings in Ext.P6 judgment and the consequential orders passed by the commission for the year 2010-11 onwards in the case of petitioner."

- 5.116 Thus, the Commission is required to comply with the direction of the Hon. High Court of Kerala, with reference to the Order of APTEL in Appeal Nos. 1 and 19 of 2013, while considering the approval of employee cost of KSEB Ltd in the truing up petitions.
- 5.117 The Commission further notes that the Hon'ble APTEL vide the common judgment dated 10-11-2014 had decided on the issues raised in the Appeal Nos. 1 of 2013 and 19 of the 2013. In their appeal before the Hon'ble APTEL, against the Commission's Order dated 30-10-2012 on the truing up of accounts of KSEB for the year 2010-11 and the order dated 28-4-2012 on the ARR&ERC of KSEB for the year 2012-13 KSEB Ltd had raised a number of common issues including i) Employees cost ii) Repair and Maintenance Expenses iii) Administrative and General Expenses iv) Return on Equity v) Depreciation vi) Capitalization of Expenses.
- 5.118 Paragraph 8.3 to 8.6 of judgment of Hon'ble APTEL in Appeal No.1 and 19 of 2013 pertains to the observation and directions regarding the employee cost and related matters, which are extracted below.

- "8.3 We find that the State Commission in the impugned order dated 28.04.2012 has shown concern about the high employees cost and non-compliance of the directions given by the State Commission in this regard. The State Commission has noted that without a scientific study on manpower requirements, the recruitments are continuing and about 1000 persons are added every year. The State Commission has decided to benchmark employees expenses based on the base year expenses escalated at price indices. The State Commission has used FY 2008-09 as the base year since latest true-up was carried out for 2008-09. The State Commission provided 3% increase in basic pay for accounting for increments. The other components are benchmarked based on CPI/WPI indices with weightage of 70:30 for estimating the increase in employees cost. Thus, while basic pay was increased by 3% the other components of employees expenses viz. DA allowances, terminal benefits, pay revision, etc., were increased as per CPI/WPI indices with weightage of 70:30 (CPI:WPI)
- .8.4 The State Commission has rightly shown concern about the high employees cost but we are not able to appreciate magnitude in the absence of a specific finding about the excess manpower and non-availability of Regulations. We feel that DA increase which is effected as per the Government orders have to be accounted for and allowed in the ARR as it compensates the employees for the inflation. The pay revision as per the agreements reached between the management and the unions have also to be honoured. The terminal benefits have also to be provided for.
- 8.5 We find that the State Commission has taken the actual expenses trued-up for FY 2008-09 as the base. The State Commission should have at least allowed the actual basic pay and DA increase, pay revision and terminal benefits over the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The gratuity directed to be paid as per the judgments of the High court dated 10.03.2003 as the Division bench of the High Court had dismissed the Appeal filed against this judgment, and which were disallowed by the State Commission by order in Appeal no. 1 of 2013 should also be allowed.
- 8.6 Accordingly, we direct the State Commission to true-up the employees cost from FY 2010-11 to FY 2012-13, as per the above directions.
- 5.119 It is clear from the above judgment of Hon'ble APTEL, that as far as employee cost is concerned, the Commission shall at least allow the actual basic pay and DA increase, pay revision and terminal benefits over *the actual base year expenses without accounting for increase in manpower from 2008-09 to 2012-13. The same was made applicable to the truing up of accounts for 2013-14 also.*

5.120 The Commission further notes that KSEB Ltd in their submission before the Hon. High Court of Kerala on the same issue had stated:

"while taking up the truing up applications of KSEB Ltd for the year 2015-16, 2016-17 and 2017-18 the Commission would take into account the judgment of APTEL and the consequent orders passed thereafter."

The Commission had agreed to consider as above before the Hon. High Court and consequently Hon. High court had passed Orders directing the Commission to pass orders on the applications of KSEB Ltd for truing up of accounts for the year 2015-16 to 2017-18 with due regard to the finding of the judgment of APTEL and consequent orders passed by the Commission for the year 2010-11 onwards in the case of KSEB Ltd. As pointed out above, as per the Judgment of Hon. High Court of Kerala, dated 28-02-2018, the Commission has to pass appropriate orders in the truing up petition for 2015-16 to 2017-18 with due regard to Orders of APTEL in 1& 19 of 2013 and the consequential orders of the Commission on truing up till 2013-14.

- 5.121 Thus, based on the submission of KSEB Ltd and submissions of the Commission to consider the request of KSEB Ltd, the Hon. High Court was pleased to pass Orders on the said Writ Petition. Hence, it is clear that the methodology adopted by the Commission in compliance to Hon. APTEL Orders was acceptable to KSEB Ltd as per their submissions before Hon. High Court of Kerala. This submission and acceptance by KSEB Ltd of the Commission's methodology in calculating employee cost is accepted by both sides and hence continued in this year of truing up also as per the submissions before the Hon. High Court.
- 5.122 Thus, the Commission is required to approve the employee cost of KSEB Ltd as per the direction of the Hon. High Court of Kerala, with reference to the Order of APTEL in Appeal Nos. 1 and 19 of 2013. It is also to be noted that APTEL has affirmed the said decision for the truing up of accounts of KSEB Ltd till 2013-14 as per the request of KSEB Ltd themselves.
- 5.123 A combined reading of the Judgment of the Hon.High Court and Hon. APTEL reveals that only in the case of employee costs, APTEL has directed the Commission to allow the actual basic pay and DA thereon, pay revision and terminal benefits over the actual base year expenses for at least the level of employees during the year 2008-09. Further, the terminal benefit paid is also required to be allowed in full. Hence, the provisions of the Regulations regarding employee costs are in fact modified to this effect. However, in the case of R&M and A&G expenses, since the decision of the Commission has been upheld no change in the provisions of the Regulations is required and shall remain the criteria for approval of said expenses.

- 5.124 In the light of the Orders of the APTEL in Appeal Nos 1 and 2013 and the consequential petitions for truing up for 2009-10 and 2010-11 and truing up for the years 2011-12, 2012-13 and 2013-14, the Commission had approved the employee cost of KSEB Ltd without considering the increase in the manpower levels from 2008-09. Based on the details furnished by KSEB Ltd, the Commission had approved the employee cost for the respective year after deducting the cost of additional employees over the 2008-09 level of 27175.
- 5.125 KSEB Ltd vide letter dated 20-10-2020 has furnished the actual disbursement of pay and allowances and pay revision expenses of the employees recruited after 2009. The total addition to the employees strength from the 2009 level of 27,175 was 11,519 employees. KSEB Ltd has also stated that the strength of employees in 2017 was 33542 and that in 2009 was 27175. Thus net the increase in employee strength is 6367, considering the retirements. As per the details furnished by KSEB Ltd, the total amount disbursed for 2017-18 for the net increase in employees (6367 nos) in comparison to 2009 (33542-27175) is Rs.232.76 crore
- 5.126 The Commission also notes that both as a departmental undertaking prior to 31-10-2013 and as a PSU thereafter, there are due procedures to be followed for creation of posts. No person can be recruited or posted in a non-existent post. However, KSEB Ltd has not furnished any full Board Sanction Order regarding creation of any new post since 01-11-2013. It is also to be understood that even those posts created but not filled up in and remained vacant for a continuous period of one year is treated as lapsed and to fill up this posts, fresh creation and sanction of the post by the competent authority i.e., the Full Board of Directors of KSEB Ltd is essential. Otherwise, such creations and filling up are treated as irregular and unauthorized.
- 5.127 Based on the above considerations and in line with the Orders of Hon. APTEL, the Commission has worked out the employee expenses without accounting for the increase in manpower from 2008-09 by deducting the employee expenses of 6,367 additional employees from the 2009 level from the total employee cost for the year. As mentioned above, the employee cost for KSEB Ltd excluding actuarial liability and capitalization is Rs.2195.76 crore. As furnished by KSEB Ltd in its letter dated 20-10-2020, the employee cost of additional employees is Rs.232.76 crore. Hence, the allowable expenses for KSEB Ltd are Rs.1963 crore (Rs.2195.76 crore Rs.232.76 crore). On a prorata basis, the employee cost for SBU-D will be 83.41% of Rs.1963.00 crore i.e., Rs.1637.34 crore as determined based on the directions of the Hon APTEL and judgment of Hon. High Court of Kerala.

Table 35
Approved employee cost for SBU-D for 2017-18

	SBU-D	KSEB Ltd
	(Rs. crore)	(Rs. crore)
Net Employee costs as per petition	1831.53	2195.76
Net cost of additional employees as per the letter dated 20-10-2020		232.76
Net employee cost of SBU-D as a percentage of KSEB Ltd	83.41%	
Balance Employee cost		1,963.00
Employee cost attributable to SBU-D (1963.00 crore x 83.41%)	1,637.34	

5.128 The Commission hereby approves the employee cost excluding terminal liabilities for SBU-D for 2017-18 as Rs.1637.34 crore

R&M expenses

5.129 KSEB Ltd in their submission has stated that the R&M expenses booked for SBU-D is Rs.205.78 crore. KSEB Ltd stated that the business activity of KSEB Ltd has been continuously increasing over several decades. According to KSEB Ltd, the R&M cost depends on the Gross Fixed Assets in use at the beginning of the financial year, age of the assets as well as inflation. There has been substantial increase in physical addition to major fixed assets during the period from 2008-09 to 2016-17 as shown below:

Table 36
Physical addition to major fixed assets between FY 2008-09 and FY 2016-17

Year	220 KV Lines	110 KV Lines	66 KV Lines	33 KV Lines	11 & 22 KV Lines
	km	km	Km	km	Km
2008-09	2641.86	4067.59	2161.91	1184.78	41440
2016-17	2801.89	4440.30	2208.81	1867.61	59496
Increase	6.06 %	9.16 %	2.17 %	57.63 %	43.57 %
Year	EHT S/s	33 KV S/s	Step-Up Transfs	Step-Down Transfs	Distribution Transfs
2008-09	218	89	2465.6 MVA	14631 MVA	46359
2016-17	258	144	2699.05 MVA	19143.4 MVA	75579
% Increase	18.35 %	61.80 %	9.47 %	30.85	63.04 %

5.130 The growth of consumer strength; annual energy consumption and gross fixed assets addition etc when compared to 2008-09 values are given in the following tables:

Table 37
Consumer strength -Growth from 2008 to 2018

No	Consumer strength	Numbers (Lakhs)	% increase over 31-03-2008
1	Number of consumers as on 31-03-2008	90.30	
2	Number of consumers as on 31-03-2018	122.76	35.95
No	Energy sales	Energy sale (MU)	% increase over 31-03-
1	Total energy sale as on 31-03-2008	12049.90	
2	Total energy sale as on 31-03-2018	20880.70	73.29

No	Details of Gross Fixed Assets	Amount (Rs. Crore)	% increase over 31-03- 2008
	Gross Fixed asset as on 31-03-2008	8684.55	
2	Gross Fixed asset as on 31-03-2018	18118.55	108.63

- 5.131 KSEB Ltd further stated that the total actual R&M expenses (Rs.277.35 Crore) increased by just 4.60 % over 2016-17 expenses (Rs.265.13 Crore) and very much within inflation levels. The physical addition to major fixed assets during the period from 2006-07 to 2016-17 clearly reveals that there has been substantial addition over the period. Ten new hydroelectric stations were commissioned between FY 2009-10 and FY 2016-17. There were additions in Transmission and Distribution network corresponding to KSEB Ltd business growth.
- 5.132 According to KSEB Ltd, a substantial portion of the expense was incurred under Line, cable network etc., incurred mainly under distribution SBU. This is due to the care and efforts taken by the KSEB Ltd to maintain the LT network. Expenses incurred under Lines, Cable networks were substantially incurred under Distribution functional area. These additions were required to provide supply to consumer in compliance of the KSERC Licensees (Standards of performance) Regulations and to cater to new consumers. (About 3.00 Lakh new consumers were added in that year)
- 5.133 KSEB Ltd further claimed that the R&M cost depends on the Gross Fixed Assets in use at the beginning of the financial year, age of the assets as well as inflation. While approving the R&M expenses as per the orders on ARR, the Commission has not allowed the R&M cost for the assets created after the year 2008-09. Physical addition to major fixed assets during the period from 2008-09 to 2017-18 is summarized below.

Table 38
Physical addition to major fixed assets during 2008-09 to 2017-18

Year	Distribution Transformers	220 KV Lines	110 KV Lines	66 KV Lines	33 KV Lines	11&22 KV Lines	LT Lines	EHT S/s	33 KV S/s	Step up Transformers	Step down Transformers	EHT S/S	S/S EE
	Nos	KMs	KMs	KMs	KMs	KMs	KMs	Nos	Nos	MVA	MVA	Nos	Nos
2008-09	46359	2641.86	4067.59	2161.91	1184.78	41440	241849	218	89	2465.6	14631	218	89
2017-18	77724	2856.46	4570.55	2123	1963.32	60892	286784	258	148	2707.1	20414	261	151
Change	31365	214.6	502.96	-38.91	778.54	19452	44935	40	59	241.45	5782.6	43	62
Change %													
	67.66	8.12	12.37	-1.80	65.71	46.94	18.58	18.35	66.29	9.79	39.52	19.72	69.66

5.134 The split up details of R&M expenses for SBU-D furnished by KSEB Ltd is given below:

Table 39
Split up details of R&M expenses as per petition for SBU-D

Doublesdous	2017-18
Particulars	Audited
	Rs. Crore
Plant & Machinery	5.79
Buildings	5.26
Civil Works	1.08
Hydraulic Works	-0.05
Lines & Cable Networks	187.22
Vehicles	1.30
Furniture & Fixtures	0.29
Office Equipment	4.89
Gross R&M Expenses	205.78
Less: Expenses Capitalised	
Net R&M Expenses	205.78

5.135 KSEB Ltd has thus claimed Rs.205.78crore as R&M Expenses

Provisions in the Regulations

5.136 The **provisions** of the Regulations regarding R&M expenses is given below:

Annexure-IX

O&M norms for the distribution business/licensees

Table 1: O&M norms for distribution business of KSEB Limited

	FY 2015-16	FY 2016-17	FY 2017-18
R&M expenses			
% of opening GFA	3%	3%	3%

Analysis and decision of the Commission

- 5.137 The Commission has examined the claims of the licensee and the provisions of the Regulations. KSEB Ltd has claimed the expenses at actual, though Regulations provides for only for expenses as per norms.
- 5.138 In the Order dated 10-11-2014, in Appeal No.1 and 19 of 2013, Hon. APTEL has decided as follows:
 - iv) The State Commission also conducted examination of Repair and Maintenance expenses of one of the Divisions of the Board through its

staff in order to understand the nature of increase in Repair and Maintenance expenses and found that 36% of the expenses booked as Repair and Maintenance expenses were misclassified as revenue expenses.

9.6 In view of above findings of the State Commission, we do not incline to interfere with the findings of the State Commission. Thus, this issue is decided against the Appellant.

5.139 Hence, there is no adjustment required in the case of R&M expenses as per the directions of Hon. High Court of Kerala and the APTEL order cited above. KSEB Ltd has claimed Rs.205.78 crore R&M Expenses for SBU-D. As per the Regulations, R&M expenses is 3% of the GFA at the beginning of the year. As per the truing up petition, the GFA of SBU-D is Rs. 7,530.50 crore.

Table 40 R&M expenses allowable for SBU-D 2017-18

	Rs. Crore
GFA of SBU-D as on 1-4-2017	7,530.50
R&M Expenses as % of GFA	3.0%
Allowable R&M expenses	225.92

5.140 Thus, the Commission allows Rs.225.92 crore as R&M expenses of SBU-D. The approved R&M expenses is Rs.20.14 crore or about 10% more than the claim of KSEB Ltd as per the petition.

A&G Expenses

5.141 The next component of O&M expenditure is A&G expenses. The A&G expense as per the petition of KSEB Ltd for SBU-D is Rs.290.77 crore excluding power factor incentive and cost of LED bulbs, which are included as part of the Accounts. In the petition, KSEB Ltd has deducted the power factor incentive from the revenue from sale of power and the cost of LED bulbs is also deducted while accounting the income from sale of LEDs under non-tariff income. The details are given below:

Table 41
Split Up Details of A & G Expenses and Provisions for 2017-18

Doutionland	2017-18
Particulars	A&G expenses
	Rs. Crore
Rent Rates & Taxes	8.80
Insurance	0.11
Telephone & Postage, etc.	3.56

Legal charges	1.19
Audit Fees	0.33
Consultancy charges	0.02
Other Professional charges	1.20
Conveyance	50.90
Vehicle Running Expenses Truck / Delivery Van	0.51
Vehicle Hiring Expenses Truck / Delivery Van	2.51
Electricity charges	7.94
Water charges	0.49
Entertainment	0.64
Fees & subscription	0.04
Printing & Stationery	4.95
Advertisements, exhibition publicity	1.67
Contribution/Donations	1.03
Training expenses	0.82
Miscellaneous Expenses	4.66
DSM activities	0.04
SRPC expenses	0.20
Sports and related activities	0.15
Freight	3.28
Purchase Related Advertisement Expenses	1.10
Bank Charges	0.03
Office Expenses	70.78
License Fee and other related fee	1.18
Cost of services procured	0.00
Outsourcing of metering and billing system	0.00
V-sat, Internet and related charges	0.10
Security arrangements	0.00
Books & periodicals	0.03
Computer Stationery	0.00
Others	91.51
Others- Other Purchase related Expenses	0.31
Others - Expenditure in connection with distribution of LED	41.59
Gross A&G Expenses	301.65
Add Ele. Duty u/s 3(I), KED Act	120.11
Less: Expenses Capitalised	-0.81
Net A&G Expenses As per accounts	422.57
Less cost of LED bulbs	41.59
Less Power factor incentive	90.21
A&G Expenses as per petition	290.77

5.142 As shown above, KSEB Ltd claimed the electricity duty of Rs.120.11 crore also as part of the A&G expenses

Response of Stakeholders

5.143 Regarding R&M expenses and A&G expenses, the HT-EHT Association has made their observation based on the comparison with other states and concluded that O&M expenses claimed by KSEB Ltd is not prudent. Hence, O&M expenses as per the Regulation need only be given. According to the Association, A&G expenses as per the Regulation for distribution would be Rs.94.96 crore.

Provisions in the Regulations

5.144 In the case of SBU-D, the relevant provision of the Regulation specifying the A&G expenses is shown below:

Annexure-IX O&M norms for the distribution business/licensees

Table 1: O&M norms for distribution business of KSEB Limited

O&M Expenses	FY 2015-16	FY 2016-17	FY 2017-18
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

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 the actual number of consumers, distribution transformers, km of HT line and sales for FY 2014-15.

Analysis and decision of the Commission

5.145 As per the Regulations, employee costs and A&G expenses together and R&M expenses separately provided. In the case of SBU-D, two components ie., employee costs and A&G expenses of O&M expenses have to be determined based on the operational parameters such as number of consumers, length of HT lines, number of distribution transformers and energy sales. The R&M expenses is determined at 3% of the GFA at the beginning of the year.

5.146 In the judgment dated 14-11-2014, Hon. APTEL in appeal No. 1 and 19 of 2013 had declined to interfere with the decision of the Commission. Thus, the judgment of Hon. High Court of Kerala and Hon.APTEL is not applicable in the case of A&G expenses. Accordingly, the provisions of the Regulations are applicable for A&G expenses. The relevant portion of the APTEL judgment is as shown below:

.....

10.3 We find that the State Commission has allowed escalation on the basis of CPI & WPI indices with weightage of 70:30 over the actual A&G expenses for FY 2008-09. The Appellant Board has not been able to give a satisfactory reply to the substantial increase in A&G expenses.

10.4 We do not find any infirmity in the findings of the State Commission."

5.147 The operational parameters applicable for the SBU-D for estimation of employee cost and A&G expense are that at the beginning of 2017-18. As per the details furnished by KSEB Ltd in the petition, the parameters are as shown below:

Table 42
Operational parameters under SBU-D for estimation of O&M expenses

Item	2017-18*
No. of Consumers	11994816
No. of Distribution transformers	75759
Circuit length of HT Lines (km)	61398.43
Energy Sales (MU)	20087.55

*Beginning of the year. There is slight discrepancy in the figures furnished by KSEB Ltd compared to previous filings. However, for true up for 2017-18, figures furnished in the petition is used

- 5.148 The Commission notes that KSEB Ltd has claimed Rs.290.77 crore as A&G expenses, which is inclusive of Electricity Duty of Rs.120.11crore under Section 3(1) of the Kerala Electricity Duty Act. As per the said provision of the Act, the Electricity Duty collected from the licensee shall not be passed on to the consumers. Hence, the Commission hereby disallows Rs.120.11 crore on account of Section 3(1) Electricity duty. Thus, the A&G expenses of Rs.170.66 crore is examined as per the provisions of the Regulations.
- 5.149 Based on the Regulation the allowable A&G expenses are shown below:

Table 43
Allowable A&G expenses for 2017-18 for SBU-D

Item	Parameters in at the beginning of 2017-18	Unit	Norms for A&G expenses for 2017-18	Allowable A&G expenses for 2017-18 (Rs. crore)
1	2	3	5	7= (2X5)/100
No. of Consumers	11994816	Rs.lakh/000 consumers	0.23	27.59
No. of Dist. Transformers	75759	Rs.lakh/Transformer	0.03	22.73
Circuit length of HT Lines (km)	61398.43	Rs./lakh/km	0.04	24.56
Energy Sales (MU)	20087.55	Rs./unit	0.01	20.09
Total				94.96

5.150 As per the provisions of Regulations, the Commission approves A&G expense of SBU-D as Rs.94.96 crore.

Summary of O&M expenses

5.151 The Table below indicates KSEB Ltd claim in the petition and the Commission's approval as per the Regulations and judgment of Hon. APTEL.

Table 44 O&M expenses approved as per Regulations

	As per	Approved in	
	Petition	true up	
	(Rs. crore)	(Rs. crore)	
Employee Costs	1831.53	1,637.34	
R&M Expenses	205.77	225.92	
A&G expenses	290.77	94.96	
Total O&M Expenses	2328.07	1,958.22	

5.152 The Commission hereby approves Rs. 1958.22 crore as the total O&M expenses of SBU-D

Asset Additions for 2017-18

5.153 KSEBLtd in their petition has claimed fixed assets addition of Rs. lakh Rs.699.45 lakhs under SBU-D. The physical addition to assets is as shown below:

Table 45
Physical addition to assets in SBU-D

Particulars	Achievement
Service Connections (Nos)	353642
HT Line construction (km)	1785.08
LT Line construction (km)	3130
Transformer installation (Nos)	2353

Line conversion	(km)	1478
HT re-conductoring	(conductor km)	950
LT re-conductoring	(conductor km)	9880
Faulty meter replace	ment (Nos)	1237110

5.154 The total asset addition for 2017-18 is Rs.1390.56 crore. After deducting the decommissioning liability, the net asset taken as per the petition is Rs.1389.28 crore. The computation is as shown below:

Table 46
Estimation of interest charges as per the petition

Particulars	SBU G	SBU T	SBU D	TOTAL
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Capitalized during the year-As per IND AS Accounts	182.98	499	707.3	1389.28
Less: IND AS addition considered in 2016-17, now withdrawn	141.75	113.29	7.85	262.89
Add: GFA addition of KAES not capitalized at ARU level in 17-18.	16.46	0	0	16.46
Less: Part capitalization in 2017-18	1.99	18.34	0	20.33
Add: Part capitalization in 2016-17 commissioned in 2017-18	5.23	17	0	22.23
Add: Perunthenaruvi SHE Scheme commissioned in 2017-18	56.73			56.73
GFA addition as per Tariff Regulation	117.66	384.37	699.45	1201.48

5.155 KSEB Ltd in their submissions stated that distribution works are of numerous in number, smaller outlay per project and has shorter gestation period. Therefore, there is remote chance of part capitalization as well as time and cost overruns. Generation of data for such large number of projects is not feasible at present from the data captured in the accounts. The petitioner is taking earnest efforts in implementing ERP system in a time bound manner and would be capable of all desired minute level data in future. Taking all these in to account, KSEB Ltd requested to approve GFA addition under SBU D for 2017-18 at Rs.699.45 Crore.

Analysis and decision of the Commission

5.156 KSEB Ltd sought asset addition of Rs.699.45 crore in 2017-18. The asset addition for the year 2016-17 is Rs.1459.87 crore after removing the part-capitalization and duplication of assets as per the details furnished by KSEB Ltd. The net asset addition approved for the year is Rs.1159.69 crore and that of SBU-D is Rs.699.45 crore.

Interest and financing charges

5.157 Interest charges include, interest on long term loans, interest on GPF, interest on security deposits, interest on over draft, and other interest charges. As per the petition, the interest and financing charges claimed for SBU-D were Rs.1648.59 crore as shown below:

Table 47
Interest and financing charges claimed in the petition for SBU-D

	Approved	^	As per
	in the Suo	As per	Truing up
Particulars	motu ARR	Accounts	petition
	Rs.crore	Rs.crore	Rs.crore
Interest on outstanding Loans and Bonds	57.84	340.41	138.93
Less: Interest capitalized		36.74	0.00
Net interest		303.67	138.93
Interest on Security Deposit	129.64	175.33	174.95
Interest on GPF	117.81	132.57	132.57
Other Interest	8.41	23.77	5.58
Master Trust Bond Interest Provision	684.98	690.95	690.95
Interest on Overdraft	0	80.60	0.00
Carrying cost on approved revenue gap			505.61
Grand Total (I+II+III+IV+V)	998.68	1406.89	1648.59

5.158 Each of the items is considered below:

Interest on Long term loans

5.159 As per the Accounts, the share of interest charges for SBU-D is Rs.340.41 crore out of the total interest charges of Rs.610.98 crore. The interest charges as per the accounts is as shown below:

Table 48
Interest on loan for 2017-18 as per accounts

							Average
	Opening	Add: additions	Less: Repayments	Closing	Interest	Average	interest rate
SBU	(01/04/17)	during the Year	during the year	(31/03/18)	on loan	loan	(%)
	Rs. crore	Rs. Crore	Rs. Crore	Rs. crore	Rs. crore	Rs. crore	
SBU G	1460.19	1293.72	1285.45	1468.47	136.65	1464.33	9.33
SBU T	1488.18	1460.43	1542.03	1406.58	133.92	1447.38	9.25
SBU D	3475.36	2595.99	2467.05	3604.30	340.41	3539.83	9.62
Total	6423.73	5350.14	5294.53	6479.35	610.98	6451.54	9.47

5.160 The interest on long term loans claimed is based on the asset additions in each of the SBUs.. As per the petition, the interest on long term loans for SBU-D is Rs.138.93 crore.

Interest on loan for existing assets

5.161 KSEB Ltd has stated in the petition that normative loan was estimated based on the outstanding as on 1-4-2017. The closing normative loan as per the truing up order for 2016-17 was Rs.1951.51 crore for KSEB Ltd. Out of this, KSEB Ltd added Rs.899.91 crore as addition to normative loan as per the OA 64 of 2019. Further a claim of Rs.467.60 crore was additionally sought considering the appeal made before the APTEL. Thus the total outstanding normative loan as on 1-04-2017 as Rs.3319.02 crore. The depreciation as per KSEB Ltd for 2016-17 was Rs.520.47 crore which is treated as normative repayment. The normative interest for opening balance of loan based on the average interest rate of 9.47% is taken and arrive at the interest on loan as Rs.288.45 crore and the share of SBU-D is taken as Rs.124.43 crore as shown below:

Table 49
Opening level of normative loan and interest charges claimed by KSEB Ltd for SBU-D for existing assets

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Normative loan as on 01.04.2017 as per TU order	564.38	547.59	839.54	1951.51
2	KSEBL claim before Hon'ble APTEL	135.23	131.21	201.16	467.60
3	Additional normative loan for 2016-17	291.21	241.44	367.26	899.91
4=(1+2+3)	Opening normative loan considered in petition	990.82	920.24	1407.96	3319.02
5	Normative repayment	142.39	149.15	228.93	520.47
6=(4-5)	Closing normative loan	848.43	771.09	1179.03	2798.55
7=(4+6)/2	Average normative loan	919.63	845.67	1293.50	3058.79
8	Average rate of interest (Actual)	9.33%	9.25%	9.62%	9.47%
9=(7*8)	Normative interest	85.80	78.22	124.43	288.45

Interest charges claimed in the petition for addition of assets for the year 2017-18

5.162 As per the petition, the addition to normative loan and interest there on is taken based on the asset addition for 2017-18. The total consumer contribution and grants for the year was Rs.573.45 crore and for SBU-D it is Rs.394.15 crore. Based on this the addition to normative loan is Rs.305.30 crore. The depreciation for the asset addition is Rs.7.85 crore and the net normative loan is Rs.297.45 crore as shown below:

Table 50
The Addition to normative loan for 2017-18 as per petition

SI No	Particulars	SBU G	SBU T	SBU D	TOTAL
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA addition eligible for normative loan	117.66	384.37	699.45	1201.48
2	Consumer contribution, Grants and Subsidies received during the year	75.31	103.99	394.15	573.45
3	Equity infusion during the year	0	0	0	0
4=(1-2-3)	Additional normative loan for 2017-18	42.35	280.38	305.30	628.03
5	Less: Normative repayment for 2017-18 (Depreciation on assets added in 2017-18 at half the normal rate (@ 5.14%/2=2.57%)	1.09	7.21	7.85	16.14

6=(4-5)	Net additional normative loan	41.26	273.17	297.45	611.89
7 =(6/2)	Average additional normative loan	41.81	276.78	301.38	619.96
8	Average rate of Interest % (Actual)	9.33	9.25	9.62	9.47
9 =(7*8%)	Normative interest on GFA addition for 2017-18	1.95	12.80	14.50	29.25

5.163 The total interest on normative loan claimed in the petition is Rs.138.93 crore as shown below:

Table 51

Total interest on normative loan as per petition

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		Rs. crore	Rs. crore	Rs. crore	Rs. crore
1	Normative interest on loan as on 01.04.2017	85.80	78.22	124.43	288.45
2	Normative interest on loan during 2017-18	1.95	12.80	14.50	29.25
3	Total	87.75	91.02	138.93	317.70

Objection of stakeholders

- 5.164 The HT-EHT Association had objected to the claims of KSEB Ltd. According to the Association, the Commission has taken only 58% of the value of grants of Rs.4670 crore for arriving at the normative loan requirements. According to the Association, the method would have been correct if the licensee had accounted the grants and contributions for the creation of assets as per AS 12 accounting standards ie., depreciation for the assets created out of contribution and grants are booked as expenses and equal amount is treated as income in the P&L accounts to nullify the effect, thereby write off of assets and grants over the useful life of assets. However, KSEB Ltd has not followed the AS12 provisions till 2013-14 instead it had only booked depreciation in its P&L accounts. The corresponding income portion has not been recognized in the such P&L accounts. Hence the corresponding reduction of 42% for depreciation is not correct and the objector stated that according to their calculation, the opening level of normative loan as on 1-4-2015 is only Rs.314.82 crore (i.e., Rs.8483.82 crore (NFA as on 1-4-2015) – Rs.3499 crore (Equity as on 1-4-2015) – Rs.4670 crore (grants and contributions as on 1-4-2015) =314.82 crore). The objector has shown the detailed calculation of the claim also.
- 5.165 The Association also submitted that the asset addition in 2016-17 and 2017-18 is to be examined closely before allowing it and only after considering the observations made by the Commission in its order in the Truing up of accounts for 2016-17. Considering the claims, and allowing asset addition of Rs.899 crore in 2016-17 and depreciation for the year Rs.369.87 crore, the opening normative loan according to estimate of the objector is Rs.890.07 crore.

Considering the depreciation of Rs.369.87 crore for the year 2017-18, the closing normative loan is Rs.520.20 crore. Accordingly, the interest charges at 9.47% is Rs.66.78 crore only. Since the Commission has not approved any capital expenditure in 2017-18, there is no addition to normative loan for the year 2017-18.

Provisions in the Regulations

- 5.166 Regarding approving the interest charges, it is to be mentioned that Regulations provide detailed procedure for the approval of interest and financing charges. Regulation 27 provides for the debt: equity ratio and the relevant portions are given below:
 - "27. Debt-equity ratio. (1) For the purpose of determination of tariff, debt-equity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

- (2) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (3) Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.
- (4) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending the Thirty First day of March, 2015 shall be considered.

"

Regulation 30 provides for interest and financing charges, which is given below:

- **30.** Interest and finance charges. (1) (a) The loans arrived at in the manner indicated in regulation 27 shall be considered as gross normative loan for calculation of interest on loan.
- (b) The interest and finance charges on capital works in progress shall be excluded from such consideration.
- (c) In the case of retirement or replacement of assets, the loan amount approved by the Commission shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.
- (2) The normative loan outstanding as on the First day of April, 2015, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission up to the Thirty First day of March, 2015, from the normative loan.
- (3) Notwithstanding any moratorium period availed by the generating business/company or the transmission business/licensee or the distribution

business/licensee, the repayment of loan shall be considered from the first financial year of commercial operation of the project and shall be equal to the depreciation allowed for that financial year.

(4) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each financial year applicable to the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre:

Provided that if there is no actual loan for a particular financial year but normative loan is still outstanding, the weighted average rate of interest on the last available loan shall be considered:

Provided further that if the regulated business of the generating business/company or the transmission business/licensee or the distribution business/licensee or state load despatch centre does not have actual loan, then interest shall be allowed at the base rate.

- (5) The interest on loan shall be calculated on the normative average loan for the financial year by applying the weighted average rate of interest.
- (6) The generating business/company or the transmission business/licensee or the distribution business/licensee or the state load despatch centre, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such refinancing shall be borne by the beneficiaries and any benefit from such refinancing shall be shared in the ratio 1:1 among, -
- (i) the generating business/company and the persons sharing the capacity charge; or
- (ii) transmission business/licensee and long-term intra-State open access customers including distribution business/licensee; or
- (iii) distribution business/licensee and consumers.
- (7) The changes to the terms and conditions of the loans during the financial year, if any, shall be effective from the date of coming into force of such changes.
- (8) Interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on the First day of April of the financial year in which the application is filed:

Provided that interest on security deposit actually paid to the users of the transmission system or distribution system and to the consumers during the financial year, shall be considered at the time of truing up for the financial year."

Analysis and decision of the Commission

- 5.167 The Commission has examined the claims of KSEB Ltd and the objections of the stakeholders in detail. The objections of the HT-EHT Association on the normative loan has been considered in detail in Chapter 2 of this Order under the heading 'Interest charges on normative loan'. Hence the same is not discussed in this section.
- 5.168 Concurrent reading of the provisions of Regulations 27 and 30 show that interest charges applicable to assets created upto 01-04-2015 and after 1-4-2015 (ie., assets addition during the year 2016-17 and 2017-18) shall be provided. Regulation 30(1) (b) specifies that, interest charges for capital works in progress are not allowable. As per the proviso to Regulation 27(1)

funds received in the form of grants and contributions are to be reduced from the fund requirements. Further, in the case of assets under construction, the same is to be treated as part of fixed assets only when the assets are put to use.

- 5.169 Rate of interest for the loan is specified in Regulation 30(4). As per this, the rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio of the each financial year applicable to the generating business, transmission business or distribution business as the case may be. As mentioned in the previous chapter, the average interest for 2017-18 is 9.47%
- 5.170 The interest charges allowable for the year 2017-18 is to be worked out based on the provisions of Regulations. As per the Regulations, interest on working capital is allowed normatively and in the case of loans taken for creation of fixed assets the same can be assessed based on the net fixed assets available as on 01-04-2016 and for the additions thereon for the year. As per Regulation 30(2), the normative loan outstanding as on 01-04-2015 shall be worked out by deducting the amount of cumulative repayment, which represents the depreciation allowed, as approved by the Commission as on 31-3-2015 from the normative loan.
- 5.171 As per Regulation 27(1), for determination of tariff, debt: equity as on the date of commercial operation on or after the first day of April 2015 shall be 70:30. As per proviso to Regulation 27(1), debt equity ratio shall be applied only to the balance of the capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy and grant if any. As per the details furnished by KSEB Ltd in the petition and the clarifications dated 20-10-2020, the total contribution and grants received during 2017-18 is Rs.573.45 crore.
- 5.172 Regulation 27(3) and Regulation 29 are also applicable while estimating the normative interest on loan. As per Regulation 29, Return on equity is to be allowed on the paid up equity capital determined as per Regulation 27. Regulation 27(3) provides that in case actual equity is less than 30% of the approved capital cost, the actual equity is to be considered. As per the details furnished there is no actual equity infused in the accounts and hence the entire net assets are to be treated as funded out of normative loan.
- 5.173 The Commission had arrived at the existing normative loan (opening levels) as per the Regulations and the Order on Truing up of accounts for 2016-17 as shown below:

Table 52
Normative existing loans for the year 2016-17 as per true up Order

	string loans for the year 2010 17 as per th	Rs. Crore
1	Net Fixed Assets as on 1-4-2015	8483.82
2	Equity as per accounts	3,499.05
3	Grants and Contribution	2 700 60
	(after depreciation)	2,708.60
4=1-2-3	Normative Loan as on 1-4-2015	2,276.17
5	Repayment equivalent to depreciation for the year	334.87
6=4-5	Normative loan as at the end of the year	1,941.30
7	Addition to loans in 2015-16 (738.44-358.35)	380.08
8=6+7	Opening levels of Loan (as on 1-4-2016)	2,321.38

- 5.174 The Commission in the truing up order for 2015-16 had considered for the purpose of estimating the normative loans, the net fixed assets as on 01-04-2015 as Rs.8483.82 crore. After deducting the funds from grants and contribution (Rs.2708.60 crore after depreciation) and equity (Rs.3499.05 crore), the normative loan as on 1-4-2015 was Rs.2276.17 crore. After deducting the normative repayment of Rs.334.87 crore equivalent to the depreciation, the net normative loan at the end of 2015-16 was Rs.1941.30 crore. The addition to normative loan ie., net increase in fixed assets excluding grants and contribution, was Rs.380.08 crore. Thus level of normative loan as on 31-03-2016 and the opening level as on 01-04-2016 was Rs.2321.38 crore.
- 5.175 In the initial truing up Order for 2016-17 dated 14-09-2018 the Commission did not allow the addition to capital assets for the year for want of details. However, KSEB Ltd subsequently filed the details and as per the Order in OA 64/2019 dated 12-10-2020, the Commission has allowed Rs.1459.87 crore the addition to capital assets for the year 2016. Accordingly, the revised Asset addition for the year 2016-17 is as shown below:

Table 53
Asset additions Approved for 2016-17

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. crore	Rs. crore	Rs. crore
Asset addition as per accounts 2016-17 (IndAS)	450.22	410.19	908.25	1,768.66
Less: Duplication	81.98	53.31	-	135.29
Less: Part capitalization	37.80	31.98	-	69.78
Less: Part capitalization during previous years	81.28	5.80	-	87.08
Less: Decommissioning Liability	-	-	16.64	16.64
GFA addition under SBU D wrongly included under SBU G	-31.69	-	31.69	-
GFA addition approved for 2016-17	217.47	319.10	923.30	1,459.87

- 5.176 The asset addition of Rs.1768.66 crore as per the accounts for the year 2016-17 was inclusive of the additional asset addition pertaining to previous years (Rs.282.73 crore out of the total Rs.414.82 crore) made as part of the cleaning up of accounts during the first-time adoption of Ind AS. The full effect of these adjustments was made in the Accounts for 2017-18, by withdrawing Rs.398.18 crore (Rs.414.82 crore-Rs.16.64 crore decommissioning liability) from GFA of 2017-18. The normative loan for the asset addition made during the year 2016-17 was allowed after deducting the grants and contribution for the year 2016-17 (Rs.646.94 crore) and depreciation for the addition of assets (Rs.12.56 crore). The effect of asset additions for the previous years were not considered while allowing addition to normative loan for 2016-17, since complete effect of the adjustments were reflected in the accounts of 2017-18 only. Hence addition to normative loan for 2016-17 was approved at Rs.517.64 crore only. However, the full effect of these additions from 2017-18 is available since the same has been fully included in of the Accounts.
- 5.177 KSEB Ltd had filed a review petition against the Order dated 12-10-2020 in OA 64/2019 on approval of addition to assets for the year 2016-17 as part of truing up. In the said review petition, KSEB Ltd had sought to review the Commissions' decision on approval of depreciation and normative loan and to approve additional interest on normative loan to the tune of Rs.14.71 crore and additional depreciation to the tune of Rs.0.92 Crore. The Commission has admitted the petition. The first hearing of the petition was conducted on 31-03-2021. Vide daily Order dated 31-03-2021, the Commission sought the following additional details:
 - (a) Whether the valuation of fixed assets under Ind AS is based on the cost model or revaluation model. If so, the adjustments made in the fixed assets due IndAS towards fair value adjustments/revaluation adjustments to be provided
 - (b) Net addition of land under SBU-G for a year 2016-17 is -ve (Rs. (-)8.16 crore) after removing the part capitalization and duplication. Reasons for negative value may be furnished
 - (c) Whether any fair value adjustments included in the claims under the asset additions during 2015-16 and 2016-17.
 - (d) Whether the interest rate booked under the accounts for 2016-17, any fair value adjustments are included. If so the details, and the processing of the same is in progress. Since the matter has not been disposed of the impact if any on the same will be considered separately.

In their response, KSEB Ltd has furnished the details and based on the same and to obtain greater clarity on the issue so as to facilitate a considered decision, the Commission has decided to hold another hearing. In the meantime, due to the intensification of Covid-19 pandemic severe restrictions were announced by the Government on the functioning of the offices

- including lockdowns and triple lockdowns in Thiruvananthapuram among other districts. The next hearing is expected to be held shortly. Since the matter is not been disposed off the impact if any on the same will be considered separately.
- 5.178 In addition, KSEB Ltd claim of Rs.467.60 crore on account of normative loan is pending before the Hon. APTEL. Since the matter is sub-judice, this claim can be considered only after the decision of the Hon. APTEL.
- 5.179 As mentioned above, the Commission has approved the asset addition of Rs.1159.69 crore for 2017-18. The grants and contribution for SBU-D is Rs.394.15 crore and that of KSEB Ltd is Rs.573.45 crore Based on the above, the normative loan approved for the year is as shown below:

Table 54
Normative loan approved for the year 2017-18

Normative loan Summary	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Normative loan as on 1-4-2015	789.34	628.83	857.99	2,276.17
Add Asset additions approved 2015-16	34.79	212.24	491.41	738.44
Less Grants & contributions	13.11	12.93	332.31	358.35
Less Depreciation-2015-16	122.05	132.84	79.98	334.86
Net Normative Ioan As on 1-4-2016	688.97	695.30	937.11	2,321.40
Add Asset Additions approved 2016-17	217.47	319.1	923.3	1459.87
Less Grants & contributions	13.05	79.12	554.77	646.94
Less Depreciation 2016-17	129.11	151.14	102.18	382.43
Normative loan As on 1-4-2017	764.28	784.14	1,203.46	2,751.90
Add Asset Additions approved 2017-18	71.42	388.82	699.45	1,159.69
Less Grants & contributions	75.31	103.99	394.15	573.45
Less Depreciation 2017-18	132.61	151.74	69.12	353.47
Closing normative loan As on 31-3-2018	627.78	917.23	1,439.64	2,984.67

- 5.180 The asset addition approved for the year 2017-18 is Rs.1159.69 crore (as detailed in chapter 2) and net additions after considering the grants (Rs.573.45 crore), depreciation (353.47 crore) etc., is Rs.232.77 crore. The net closing normative loan is thus, Rs.2984.67 crore. Out of this, the closing loan for SBUD is Rs.1439.64 crore.
- 5.181 The weighted average rate of interest on the actual loan portfolio is 9.47% and the interest on existing normative loan is estimated as shown below:

Table 55
Interest charges for normative loan approved for 2017-18

	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Opening level of Normative loan (as on 01-04-2017)	764.28	784.14	1,203.46	2,751.90
Closing level of Normative loan (as on 31-3-2018)	627.78	917.23	1,439.64	2,984.67
Average Normative loan	696.03	850.69	1,321.55	2,868.29
Rate of Interest	9.47%	9.47%	9.47%	9.47%
Interest charges for 2017-18	65.91	80.56	125.15	271.63

5.182 The interest charges of Rs.245.61 crore so arrived at and the share of SBU-D is Rs.125.15 crore.

Overdrafts

- 5.183 In their petition KSEB Ltd stated that since the Commission has allowed carrying cost for the unbridged revenue gap, for the truing up for 2015-16 and 2016-17, the same is sought for 2017-18 also. Hence interest on over drafts is not claimed.
- 5.184 Since no interest on overdraft is claimed by KSEB Ltd, the Commission does not allow any interest on overdrafts.

Interest on working capital

5.185 KSEB Ltd in the petition stated that as per Regulation 33(e) of Tariff Regulation 2014, KSEB Ltd is not entitled to any interest on working capital and therefore no claim is made on this count. The computation of interest on working capital for 2017-18 by KSEB Ltd is furnished below.

Table 56
Interest on working capital as per the petition

	Amount	
Particulars	(Rs.Crore.)	
Operation and maintenance expense for month	117.88	
Cost of maintenance spares	22.76	
Two months receivables	2009.54	
Sub Total	2150.18	
Security Deposit Amount	2717.24	
Cost of power purchase for one month	616.50	
Net Amount	-1183.56	
Interest on working capital	0	

Objections of stakeholders

5.186 The Association pointed out that KSEB Ltd has claimed no interest on working capital for SBU-D.

Provisions in the Regulations

- 5.187 As per the provisions of the Regulations, interest on working capital is allowed on a normative basis. The provisions regarding interest on working capital is as extracted below:
 - 33.Interest on working capital. (1) The generation business/company or transmission business/licensee or distribution business/licensee or the state load despatch centre shall be allowed interest on the normative level of working capital for the financial year, computed as under,-

′a)	 	
(c)	 	
(d).		

- (e) In the case of distribution business/licensee the working capital shall comprise of,-
- (i) operation and maintenance expenses for one month; plus
- (ii) cost of maintenance spares equal to one-twelfth of the sum of the book value of stores, materials and supplies at the end of each month of the financial year; plus
- (iii) receivables equal to the expected revenue from sale of electricity for two months at the prevailing tariff:
- Provided that the following amounts shall be reduced while computing the working capital requirement:
- (i) the amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from users of the distribution system and consumers; and
- (ii) the amount equivalent to the cost of power purchase for one month, based on the cost of power purchase approved by the Commission:

Provided further that the amount equivalent to the cost of power purchased for one month corresponding to the quantity of electricity supplied from the generating station owned by the distribution licensee shall not be deducted: Provided also that for distribution business/licensees who supply electricity to their consumers on prepaid metering system, no interest on working capital shall be allowed.

Analysis and decision of the Commission

5.188 It is to be noted that KSEB Ltd has not claimed any interest working capital. As per Regulation 33(1), interest on working capital is allowed on a normative basis. As per Regulation 33(2), interest on normative working capital is allowed at a rate of 2% higher than the base rate applicable for the first day of April of the respective financial year.

5.189 In the case of distribution business, the working capital is estimated based on O&M expenses for one month and cost of maintenance of spares equal to 1/12th of the sum of the book value of stores, materials and supplies at the end of each month and receivable equal to the expected revenue from sale of electricity for two months. Further, amount held as security deposits and cost of power purchase for one month is to be deducted. Accordingly the parameters required for estimation of normative working capital requirements as per the Regulations is as shown below:

O&M expenses of SBU-D for 2017-18 - Rs.1958.22 crore Inventories (less Fuel) - Rs. 389.55 crore Receivables (revenue from sale of power) - Rs.11,967.05 crore Security deposits - Rs.2,597.16 crore Cost of power purchase - Rs.7,341.87 crore

Base rate of SBI as on 1-4-2017 - 9.10% Interest rate for working capital - 11.10%

5.190 Based on the above, interest on working capital is estimated as shown below: Table 57

Interest on working capital for SBU-D

<u> </u>	ODLLD
	SBU-D
	(Rs. crore)
O&M expenses for one month	163.18
Cost of maintenance of spares -1-month stores	32.46
Receivables (Revenue for two months)	1994.51
Total	2,190.15
Less Security deposits	2,597.51
Less cost of power purchase for one month	612.35
Total Normative Working Capital Requirement	-1,019.70

5.191 The excess security deposit available after meeting the working capital requirements is Rs.1019.70 crore. As per KSEB Ltd, the excess of security deposit over the working capital needs is Rs.1183.56 crore. Since the amount of security deposit held by SBU-D is substantial and more than the normative working capital requirement, the working capital requirement is negative. Hence no interest on working capital is allowed for SBU-D. Rs.1019.70 crore is in excess held by KSEB Ltd without any additional interest liability. The same is available as a source of funds to KSEB Ltd.

Interest on security deposits of consumers.

5.192 KSEB Ltd in the petition stated that the interest on security deposit approved for the year 2017-18 in the Suo motu order was Rs.129.64 crore, which is only 70% considering the rationale that only 70% of the interest is being given to

the consumers. The actual security deposit as per accounts was Rs.2597.51 crore at the beginning of the year (1-4-2017), on which the interest at 6.75% was provided in 2016-17 i.e., Rs.175.33 crore. However, the actual sum disbursed in 2017-18 is Rs.174.95 crore, which is from the provision made for the year 2016-17 (Rs.177.27 crore) at 7.75% on SD balance as on 01-04-2016 (Rs.2287.32 crore). KSEB Ltd sought actual disbursement of interest charges of Rs.174.95 crore under SBU-D.

Provisions in the Regulations

5.193 As per the Regulation 30(8), interest on security deposit is allowable only to the extent of actual disbursement of interest to the consumers. The relevant provisions are quoted below

30 (8) Interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on the First day of April of the financial year in which the application is filed:

Provided that interest on security deposit actually paid to the users of the transmission system or distribution system and to the consumers during the financial year, shall be considered at the time of truing up for the financial year.

Analysis and decision of the Commission

5.194 Since an amount of Rs.174.95 crore has been disbursed to consumers as interest on security deposit in the year 2017-18, the Commission approves same for the purpose of truing up.

Interest on GPF

The Commission had in the Suo motu Order dated 17-04-2017 approved Rs.140 crore towards interest on GPF. But as per the audited accounts, the actual interest paid on GPF was Rs.156.26 crore, which exceeded approval by Rs.16.26 Crore. The Commission had considered Rs.1600 Crore as GPF balance as on 31.03.2017 and applied interest @ 8.75%. However, actual PF balance was Rs.2029.93 Crore as on 01-04-2017 because of pay revision arrears credited to GPF account of employees. The actual rate of interest, however, was lower than approval at 7.90% and later on came down to 7.60% during the year. The actual interest as per the audited accounts may kindly be approved among SBUs as given below:

Table 58
Interest on GPF balance for 2017-18

Item	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs.crore	Rs.crore	Rs.crore
Interest on GPF	8.23	15.46	132.57	156.26

5.196 Accordingly, KSEB Ltd claimed Rs.132.57 crore as interest on GPF for 2017-

Objections of the stakeholders

5.197 The HT -EHT Association stated that interest on GPF is to be allowed as per the Note 29 of the audited accounts at Rs.156.26 crore and accordingly, Rs.132.57 crore is to be allowed

Analysis and decision of the Commission

- 5.198 The Commission notes that GPF contribution of employees is one of the sources of funds for KSEB Ltd. The GPF balance outstanding includes the sum deposited by the 6367 excess employees for whom employee cost is not approved as per the judgments of Hon.High Court of Kerala and Hon.APTEL. Since GPF balance is only treated as the source of funds similar to that of any borrowing, the same is considered fully in the truing up.
- 5.199 As per the Accounts, the interest charges booked for GPF is Rs.156.26 crore. Out of this, the share of SBU-D is **Rs.132.57 crore, which is allowed for 2017-18.**

Interest charges for Master Trust Bonds

- KSEB Ltd in their petition has sought Rs.690.94 crore towards interest on Master Trust for SBU-D. In the petition KSEB Ltd stated that the State Government, as per notifications dated 31.10.2013 and 28.01.2015, ordered creation of a Master Trust for meeting the unfunded liability of pension, gratuity and leave surrender as on 31.10.2013, in respect of the personnel transferred from erstwhile KSEB to KSEB Ltd. The total liability as on 31.10.2013 was estimated at Rs.12,418.72 Crore and necessary funding arrangements were put in place through issue of 2 series of Bonds. The Commission has recognized the unfunded pension liabilities as above and approved the recovery of interest on KSEB Ltd submitted share of Bonds as per Tariff Regulations, 2014. KSEB Ltd that in the *Suo motu* Order dated 17-4-2017 of the Commission had approved the interest charges of Rs.814.06 crore for 2017-18. KSEB Ltd has now requested that the actual share of expenses for SBU-D is Rs. 690.95 Crore, which may kindly be approved.
- 5.201 KSEB Ltd further submitted that the operationalization of the Master Trust was delayed due to non-receipt of the Income tax exemption and the actual date of operationalization of the Master Trust is only from 01.04.2017. Actuarial

valuation has been done on 31.03.2017 and the assessed unfunded pension liability, gratuity liability and leave surrender liability as on 31-03-2017 stood at Rs.16,147.70 Crore i.e., an increase of Rs.3,728.98 Crore liability for the period from 01.11.2013 to 31.03.2017

5.202 In the petition KSEB Ltd stated that the Kerala Service Rules as applicable in the Government are applicable to employees of KSEB Ltd. The details of terminal benefits paid to retired employees in FY 2017-18 through Master Trust amounts to Rs.1341.36 Crore as detailed below:

Table 59
Amount paid to pensioners by Trust in 2017-18

Month	Rs. Crore	Month	Rs. Crore
Apr-17	107.17	Nov-17	112.94
May-17	153.04	Dec-17	99.82
Jun-17	124.60	Jan-18	99.48
Jul-17	98.14	Feb-18	95.83
Aug-17	219.54	Mar-18	94.30
Sep-17	25.68	Total	1341.36
Oct-17	110.82		

5.203 KSEB Ltd as per their audited accounts for 2017-18 has not claimed pension and terminal liabilities under employee cost by virtue of operationalization of Master Trust and provisioned 10% interest on Bonds (Rs.8144.40 Crore) amounting to Rs.814.40 Crore among the SBUs as detailed below:

Table 60 Interest on Master Trust Bonds

Item	SBU G	SBU T	SBU D	Total
	Rs. crore	Rs. crore	Rs. crore	Rs. crore
Interest on Bonds	42.90	80.55	690.95	814.40

Objections of the stakeholders

5.204 The HT-EHT association stated that the Commission should approve interest on Master Trust Bonds strictly as per the audited accounts for the year 2017-18

Analysis and decision of the Commission

5.205 The Commission has examined the submissions of KSEB Ltd regarding interest on bonds issued to Master Trust. As per the submissions of KSEB Ltd, the Master Trust is operational only from 2017-18 and in the first year of the Trust itself the fund has become unsustainable considering the fact that the actual pension payments (Rs.1341.36 crore) is more than the interest allowed

on bonds (Rs.814.40 crore). KSEB Ltd sought to meet to bridge the gap in pension outflow (Rs.526.96 crore) for the year 2017-18 by recovery through consumer's tariff in the form of interest on unfunded actuarial liability of Rs.531.39 crore.

- 5.206 The Commission noted that as per the original scheme of issue of Bonds, the actuarial liability as on 31-10-2013 was assessed at Rs. 12418.72 crore. This liability was as per transfer scheme apportioned in the ratio of 35:65 between the Government of Kerala and KSEB Ltd. The Commission notes that the scheme envisages the flow of funds from the Government in the form of interest and repayments to the tune of Rs.586.10 crore and Rs.52.40 crore for 10 years, in addition to the interest on Bonds issued to the Master Trust at the rate of 10% for 20 years @Rs.814.40 crore for the first year. Further, a substantial portion of funds inflow was envisaged by the increase in the ROE, through increase in equity from Rs.1553 crore to Rs.3499.05 crore in the transfer scheme which would also contribute to fund the Master Trust.
- The Commission has examined this issue as part of the Tariff Order dated 08-5.207 07-2019 and noted that payments are not being remitted by KSEB Ltd as envisaged in the Scheme for creation of a corpus fund and to make this fund self-sustaining over a period of 20 years. Instead, KSEB Ltd has been operating the Trust Accounts like a "Current Account" by remitting money into the account on requirement basis for dispersal and fulfilment of retirement benefits. Hence, the payments into the Trust account by KSEB Ltd is not as per the original scheme envisaged but only as per the fund requirements to disburse the pension. The Commission has also sought a copy of the audited accounts of the Trust and KSEB Ltd has furnished the same vide letter dated 20-10-2020. In the Note to the accounts of said audited accounts, (schedule 12.2.2.) it is mentioned that no income and expenditure account has been prepared as the trust is only acting as the intermediary institution for effecting disbursement of pension, gratuity and other retirement benefits of the employees of erstwhile KSEB and receipts /payments are accordingly credit/debited to the fund account. There is no revenue earning activity for the Trust in view of the above. Based on this, the statutory auditors have qualified their opinion.
- 5.208 It is pertinent to note that the Auditors had noted that the Trust was not being managed as envisaged. The Commission notes that the proposal of KSEB Ltd for additional funds is also not in line with the scheme of operation of the Fund. The deficit in the Master Trust is on account of not providing the funds to the Trust on a yearly basis as envisaged. The Commission notes that KSEB Ltd did not constitute the Trust till the financial year 2017-18 claiming that they were not exempted from Income Tax liability. This according to the Commission is a lame excuse. The Master Trust could have been constituted

and operationalized and IT exemption petition could have been moved simultaneously. KSEB Ltd however did not act accordingly. Since the Master Trust was not constituted and operationalized by KSEB Ltd as originally envisaged, no provision was made by the Commission in the Truing up orders till 2016-17, but Rs.814.40 crore was allowed yearly for payment of terminal liabilities. It is also important to note that even the increase in income from ROE is being utilized by KSEB Ltd to fund their working capital requirements and no amount from this is being apportioned to the Master Trust as envisaged. The contribution from the Government to the tune of Rs.586.10 crore and Rs.52.40 crore is also not included in the fund. *This is a very serious lapse and threatens the very sustainability of the Master Trust.*

5.209 The above facts very clearly reveal that from the first year itself the fund is not functioning as envisaged. This is highly objectionable and contrary to the very intent of setting up of the Master Trust. The Commission cautions KSEB Ltd that they are required to take urgent corrective action to overcome this serious deviation from the Scheme. The Commission also opines that if KSEB Ltd does not urgently take corrective action, the very payment of the pension will be jeopardized and the retirement financial security of the retirees of KSEB Ltd shall be compromised. KSEB Ltd also submitted that they will place a proposal in this regard in consultation from the Government. With the above caution and the proposed submission, and consultation with the Government, the Commission hereby approves the interest on bonds on Master Trust as per the initial scheme approved by the Government. Since 2017-18 is the first year of effective establishment of the Trust, an amount of Rs.814.40 crore is allowed as per SBU wise details as shown below:

Table 61
Interest on Master Trust Bonds for 2017-18

Item	SBU G	SBU T	SBU D	Total
	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Interest on Master Trust Bonds	42.90	80.55	690.95	814.40

5.210 Thus, for 2017-18, the share of interest on master trust for SBU-D is approved as Rs.690.95 crore

Other interest charges

5.211 Other interest charges paid include of guarantee commission and bank charges. The actual expenses booked by KSEB Ltd is Rs.5.58 crore only. Predominant portion of other interest charges represent interest charges for power purchase bills, which is in line with the tariff revision ordered by CERC. Actual interest as per accounts are detailed below:

Table 62
Details of other interest charges

Detaile of earlier interest energee			
	Amount		
Item	(Rs. Crore.)		
Discount to consumers for timely payment of bills	1.64		
Interest to suppliers / contractors	5.06		
Other charges and cost of raising finance	0.13		
Interest on fair valuation of concessional loans	22.28		
Total	29.11		

5.212 An amount of Rs. 5.06 crore which was incurred towards interest on power purchase bills has been classified under interest to suppliers/contractors. These bills were raised in line with tariff revision ordered by CERC for the control period 2014-19 and the payment is strictly in line with CERC regulations, which allow interest for the differential amount between provisional AFC and final AFC. Other bank charges KSEB Ltd has been reducing the bank charges consistently through negotiations with banks. KSEB Ltd submitted that in the IND AS audited accounts, bank charges amounting to Rs.1.07 Crore has been disclosed under A&G expenses. Interest on fair valuation of concessional loans Rs.22.28 Crore charged as expense under this head has been entered as a contra entry as income under FV adjustments, as detailed in subsequent paragraphs. Since this amount does not involve any cash flow and is only an adjustment entry made in line with IND AS compliance, KSEB Ltd excluded the same in the truing up petition. Therefore, actual expense during the year has been Rs.6.83 crore against the ARR approval of Rs.10 Crore. In view of the above, actual expenses including bank charges claimed by KSEB Ltd is as shown below:

Table 63
Other interest charges as per petition

Item	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Other interest	0.76	0.49	5.58	6.83

Analysis and decision of the Commission

- 5.213 As per the petition Other interest charges paid is inclusive of guarantee commission and bank charges. Predominant portion of other charges represent interest charges on power purchase bills as per the orders of CERC KSEB Ltd has not claimed the adjustment amount on account of fair valuation under Ind AS accounts.
- 5.214 The Commission approves the other interest charges of Rs.5.58 crore as per audited accounts.

Summary of Interest and financing charges

5.215 Summary of the total interest charges allowable for SBU-D for the year 2017-18 is as shown below:

Table: 64
Interest charges allowable for SBU-D for truing up for 2017-18

Particulars	Approved	As per accounts	As per petition	Approved in truing up
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Interest on Loan	57.84	303.67	138.93	125.15
Interest on Working capital	-	80.60	-	-
Interest on security deposits	129.64	175.33	174.95	174.95
Interest on GPF	117.81	132.57	132.57	132.57
Interest on Master Trust Bonds	684.98	690.95	690.95	690.95
Other Interests	8.41	23.77	5.58	5.58
Total	998.68	1,406.89	1,142.98	1,129.20

5.216 As explained in the paragraphs above, the total interest and financing charges approved for SBU-D for the purpose of truing up is Rs.1129.20crore. The main difference in the approved and actual interest charges is on account of interest on loan allowed on normative basis.

Unfunded actuarial liability

- 5.217 KSEB Ltd also sought Interest on interest on unfunded actuarial liability and Rs.450.84 crore for SBU-D.
- 5.218 In the petition, KSEB Ltd stated that as per the actuarial valuation as on 31.03.2018, the liability on this account has been assessed at Rs. 17,732.57 Crore. The increase of Rs.1584.87 Crore according to KSEB Ltd has been captured in audited accounts as follows:
 - 1) Liability pertaining to 2017-18 amounting to Rs.509.42 Crore has been booked under employee cost for the year and
 - 2) Remaining portion, pertaining to earlier years Rs.1075.46 Crore under other comprehensive income in P&L account.
- 5.219 However, KSEB Ltd has not claimed the liability pertaining to 2017-18 of Rs.509.42 crore booked under employee cost. KSEB Ltd while seeking approval of employee cost in the petition had excluded this Rs.509.42 crore.

Instead in the petition KSEB Ltd stated that the claim is made through interest charges on unfunded actuarial liability.

- 5.220 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore i.e., an increase of Rs. 5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. KSEB Ltd has decided to issue 20-year bonds at a coupon rate of 10% to the Master Trust. Claiming the entire additional contribution to the Master Trust in one-go is likely to result in tariff shock. Therefore, KSEB Ltd proposes to claim 10% interest on unfunded liability to the tune of Rs.531.39 crore and the share of SBU D on this count is Rs.450.84 Crore.
- KSEB Ltd has requested to approve the interest on unfunded portion of actuarial liability since the pension and terminal benefits pay out cannot be met from the existing arrangement. Actual pension and terminal benefit disbursement during the year exceeded interest on bonds by Rs. 526.96 Crore. (Rs.1341.36 Crore-Rs.814.40 Crore). Hence, KSEB Ltd requested the Commission to approve provisionally, an additional amount Rs.531.39 Crore (being 10% of the unfunded liability as on 31.03.2018 Rs.5313.85 Crore) in view of the fact that KSEB Ltd has no other source to meet this expense and charging the entire additional liability in the ARR for one year may result in tariff shock. Therefore, KSEB Ltd requested the Commission to approve Rs.531.39 Crore as detailed below:

Table 65
Interest on unfunded terminal liability

Item	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Interest on Bonds	27.99	52.56	450.84	531.39

- 5.222 According to KSEB Ltd, Tariff Regulations, 2014 also provide that, the annual pension contribution by KSEB Ltd to the Master Trust based on the actuarial valuation is also allowed to be recovered through tariff on annual basis. KSEB Ltd further stated that claiming the entire additional contribution to the Master Trust in one-go is likely to result in huge accumulation of Regulatory Asset and subsequent tariff shock. Therefore, KSEB Ltd has already taken up the matter of unfunded liability till 31.03.2018 with the Government and a detailed scheme in consultation with the Government is proposed to be prepared and submitted before Hon Commission separately.
- 5.223 KSEB Ltd also pointed out that the Commission as per MYT order for the control period from 2018-19 to 2021-22 appraised the matter in detail and provisionally allowed Rs. 200 Crore in addition to Bond interest and decided

to take up the matter through separate proceeding to examine the working of the Master Trust

Objections of the stakeholders

5.224 Regarding unfunded actuarial liability, the Association stated that as per clause 31 the licensee shall issue bonds to service terminal liabilities. The interest on bonds issued by KSEB Ltd to service the terminal liabilities shall be recovered through tariff at the rates specified by State Government. The Association argued that till such time the licensee furnishes a detailed scheme for the maintenance and disbursal of the fund, the proposed 10% interest amounting to Rs.531.39 crore is to be disallowed.

Analysis and decision of the Commission

- 5.225 According to KSEB Ltd, as per the actuarial valuation done for 2017-18 the fund liability is assessed at Rs.17732.57 crore ie., an increase of Rs.5313.85 crore above the original liability of Rs.12418.72 crore assessed at the time of Second transfer scheme. In order to fund this additional liability, KSEB Ltd proposes to issue bonds for the said amount at an interest rate of 10% That is additional requirement to the tune of Rs.531.39 crore in the form of interest to additional liability on account of actuarial valuation. Out of which Rs.450.84 crore pertains to SBU-G.
- 5.226 The Commission notes that the proposal of KSEB Ltd is not at all in line with the governing principles of the Fund. The deficit in the Master Trust is on account of not appropriately providing the funds to the Trust as envisaged. The share of Government through adjustment of electricity duty and portion of RoE envisaged to fund the Trust is not being credited to the Trust fund but being diverted for funding other expenses. The shortfall on account of funds is not being transferred to the fund at the appropriate time. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year. If this arrangement is continuing on a year on year, there is no doubt that the entire scheme will be a failure in no time.
- 5.227 The approach taken by KSEB Ltd in this case is not correct and also not in line with the provisions of the Government order dated 31-10-2013 and 28-1-2015. The present proposal of KSEB Ltd is to fund the entire deficit by the consumers to the tune of Rs.531.39 crore in one year which is an unsustainable proposal and will seriously impact consumers tariff for KSEB Ltd's fault. If this arrangement is continuing year on year there is no doubt that the entire scheme will be a failure in no time and the financial security of KSEB Ltd pensioners will be jeopardized.

- 5.228 After examining the issue, the Commission in the MYT Tariff order dated 08-07-2019, had allowed Rs.200 crore provisionally for the control period from 2018-19 to 2021-22, and proposed to review the scheme holistically. With the available details, the Commission is not in a position to assess the exact commitment required for funding the terminal liabilities. KSEB Ltd in the petition has proposed to submit a proposal in this regard in consultation with the Government.
- 5.229 However, the Commission has also given due consideration to the stated difficulty of KSEB Ltd in obtaining income tax exemption till 2017, hindering the roll out of the Master Trust. The Commission has also noted that against the total provision of Rs.814.40 crore, the actual disbursement during the year was Rs.1341.36 crore i.e., an additional amount of Rs.526.96 crore (without accounting for the contribution from the Government and increase in ROE as envisaged in the original scheme). The Commission is also duty bound to ensure that the licensee is also able to fulfill its commitments to its pensioners. As pointed out earlier, the Commission is also not in a position to assess the requirement of funds for funding the terminal liabilities with available information. Hence, after considering the scenario holistically and keeping in view of the financial viability of the licensee, the Commission is inclined to provisionally allow an additional amount of Rs.200 crore in the current year as in the case of MYT Period 2018-19 to 2021-22. This amount is allowed additionally on the condition that the same is to be transferred to the Trust fund and the proof is to be placed before the Commission within three months. The amount is allocated to the SBUs in the same ratio as proposed by KSEB Ltd. Thus, the additional amount allowed to SBU-D is as shown below:

Table 66
Unfunded actuarial liability provisionally approved for 2017-18

	SBU G	SBU T	SBU D	Total
	(Rs. crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
As per Petition	27.99	52.56	450.84	531.39
As approved	10.54	19.78	169.68	200.00

- 5.230 Accordingly, the Commission provisionally approves Rs.169.68 crore for SBU-D as unfunded actuarial liability for the year 2017-18 as against Rs.450.84 crore sought by KSEB Ltd.
- 5.231 The Commission notes that KSEB Ltd has been conducting the actuarial valuation regularly from 2013-14. Hence the circumstances under which the 'under provisioning' of actual liability has occurred required further investigation. As mentioned in Chapter 6, KSEB Ltd is hereby directed to file a petition showing complete actuarial liability till 2020-21 including

assumptions and data and the proposed recovery within 3 months of this Order.

Depreciation

KSEB Ltd stated that in the Suo motu Order dated 17-04-2017 the Commission had approved the depreciation for SBU-D for 2017-18 at Rs 58.12 Crore. The depreciation as per accounts for the distribution assets for the year 2017-18 is Rs.390.83 Crore. This depreciation has been worked out in line with IND AS requirements and claw back of depreciation was calculated and credited to Claw Back of grant under Note 33 (Changes in fair valuation and adjustments). But, as per MYT Regulation for the Control Period 2015-18, depreciation is allowable only as per the provisions contained in the Tariff Regulations, 2014 in which applicable rates as well as the methodology to be followed are specified therein. Accordingly, allowable depreciation for SBU D has been worked out at Rs. 236.78 Crore. KSEB Ltd in their petition estimated the depreciation as per the provisions of the Regulations as shown below:

Table 67
Depreciation estimated by KSEB Ltd for the purpose of truing up for 2017-18

SI.					
No	Particulars	SBU G	SBU T	SBU D	Total
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	GFA as on 31.03.2017	16,880.05	4,719.64	7,515.45	29,115.14
2	Less: Enhancement in value while re vesting	11,988.98	0	0	11,988.98
	GFA as on 31.03.2017 excluding value				
3	enhancement	4,891.07	4,719.64	7,515.45	17,126.16
4	Less: GFA addition for 2016-17 as per accounts	450.22	410.19	908.25	1768.66
5	GFA as on 01.04.2016	4,440.85	4,309.45	6,607.20	15,357.50
6	Add: Additions during the year 2016-17	298.75	324.90	939.94	1563.59
7	Closing GFA as on 31.03.2017 (A)	4,739.60	4,634.35	7,547.14	16,921.09
	Assets more than 12 yrs old GFA as on				
8	01.04.2005 (B)	2,655.68	2,230.21	2,174.08	7,059.97
9	Assets less than 12yrs old C=(7-8)	2,083.92	2,404.14	5,373.06	9,861.12
10	Less fully depreciated assets (01.04.1987)	192.33	90.89	252.03	535.25
11	Assets with life from 13 to 30 years (D)=(8-10)	2,463.35	2,139.32	1,922.05	6,524.72
12	Land value GFA 13-30 yrs GFA (2.80%* of D)	68.97	59.9	53.82	182.69
13	-DO- On < 12 years (2.80%* of C)	58.35	67.32	150.45	276.11
14	GFA excl land on 13-30 years GFA (11-12)	2,394.38	2,079.42	1,868.23	6,342.03
15	GFA excl land < 12 years (9-13)	2,025.57	2,336.82	5,222.61	9,585.01
16	GFA eligible for depreciation (14+15)	4,419.95	4,416.24	7,090.85	15,927.04
	Depreciation on assets <12 years (Av 5.28% on 15				
17	above)	106.95	123.38	275.75	506.09
	Depreciation on assets >12 years (Av 1.48 % on				
18	14 above)	35.44	30.78	27.65	93.86
19	Total depreciation for 2017-18 (15+16)	142.39	154.16	303.4	599.95
20	Combined average rate (19/16)*100	3.22	3.49	4.28	3.77
21	Consumer contribution & Grants as on 01.04.2017	0	94.94	1410.46	1505.4

23	Disallowance of depreciation (@5.28% on 21)	0	5.01	74.47	79.49
	Allowable depreciation on GFA till 01.04.2017 (19-				
24	23)	142.39	149.15	228.93	520.47
	Depreciation on GFA addition in 2017-18 as per				
25	Table 5.12 above	1.09	7.21	7.85	16.14
26	Total depreciation for the year 2017-18	143.48	156.36	236.78	536.62

^{*}Land value has been determined at 2.80% being value of land before value enhancement as a % GFA)

5.233 As shown above, the depreciation for SBU-D is estimated as Rs.236.78 crore.

Objections of the stakeholders

5.234 The Association has separately worked out the depreciation. As per their estimates the depreciation allowable for 2017-18 is Rs.97.57 crore only.

Provisions in the Regulations

- 5.235 Regulation 28 provides for determination of depreciation for the purpose of tariff determination. The relevant provisions are reproduced below:
 - 28. Depreciation. (1) The value base for the purpose of depreciation shall be the original capital cost of the asset approved by the Commission:
 - Provided that no depreciation shall be allowed on revaluation reserve created on account of revaluation of assets.
 - (2) The generation business/company or transmission business/licensee or distribution business/licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective business, computed in the following manner:-
 - (a) depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure-I to these Regulations for the first twelve financial years from the date of commercial operation;
 - (b) the remaining depreciable value as on the Thirty First day of March of the financial year ending after a period of twelve financial years from the date of commercial operation shall be spread over the balance useful life of the assets as specified in Annexure- I;
 - (c)the generating business/company or transmission business / licensee or distribution business/licensee, shall submit all such details and documentary evidence, as may be required under these Regulations and as stipulated by the Commission from time to time, to substantiate the above claims:
 - (d)the salvage value of the asset shall be ten per cent of the allowable capital cost approved by the Commission and depreciation shall be a maximum of ninety per cent of the approved capital cost of the asset.
 - (3)The generating business/company or transmission business/licensee or distribution business/licensee shall be allowed to claim depreciation to the extent of financial contribution in the form of loan and equity, including the loan and equity contribution, provided by them:
 - Provided that depreciation shall not be allowed on assets funded through consumer contribution, deposit works, capital subsidies and grants.
 - (4)In the case of existing assets, the balance depreciable value as on the First day of April, 2015, shall be worked out by deducting the cumulative depreciation as approved by the Commission up to the Thirty First day of March, 2015, from the gross depreciable value of the assets.

Analysis and decision of the Commission

- 5.236 As quoted above, the depreciation is to be calculated at the rates provided in the Regulations. The rate of depreciation in the Regulations for an asset for the first 12 years is to be at the rates notified and for the balance value if any shall be spread over the useful life of the assets. Further, depreciation shall not be applicable to the assets created out of consumer contribution and grants.
- 5.237 In addition, Regulation 35 provides the principles to be adopted for treating the Transfer scheme under Section 131 of the Act.
 - "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";
- 5.238 Regulation 35 (a) mandates that any increase in the value of assets consequent to its revaluation shall not qualify for computation of depreciation or for return on net fixed assets. Similarly, depreciation shall also not be allowable for the assets created out of consumer contribution and grants. Further, the reduction in contribution from consumer contribution and grants made as part of the transfer scheme shall not be considered for computing depreciation. The Commission notes that KSEB Ltd has removed depreciation only for the grants and contribution added after the transfer scheme, thereby substantially over stated the depreciation.
- 5.239 Since the depreciation as per the accounts and as per the petition is not as per the provisions of the Regulations, the Commission has to estimate the depreciation allowable as per the provisions of the Regulations. Accordingly, the depreciation for the assets as on 01-04-2017 is worked out as shown below:

Table 68
Depreciation approved for the year 2017-18

	Depreciation for Assets 2017-18	SBU-G	SBU-T	SBU-D	KSEBLtd
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Opening GFA as on 1-4-2017	4,658.32	4,628.56	7,530.50	16,817.38
2	Assets >12 years old (GFA as on 1-4-2005)	2,655.68	2,230.21	2,174.08	7,059.97
3	Fully depreciated Assets (assets upto 1-4-1987)	192.33	90.89	252.03	535.25
4=(2-3)	Assets having life 12-30 yrs	2,463.35	2,139.32	1,922.05	6,524.72
5=(4*2.8%)	Value of land (Average 2.8% of GFA)	68.97	59.90	53.82	182.69
6	Grants and contributions (upto 1-4-2005)		ı	1,413.12	1,413.12
7=(4-5-6)	Assets having life 12-30 yrs eligible for depreciation	2,394.38	2,079.42	455.11	4,928.91
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	34.00	29.53	6.46	69.99
9=(1-2)	Assets < 12 years old (1-4-2005 to 31-3-2017)	2,002.64	2,398.35	5,356.42	9,757.41
10=(9*2.8%)	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
11	Grants and contributions (1-4-2005 to 31-3-2017)	26.16	95.95	4,140.05	4,262.16
12=(9-10-11)	Opening balance of Assets < 12 years old	1,920.41	2,235.25	1,066.39	5,222.04
13	Total asset addition approved	71.42	388.82	699.45	1,159.69
14	Grants and Contributions for 2017-18	75.31	103.99	394.15	573.45
15=13+14	Total Grants and Contributions (1-4-2005 to 31-3-2018)	101.47	199.94	4,534.20	4,835.61
16	Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
17=(12+13-15- 16)	Closing balance of Assets <12 years Old (1-4-2005 to 31-3-2018)	1,916.52	2,520.08	1,371.69	5,808.28
18=(12+17)/2	Average Value of Assets <12 Years old	1,918.46	2,377.66	1,219.04	5,515.16
19=(18*5.14%)	Depreciation for assets <12 years (@5.14%)	98.61	122.21	62.66	283.48
20=8+19	Total Depreciation for assets for 2017-18	132.61	151.74	69.12	353.47

*The total value of land out of the total approved capital additions for the year 2017-18 is Rs.10.46 crore (Rs.1.24 crore for SBU-G, Rs.9.15 crore for SBU-T and Rs.0.07 crore for SBU-D). Out of this, land included in the part capitalized which were commissioned in **2017-18 itself** is Rs.8.75 crore. Since the net value of land as part of capitalized assets for the year 2017-18 is very low, the Commission has not made any adjustments on the value of land while estimating depreciation for the assets added during the year.

5.240 The depreciation allowed for the year is Rs.353.47 crore for KSEB Ltd as a whole and Rs.69.12 crore for SBU-D.

Return on equity

5.241 KSEB Ltd in their petition claimed return on equity at the rate of 14% for the SBUs. The equity as per accounts is Rs.253.50 crore for SBU-D.

Objections of the stakeholders

5.242 According to the Association, return on equity shall be as per the equity base approved by APTEL in the Order dated 18-11-2015 in Appeal No.247 of 2014. Accordingly, RoE of Rs.63.93 crore only to be given

Provisions in the Regulations

- 5.243 The determination of the equity and the rate of return allowed shall be as per the provisions of the Regulations. As per Regulation 27, normative debt equity ratio is 70:30 as shown below:
 - **29. Debt-equity ratio.** (1) For the purpose of determination of tariff, debt-equity ratio as on date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2015, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

- (8) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.
- (9) Where actual equity employed is less than thirty percent of the approved capital cost, the actual equity shall be considered.
- (10) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending the Thirty First day of March, 2015 shall be considered.
- 5.244 Regulation 29 provides for return on equity. As per the said Regulation, RoE of 14% shall be allowed on the equity on the paid up equity capital as shown below:
 - **30. Return on investment.** (1) Return on equity shall be computed in rupee terms, on the paid up equity capital determined in accordance with the Regulation 27 and shall be allowed at the rate of fourteen percent for generating business/companies, transmission business/licensee, distribution business/licensee and state load despatch centre:

Provided that, return on equity for generating business/company, transmission business/licensee, distribution business/licensee and state load despatch centre, shall be allowed on the amount of equity capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity capital portion of the approved capital cost for the investment put to use during the financial year:

Provided further that at the time of truing up for the generating business/company, transmission business/licensee, distribution

business/licensee and state load despatch centre, return on equity shall be allowed on pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year.

Analysis and decision of the Commission

- 5.245 The Commission examined the details furnished by KSEB Ltd. It is seen that the Commission had adopted certain equity figures in the *Suo motu* order due to lack of details from KSEB Ltd. However, since the actual apportionment of equity as per audited accounts has been made available by KSEB Ltd, the Commission has adopted the figures given in the audited accounts for consistency. Further, Regulation 35(b), requires that for the purpose of computation of return on equity, the equity of Government of Kerala as per the transfer scheme published under Section 131 is to be followed. Hence the contentions of the HT-EHT Association are to be rejected.
- 5.246 The amount of equity notified as part of the Transfer Scheme is Rs.3499 for KSEB as a whole. Accordingly, the RoE allowable for the SBUs for the year 2017-18 is as shown below:

Table :69
Return on equity approved for the year 2017-18

Particulars	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Equity Capital	831.27	857.05	1810.73	3499.05
RoE @14% on above	116.38	119.99	253.50	489.87

5.247 As shown above, the RoE approved for SBU-D for 2017-18 for the purpose of truing up is Rs.253.50 crore.

Other expenses:

5.248 KSEB Ltd in their petition has submitted that Other expenses includes other debits and prior period expenses and income. The other debits include Material cost Variance, R&D Expenses, Bad Debts and Misc Losses Written-off. The material cost variance represents the difference between the actual rate at which material was procured and the standard rate at which materials are issued. Bad and doubtful debts written off/ provided for represent withdrawal of credits to revenue in earlier years. The miscellaneous losses and write off represent the compensation paid to staff and outsiders for injuries, death and danger.

5.249 The Other debits as per accounts and as per the petition for KSEB Ltd as a whole is Rs.(-)14.17 crore For SBU-D other expenses claimed is Rs.-17.09 crore. The details of other debits as per the audited accounts are given below.

Table 70

Details of Other expenses as per accounts for 2017-18

N		Amount
0	Particulars	Rs Crore
1	Research and Development Expenses	0.21
2	Bad and Doubtful debts written off/ provided for	8.11
3	Miscellaneous Losses and write-offs	2.76
4	Loss on account of flood and cyclone	-0.53
5	Material cost variance	-26.46
6	Sundries	0.06
7	Other debits Total (1 to 6)	-15.85
8	Prior period expenses	9.24
9	Prior period income	7.56
10	Prior period expenses (net) (8-9)	1.68
11	Other expenses (7+10)	-14.17

- 5.250 **Bad and doubtful debts written off/ provided** for represent withdrawal of credits to revenue in earlier years. The Commission has sought details of the withdrawl of credits and KSEB Ltd vide letter dated 20-10-2020 had furnished the details of consumers in which credits have been withdrawn as given below:
 - Synthite industries (HT-1A) industrial consumer No.18/1975) Rs.0.05 outstanding demand as per books withdrawn in the light fo High court of order.
 - Marayoor paperboards (P) Ltd-HT IA industrial consumer No.19/2022)Rs
 0.08 crore irrecoverable arrears written off since no properties are available for the realisation.
 - Cochin Cadalar (P) Ltd (HTIA Industrial consumer No.2/224) Rs.0.03 crore Reduction of penal interest from 24% to 12% in the wake of Hon High Court fo Kerala judgment together with interest on excess amount paid by the consumer
 - Garrison Engineer (HTB 3/1968) Rs.0.03 crore Duplication in demand due to creation of multiple bills during the initial stages of implementation of Energise software for the month of July 2010 withdrawn.'
 - CSEZ (HTB 8/4201) Rs.1.44 crore Duplication in demand due to creation of multiple bills during the initial stages of implementation of energise software for the month of July 2010 withdrawn
 - Kavitha theatre (HTB 3/233) Rs.0.02 crore duplication in demand due to creation of multiple bills during the initial stage of the implementation of energise software for the month of October 2015 withdrawn
 - Surabhi Steels pvt Ltd (HTB 27/3254) Rs.0.36 crore revision of bills consequent to reduction in contract demand. Since the consumer

- remitted a part of the amount, 0.14 crore alone was required to be withdrawn in the books.
- Mundath Storage Systems (HTB 27/3254) Rs.0.02 crore minimum demand erroneously created for 4 months in energise software for the period from January 2017 to April 2017 withdrawn. Since the consumer remitted a part of the amount, 0.01 crore alone was required to be withdrawn in the books.
- Malabar Cancer Centre LCN 20/3725 Rs.0.13 crore revision of invoices for the period from January 2003 to January 2011 made in line with change in tariff but invoices prior to April 2010 were revised manually. The Refund was made in manual DCB and not included in energise software because of which unsettled arrears reflected in the books of accounts. The mistake was rectified. Since the consumer remitted a part of the amount, 0.09 crore alonw was required to be withdrawn in the books.
- Metrolla steels HTB 24/3287 (Rs.3.49 crore+Rs.0.50 crore) Rs.3.99 crore.
 Arrears and interest for the period from 30-12-1996 to 01/2003 reworked, one time settlement granted and withdrawn, the balance of Rs.3.99 crore
- KMCT Dental College 12/4640 Rs.0.32 crore withdrawal of demand on account of unauthorised load consequent to the decision of the Appellate Authority.
- Guardian Controls Limited 21/1843 Rs.0.10 crore Penal bill on unauthorised additional load revised to 92 days against 270 days originally assessed.
- Kunnathan wood products 24/4875 Rs.0.01 crore withdrawal of demand under sec. 126 of the Electricity Act 2003 on the basis of the decision by Appellate Authority
- Metrolla Steels Ltd Meteing division HTB 24/3267 Rs.1.57 crore withdrawal of demand on account of pre-92 tariff applicability one time settlement.
- 5.251 The miscellaneous losses and write-offs represent the total compensation paid for injuries, death and danger to staff and outsiders. The material cost variance represents the difference between the actual rate at which material was procured and the standard rate at which pricing the issue of material was made. As per the ESAAR-1985, the material cost are first accounted as per the standard rates and subsequently difference between the actual and standards are accounted under material cost variance. This policy has been dispensed with consequent to the integration of SCM software (material issues) and SARAS (accounting) software on 01.07.2017 for the distribution function. The credit balance under this head is mainly on account of transactions prior to the integration of SCM & SARAS software ie till 30.06.2017.

5.252 Prior period credit/ charges: Prior period charges include both income as well as expenses relating to earlier years. During the year, this amounted to Rs. 7.56 Crore and Rs.9.24 Crore respectively; resulting in net prior period expense of Rs.1.68 Crore. In reply to the query of the Commission, KSEB Ltd vide letter dated 20-10-2020 furnished the following details

Table 71
Prior period expenses and income

	Rs.crore
A.Prior period expenses	
Short provision for power purchase	2.99
Repairs and maintenance	0.1
Interest and financing charges	0.07
Administrative expenses	0.32
Material related expenses	4.14
Other charges	1.62
Total	9.24
B.Prior period income	
Excess provision in prior periods	0.43
Other income	7.13
Total	7.56
Net prior period expenses A-B	1.68

5.253 SBU wise break up of gain under other expenses is furnished below, which may kindly be approved.

Table 72
Other expenses for 2017-18 as per petition

Item	SBU G	SBU T	SBU D	Total
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Other expenses	- 0.92	3.84	-17.09	-14.17

Analysis and decision of the Commission

5.254 KSEB Ltd booked Rs.8.11 crore under bad debts written off and the miscellaneous write off, but no details were given. The relevant provision under the Regulations is given below:

83.Provision for bad debts.– (1) The Commission may allow a provision for bad and doubtful debts in the revenue requirement of the distribution business/licensee, based on past data.

(2) The distribution business/licensee shall be allowed to provide for opening balances of receivables as per policies developed by the distribution business/licensee:

Provided that the dues actually written off shall be reduced from the provision made against outstanding receivables and shall not be charged to the revenue account of the financial year

- The Commission has analysed the details furnished by KSEB Ltd regarding 5.255 the write off of bad debts. KSEB Ltd has booked Rs.8.11 crore as bad and doubtful debts for which details were furnished. KSEB Ltd has furnished 14 cases of write off totaling to Rs.7.88 crore vide letter dated 20-10-2020. Out of this 14 cases, 4 cases of write off are based on court decisions, 5 cases on account of multiple bills issued during software implementation and balance 5 cases involve other matters. Of the above cases, two cases pertain to Metrolla steels involving Rs.3.99 crore and Rs.1.57 crore respectively. According to the details given by KSEB Ltd, the matter pertains to one time settlement. Since complete details are not furnished by KSEB Ltd to evaluate the matter, the Commission declines to admit the claim of Rs.5.56 crore (Rs.3.99 crore +1.57 crore) under this head in this truing up. However, KSEB Ltd may claim this amount as part of truing up for 2018-19, after furnishing required details. Once the details are available, the Commission will examine the matter so as to decide the admissibility of the claim.
- 5.256 Regarding material cost variance, the Commission notes that the amount is relating to the adjustment for the difference in issue price and the standard price of materials used. In this context, it is to be noted that the Commission is not in a position to ascertain the prudence of material cost variance booked under the head owing to two reasons: The first one is whether the cost relating to items of capital expenditure is booked under material cost variance i.e., whether or not the difference in cost arising out of difference in issue price and actual price of material used creating capital assets, is accounted part of material cost variance. Such items should be made as part of the capital expenditure either as additional capitalization or other adjustments and the same is not fair to include under P&L account. The second issue is whether the cost difference is with respect to specific items relating to specific consumer or a category of consumers. In such cases also the same is to be recovered from such identifiable beneficiaries/consumers and not to be made part of overall expenditure so as to subsidize the such consumers. Hence in the Truing up order for 2016-17 the Commission directed as follows:

"In the absence of details furnished by the KSEB Ltd, the Commission directs that in future, while truing up, such details as mentioned above should be furnished as part of the truing up petition in the absence of such information the Commission shall be constrained to disallow the entire expenditure disallowed. With the above direction, material cost variance of Rs.64.32 crore booked for the year 2016-17 is allowed as a onetime measure. "

- 5.257 However, KSEB Ltd stated that the policy of booking material cost variance has been dispensed with consequent to the integration of SCM software and accounting software on 01-07-2017 for the distribution function. Accordingly, the credit balance is mainly on the transaction prior to integration of SCM and SARAS software ie., prior to 30-06-2017. Considering the details, the Commission allow the same for 2017-18.
- 5.258 Next item is relating to 'income and charges relating to prior periods. KSEB Ltd in the letter dated 20-10-2020 has furnished the details of prior period expenses. Of the expenses Rs.0.49 crore pertains to prior period expenses relating to R&M, interest and financing charges and A&G expenses. Since these expenses are allowed at normative level, the claim of Rs.0.49 crore is not allowed under these head.
- 5.259 No adjustment is made under Other income relating to previous years (Rs.7.56crore) and Other charges relating to previous years (Rs.1.62 crore) for want of details. Hence the total prior period expenses will be Rs.1.19 crore only (9.24-0.49=8.75-7.56). The total deductions allowed under other expenses is as shown below:

Table 73 Other expenses approved for 2017-18

No	Particulars	As per Petition for KSEB Ltd (Rs. Crore)	Approved in Truing up for KSEB Ltd (Rs.crore)	
1	Research and Development Expenses	0.21	0.21	
2	Bad and Doubtful debts written off/ provided for	8.11	2.55	
3	Miscellaneous Losses and write-offs	2.76	2.76	
4	Loss on account of flood and cyclone	-0.53	-0.53	
5	Material cost variance	-26.46	-26.46	
6	Sundries	0.06	0.06	
7	Other debits Total (1 to 6)	-15.85	-21.41	
8	Prior period expenses	9.24	8.75	
9	Prior period income	7.56	7.56	
10	Prior period expenses (net) (8-9)	1.68	1.19	
11	Other expenses (7+10)	-14.17	-20.22	

- 5.260 The Commission has approved the other expenses booked under SBU-G and SBU-T as per the petition. Hence the above adjustments is entirely made under SBU-D. As per the petition, the Other expenses booked under SBU-D is Rs.(-)17.09 crore. Considering the adjustments, the other expenses approved will be Rs.(-)23.14 crore.
- 5.261 Considering the above, other expense of Rs. (-)23.14 crore is approved for the year 2017-18.

Carrying cost for past revenue gaps

KSEB Ltd in the petition has mentioned that borrowing had to be resorted to for making good the financial difficulties caused by uncovered revenue gap of the earlier years. According to KSEB Ltd the approved revenue gap as per trued up of accounts till 2016-17 was Rs.6739.13 crore Based on the methodology adopted by the Commission in TU 2016 & TU 2017, the average GPF balance of Rs.2118.63 Crore has been excluded from the approved gap to determine the revenue gap for which carrying cost is eligible. Actual average interest on loans during 2017-18 for SBU D had been 9.62%. Accordingly, a sum of Rs.444.49 Crore is claimed as carrying cost for the year 2017-18 being 9.62% of Rs.4620.50 Crore as detailed below:

Table 74
Computation of carrying cost on approved revenue gap as per petition

	Rs.crore
1 Total un bridged revenue gap as on 31-03-2011	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
4. Remand order dated 09.05.17-2009-10	107.90
5. Remand order dated 19.05.17-2010-11	204.70
6. True up order 2013-14 dated 20.06.2017	195.50
7. RP 2/2017 dated 07.09.2017 on TU 2011-12	4.96
8. True up order 2015-16 dated 21.08.2018	202.97
9. True up order 2016-17 dated 14.09.2018	1031.06
10. RP 3/2019 on TU 2016-17	47.99
Total trued up revenue gap	6739.13
Less: Average PF balance (2029.93+2207.33)/2	2118.63
Net revenue gap	4620.50
Carrying cost at average interest rate of 9.62% on above	

5.263 KSEB Ltd further submitted that the Hon'ble APTEL, as per judgment dated 08.04.2015 in Appeal 160 of 2012 and batch has laid down the principle based on which carrying cost is to be allowed. The decision was reiterated in judgment dated 22.04.2015 in Appeal 174 of 2013 as well. The same is reproduced below:

- 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 the revenue gap up to the middle of the year in which the same is proposed to be recovered. This is not correct. The interest to be calculated for the period from the middle of the financial year in which the revenue gap had occurred up to the middle of the financial year in which the recovery has been 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 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 financial year in which its recovery is allowed. Therefore 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 financial 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 balances, 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 2013-14. Therefore carrying cost would be calculated from the middle of FY 2010-11 to middle of FY 2013-14 ie 3 years.
- 5.264 The Revenue gap for the year 2017-18 (before carrying cost on revenue gap during 2017-18) has been Rs.1270.69 Crore. In view of the above judgment, KSEB Ltd requested to approve carrying cost for the revenue gap for 2017-18 also from the middle of the year at Rs.61.12 Crore.
- 5.265 KSEB Ltd requested that the Commission to approve Rs.505.61 Crore (Rs.444.49 Crore+Rs.61.12 Crore) towards carrying cost for 2017-18 under SBU D.

Objections of the stakeholder

5.266 HT-EHT Association stated that while approving the carrying cost, the amortization amount made in *Suo motu* order is to be considered. The Association estimated revenue surplus for the current year 2017-18. As per their calculation, only Rs.444 crore only to be allowed.

Analysis and decision of the Commission

5.267 The Commission has examined the claim for allowing carrying cost for the accumulated revenue gap. The revenue gap accumulated over the years is as shown below:

Table 75
Approved Revenue Gap over the years

Approved Revenue Gap over the years					
Year	Net Gap as per true up	Remarks			
	(Rs crore)				
Revenue gap approved after truing up till 2010-11	424.11	True up order 2010-11 dated			
Additional gap approved based on Remand order	107.90	Remand Order on truing up			
Additional gap approved based on Remand order	204.70	Remand Order on truing up			
Total Revenue gap till 2010-11	736.71				
Revenue gap after Truing up for 2011-12	1,386.97	True up order for 2011-12 dated			
Revenue gap for 2011-12 as per RP 2/2017	4.96	Review order dated 07-09-2017			
Revenue gap after Truing up for 2012-13	3,132.97	True up order for 2012-13 dated			
Revenue gap after Truing up for 2013-14	195.50	True up order for 2013-14 dated			
Reveneu gap /Surplus for 2014-15		True up order not issued yet due			
Revenue gap for 2015-16	202.97	True up order for 2015-16 dated			
Revenue gap for 2016-17	1,031.06	True up order for 2015-16 dated 21-8-2018			
Revenue gap for 2016-17 as per RP 3/2019	47.99	Review order dated 16-05-2019			
Asset additions & additional revenue gap 2016-17	39.61	OP64/2020 dated [12.56+27.05] =39.61			
Total revenue gap till 1-4-2017	6,778.74				
Less Average GPF balance (2029.93+2207.33)/2	-2,118.63				
Less Balance Security Deposit Available (after working capital requirements)	-1,019.70				
Balance Revenue gap	3,640.41				
Interest Rate applicable	9.47%				
Carrying cost for unbridged revenue gap as on 1-4-2017	344.75				

Rate of carrying cost

- 5.268 Carrying cost is to be allowed considering the cost of funds actually incurred by the entity for funding the revenue gap. The average rate of interest for the loans for the year 2017-18 is 9.47%.
- 5.269 In this context, the Commission is also required to examine the availability of funds to KSEB Ltd for meeting the revenue gap. It is to be noted that, the

Commission is allowing the interest on Provident Fund as part of the interest and financing charges. Further, balance security deposit after meeting the working capital requirements is also available. Hence while deciding the outstanding revenue gap for which carrying cost is to be allowed, the availability of funds in the form of GPF & security deposit needs to be considered and reduced from this requirement. Accordingly, as shown above, the balance revenue gap after accounting for GPF and balance security deposit is Rs.3640.41 crore at an interest rate of 9.47%.

- 5.270 The carrying cost for the year 2017-18 is estimated as Rs.344.75 crore
- 5.271 KSEB Ltd also sought carrying cost for the revenue gap for 2017-18 also on an average basis. The same is estimated as shown below:
- 5.272 Approved revenue gap before carrying cost for current year is Rs.80.32 crore. The average carrying cost for the year is Rs.3.80 crore considering the interest rate of 9.47%.

Table 76
Carrying cost for the revenue gap 2017-18

Carrying cost for Current year Revenue gap	Rs.crore
Carrying cost the revenue gap at the beginning of 2017-18	344.75
Revenue gap before the carrying cost (current year)	80.32
Average Interest charges @9.47%	3.80
Total carrying cost	348.55

5.273 Thus the total carrying cost for the year is Rs.348.55 including current year carrying cost of Rs.3.80 crore.

Non Tariff income

5.274 As per KSEB Ltd's audited accounts, the non Tariff income of SBU-D is Rs.555.14 crore and as per the petition the same is Rs.513.55 crore. KSEB Ltd clarified that the difference is due to the cost of LED bulbs (Rs.41.59 crore) booked under A&G expenses which is to be deducted from the Non-Tariff income. The details of non-tariff income are shown below:

Table 77
Non Tariff Income of SBU-D for 2017-18

	2017-18			
Particulars	Approved in Tariff Order	Audited	Truing Up requirement	
	Rs. Crore	Rs.crore	Rs.crore	
Wheeling charges recovery		0.10	0.10	
Recov. For Theft Of Power/Malpractices		6.05	6.05	

Other item, SC fee etc		31.28	31.28
TF/RF		19.03	19.03
Other levies on fees		13.80	13.80
LE/SC Minimum		0.98	0.98
Proce fee power allocation		2.39	2.39
STOA Reg and application		0.15	0.15
STOA Open access charges		13.77	13.77
Reg & Application fee grid connectivity		2.09	2.09
Energization charges		0.52	0.52
Misc chgs-PF penalty		22.15	22.15
Meter rent		93.17	93.17
RE Charges		55.43	55.43
Int on loans and adv to licensees		0.16	0.16
Int on adv to suppliers & contractors		12.10	12.10
Interest on staff loan		0.15	0.15
Rebate PFC loan		0.13	0.13
Rebate on pop		132.92	132.92
Int on advance to KHTC		0.04	0.04
Interest from banks FD		2.52	2.52
Hire charges from contractors		0.01	
		21.01	0.01 21.01
Sale of scrap			
Sale of tender forms		2.21	2.21
Rental from staff quarters		0.22	0.22
Rental from contractors		0.01	0.01
Rent from others		3.44	3.44
Excess found on PV		0.02	0.02
Pole rent Cable TV Operators		36.42	36.42
Infra dev charges and sup visn chgs		5.18	5.18
SD Forfeited Sale of trees		13.40	13.40
		0.03	0.03
Usufructs		0.00	0.00
Penalty/LD from contractors/suppliers		5.92	5.92
Int/penaly on pole rent SD		1.47	1.47
Outside students-project		0.41	0.41
Fee for providing information		0.02	0.02
6% Material cost RAPDRP Storage &cont		0.04	0.04
Revenue Energy audit consultancy		0.05	0.05
Rent from office cum complex		0.25	0.25
Optical fiber cable leasing		0.08	0.08
Testing fee from contractors		0.12	0.12
Commission For Collection Of Ele. Duty		7.94	7.94
Commisson For Collection Of Supply Surcharges		0.13	0.13
Others		15.04	15.04
Sale of LED bulbs			
Total	449.00	32.66 555.14	32.66 555.14
Less: Cost of LED Bulbs	449.00	555.14	41.59
Non Tariff Income			513.55

5.275 KSEB Ltd stated that the write back of depreciation on account of depreciation for the assets created out of contribution and grants was removed from the miscellaneous receipts (in the accounts the same is included). Hence, the

same is not needed and not included under the non-Tariff income. So an amount of Rs.513.55 crore (excluding the claw back) alone is included in the petition.

Objections of stakeholders

5.276 There were no specific objections raised by stakeholders regarding the non-tariff income.

Provisions in the Regulations

5.277 As per Regulation 84(1), the amount of non tariff income of SBU-D is to be deducted from aggregate revenue requirements. The Regulation is quoted below:

84. Non-tariff income.— (1) The amount of non-tariff income of the distribution business/licensee as approved by the Commission shall be deducted from the aggregate revenue requirement in determining the tariff of the distribution business/licensee.

Regulation 84(2) provides the indicative list of items under non tariff income.

- "(2) The indicative list of items to be considered as non-tariff Income are as under:-
 - (i) interest on staff loans and advances;
 - (ii) income from statutory investments;
 - (iii) income from trading;
 - (iv) income from rent of land or buildings;
 - (v) income from sale of scrap;
 - (vi) income from staff welfare activities:
 - (vii) rental from staff quarters;
 - (viii) excess found on physical verification;
 - (ix) interest on investments, fixed and call deposits and bank balances;
 - (x) interest on advances to suppliers/contractors;
 - (xi) income from hire charges from contractors and others;
 - (xii) income due to right of way granted for laying fibre optic cables/co-axial cables on distribution system;
 - (xiii) income from advertisements, etc.;
 - (xiv) miscellaneous receipts;
 - (xv) commission for collection of electricity duty;
 - (xvi) interest on delayed or deferred payment on bills;
 - (xvii) rebate from central generating stations;
 - (xviii) revenue from late payment surcharge;
 - (xix) recovery of theft and pilferage of energy; and

(xx) meter/metering equipment/service line rentals.

Analysis and decision of the Commission

- 5.278 The Commission has examined the details furnished by KSEB Ltd. The Commission notes that there is slight increase in in the non-tariff income as compared to previous year for KSEB Ltd (Rs.537.51 crore for 2016-17 against Rs.555.14 crore in 2017-18). In the petition, KSEB Ltd has also stated that an amount of Rs. 41.59 crore incurred as the expenses for the distribution of LED bulbs was included under A&G expenses. Since the O&M expenses are allowed as per the norms, this one time expense towards distribution of LED bulbs will not be covered under the head. Hence, KSEB Ltd requested that the income net of sale of LED bulbs is to be considered for truing up.
- 5.279 The Commission has examined the matter. As per the details furnished by KSEB Ltd, the income received from sale of LED bulbs Rs.32.66 crore (Rs.45.94 crore in 2016-17) is accounted under non-tariff income for KSEB Ltd:
- 5.280 As mentioned in the petition, an amount of Rs.41.59 crore (Rs.23.59 crore for 2016-17) is included under the A&G expenses of KSEB Ltd. Hence, the Commission is of the view that the inclusion of LED bulb expenses of Rs.41.59 crore under A&G expenses is not correct. It is actually supplementary or incidental to KSEB Ltd's electricity distribution business. Hence, expenses on this count is to be reduced from the income received from the sale of LED Bulbs and the resultant income is to be treated as Non-Tariff Income of SBU-D. As mentioned above, the Commission considered the adjustments towards LED bulbs distribution in the non-tariff income.

Table 78

Non Tariff income approved for 2017-18

	As per petition (Rs. crore)	Approved in the truing up (Rs.crore)
Total Non Tariff Income as per accounts	555.14	555.14
Less Expenses towards LED distribution	41.59	41.59
Net Non-Tariff income	513.55	513.55

5.281 Accordingly, Rs.513.55 crore is approved as non-Tariff income for the year 2017-18 for the purpose of truing up.

Summary of Truing up for SBU-D

- 5.282 The summary of truing up for SBU-D is as shown below:
 - (a) Cost of generation or transfer cost of SBU-G

The approved cost of SBU-G or transfer Cost of SBU-G to SBU-D towards generation of power is Rs.497.50 crore.

(b) Intra state Transmission charges or transfer cost of SBU-T

The approved cost of SBU-T or transfer Cost of SBU-T to SBU-D towards intra state transmission charges is Rs.765.77 crore.

(c) Cost of power purchase

The approved cost of power purchase is Rs.7348.15 crore.

(d) Employee cost

The approved level of employee cost for SBU-D is Rs.1637.34 crore

(e) R&M Expenses

The approved level of R&M expenses for SBU-D is Rs.225.92 crore

(f) A&G Expenses

The approved level of A&G expenses for SBU-D is Rs.94.96 crore

(g) Interest and finance charges

The approved level of interest and financing charges including interest on working capital for SBU-D is for Rs.1129.20 crore

(h) Carrying cost for approved revenue gap

The carrying cost for approved revenue gap for SBU-D is Rs.348.55 crore

(i) Depreciation:

The approved level of depreciation for SBU-D is Rs.69.12 crore

(j) Return on equity:

The approved level of RoE for SBU-D is Rs.253.50 crore

(k) Other expenses

The approved level of Other expenses for SBU-D is Rs. (-)23.14 crore

5.283 Thus, the total annual revenue requirements approved for the year 2017-18 for SBU-D is as shown below:

Table: 79
Aggregate Revenue Requirements approved for SBU-D for 2017-18

riggrogato rtevenae rtequiremente a	SBU-D 2017-18		
Particulars	Approved in Suo motu ARR (Rs. Crore)	As per Petition (Rs. Crore)	Approved in true up (Rs. Crore)
Cost of Generation	677.48	581.91	497.50
Cost of intra state transmission	905.20	881.87	765.77
Power Purchase	7,339.34	7,398.67	7,348.15
Employee expense	1,133.75	1,831.53	1,637.34
R&M expenses	208.04	205.77	225.92
A&G expenses	98.57	290.77	94.96
Total O&M expenses	1,440.36	2,328.07	1,958.22
Unfunded Actuarial Liabilities		450.84	169.68
Interest and financing charges	998.68	1,648.59	1,129.20
Carrying cost on Accumulated Revenue gap		-	348.55

Depreciation	58.12	236.78	69.12
RoE	68.64	253.50	253.50
Other expenses		-17.09	-23.14
Gross Expenses	11,487.82	13,812.41	12,564.73
Non-Tariff income	449.00	513.55	513.55
Net Annual Revenue Requirements	11,038.82	13,298.86	12,051.18

Revenue from Sale of Power

5.284 The SBU-D, is the largest distribution licensee among all the 10 distribution licensees in the State. The total revenue for the sale of 20998.21 MU as per the petition is Rs.12057.26 crore. Of this, the sale within the State was 20880.70MU fetching an income of Rs.12005.98 crore. A further 117.51 MU was sold outside the State earning an amount of Rs. 51.18 crore. Further, KSEB Ltd booked an amount of Rs.0.09 crore under miscellaneous item. The power factor incentive distributed during this period was Rs.90.21 resulting in a total power sale of operational income of Rs.11967.05 crore. The average tariff was Rs.5.70 as shown in the table below:

Table 80
Revenue from Sale of Power for SBU-D

No	Category	Energy sales (MU) Rever		Revenue (I	Rs. Crore)	Average tariff (Rs./kWh	
		Approved	Actual	Approved	Actual	Approved	Actual
1	Domestic	11402.4	10574.84	4290.74	4316.99	3.76	4.08
2	Industrial	1116.63	1112.33	665.5	809.19	5.96	7.27
3	Agriculture	287.4	346.03	68.69	63.29	2.39	1.83
4	Commercial	3250.84	3063.48	2696.72	2876.69	8.30	9.39
5	Public Lighting	390.67	373.48	146.51	169.85	3.75	4.55
	HT Total	3448.06	3494.04	2636.05	2601.82	7.65	7.45
6	EHT Total	1059.7	1041.94	598.73	623.55	5.65	5.98
7	Railway Traction	242.03	265.8	139.17	160.01	5.75	6.02
8	Bulk Supply	642.3	608.77	369.31	384.59	5.75	6.32
9	Total sales (within state)	21840.03	20880.7	11611.42	12005.98	5.32	5.75
10	Interstate sale		117.51		51.18		4.36
11	Misc				0.09		
12	Total		20998.21		12057.26		5.74
13	Power Factor incentive				90.21		
14	Revenue from Sale of power		20998.21		11967.05		5.70

5.285 KSEB Ltd further stated that the revenue from sale of Power is the billed demand inclusive of the subsidy allowed by the Government for domestic

consumers having monthly consumption up to 120 units and for LT Agricultural consumers.

Table 81
Income from sale outside for 2017-18

Month	Nature of transaction-Bilateral /Exchange	Income	average sale price
	MU	Rs. Crore	Rs/Unit
April			
May			
June	0.37	0.15	4.06
July	0.20		
August			
September	0.06	0.02	3.37
October	18.68	8.08	4.33
November	0.97	0.37	3.82
December	8.40	3.72	4.43
January	37.08	16.03	4.32
February	34.63	14.79	4.27
March	17.12	8.02	4.68
TOTAL	117.51	51.18	4.36

Objections of stakeholders

5.286 There were no specific objections raised by consumers regarding non-tariff income.

Analysis and decision of the Commission

- 5.287 As per the petition, the revenue from tariff for the year was Rs.11,967.05 crore for SBU-D. The licensee has given the tariff category wise sales and revenue realization for the year 2017-18. The average revenue earned per unit of sale was worked out to be Rs.5.70, the least being Rs.1.83 per unit. and the highest average tariff charged to LT Commercial consumers (Rs.9.39/unit). Since the ultimate sale to the consumers is effected through SBU-D, the entire revenue from sale of power is realized by SBU-D.
- 5.288 In addition to the revenue from sale of power within the State, KSEB Ltd also sold 117.51 MU outside the State for an amount of Rs.51.18 crore at an average rate of Rs.4.36/unit. After allowing a power factor incentive of Rs.90.21 crore, the total revenue from sale of power including miscellaneous revenue of Rs.0.09 crore was Rs.11967.05 crore.

5.289 After carefully examining the details furnished by KSEB Ltd, the Commission hereby approves the revenue from sale of power as Rs.11967.05 crore as furnished by KSEB Ltd for the year 2017-18.

Approved Revenue gap for the year 2017-18

5.290 Based on the above analysis, the approved revenue gap for the year 2017-18 for SBU-D is as shown below:

Table 82
Revenue gap approved SBU-D approved for 2017-18

	SBU-D				
	Approved in Suo motu ARR (Rs. Crore)	As per Petition (Rs. Crore)	Approved in true up (Rs. Crore)		
Annual Revenue Requirements	11,038.82	13,298.86	12,051.18		
Revenue from sale of power	11,529.74	11,967.05	11,967.05		
Revenue gap	490.92	-1,331.81	-84.13		

5.291 As shown above, the total revenue gap after truing up is Rs.84.13 crore as against Rs.1331.81 crore as per the petition for truing up of accounts for 2017-18

CHAPTER - 6 CONSOLIDATED TRUING UP ACCOUNTS OF KSEB LTD

Introduction

6.1 This chapter presents the consolidated details of the truing up for 2017-18 of KSEB Ltd. A comparison of the ARR&ERC approved in the Suo motu order dated 17-4-2017, consolidated audited accounts as well as the truing up petition is shown below:

Table 1
Summary of the Audited Accounts and Truing up petition the year 2017-18

,	initially of the Addition Accounts and Training up position the year 2017 To			
Particulars	Approved in suo motu Order	As per Annual Accounts	Truing up petition	
	Rs. Crore	Rs.crore	Rs.crore	
Generation Of Power	-	2.08	2.08	
Purchase of power	7,339.34	7,526.03	7,398.67	
Interest & Finance Charges	1,506.55	1,814.69	2,000.05	
Depreciation	414.80	803.71	536.62	
Employee Cost (excluding terminal benefits)	4 707 07	2,638.06	2,195.76	
Repair & Maintenance	1,737.27	277.35	277.35	
Administration & General Expenses		530.38	398.58	
Other Expenses	-	-142.76	-14.17	
Interest on unfunded Master trust liability	1	ı	531.39	
Over achievement of loss reduction claim			49.27	
Net Expenditure (A)	10,997.96	13,449.54	13,375.60	
Statutory Surplus/ Roe (B)	489.86	ı	489.86	
ARR(C) = (A) + (B)	11,487.82	13,449.54	13,865.46	
Non-Tariff Income	449.00	608.19	566.60	
Revenue from Tariff	11,529.74	12,057.26	11,967.05	
Total Income (D)	11,978.74	12,665.45	12,533.65	
Revenue surplus (Gap) (D-C)	490.92	(784.09)	(1,331.81)	

6.2 The revenue surplus approved by the Commission in the Suo motu ARR order dated 17-4-2017 for 2017-18 was Rs.490.92 crore. The revenue gap as per the Petition for truing up of accounts for the year 2017-18 is Rs 1331.81 crore and that of the audited accounts is Rs.784.09 crore. The difference between the accounts and the petition is mainly on account of the Return on Equity and non-tariff income booked as per the truing up of accounts. The SBU wise ARR & ERC furnished in the petition is as shown below:

Table 2
SBU wise ARR&ERC for 2017-18 as per truing up petition

Particulars	SBU G	SBU T	SBU D	Total
	Rs. crore	Rs. crore	Rs. crore	Rs. crore
Revenue from sale of power	581.91	881.87	11,967.05	11,967.05
Non-Tariff income	24.99	28.06	513.55	566.60
Total Revenue	606.90	909.93	12,480.60	12,533.65
Cost of Generation	-	-	581.91	-
Cost of intra state transmission	-	1	881.87	ı
Fuel cost	2.08	-	-	2.08
Power Purchase	-	-	7,398.67	7,398.67
Employee expense	116.77	247.47	1,831.53	2,195.77
R&M expenses	29.30	42.27	205.77	277.34
A&G expenses	25.11	82.70	290.77	398.58
O&M for new Stations	-	-	-	-
Total O&M expenses	171.18	372.44	2,328.07	2,871.69
Unfunded Actuarial Liabilities	27.99	52.56	450.84	531.39
Interest and financing charges	146.71	204.75	1,648.59	2,000.05
Carrying cost on Accumulated Revenue gap	-	1	1	-
Depreciation	143.48	156.36	236.78	536.62
RoE	116.38	119.99	253.50	489.87
Other expenses	-0.92	3.84	-17.09	-14.17
Add Gains from Reduction in T&D Loss	-	-	49.27	49.27
Gross Expenses	606.90	909.94	13,812.41	13,865.47
Revenue gap	-	-0.01	-1,331.81	-1,331.82

Expenses of KSEB Ltd

6.3 As per the petition, KSEB Ltd has sought expenses under various head as shown below:

Table 3
Expenses of KSEB Ltd for 2017-18

Particulars	Approved in Suo motu ARR order	As per accounts	As per Truing up petition
	(Rs.crore)	(Rs. crore)	(Rs. crore)
Generation of Power	-	2.08	2.08
Purchase of power	7,339.34	7,526.03	7,398.67
Interest & Finance Charges	1,506.55	1,814.69	2,000.05

Depreciation	414.80	803.71	536.62
Employee Cost (excluding terminal benefits)	4 707 07	2,638.06	2,195.76
Repair & Maintenance	1,737.27	277.35	277.35
Administration & General Expenses		530.38	398.58
Other Expenses	1	-142.76	-14.17
Interest on unfunded Master trust liability	-	-	531.39
Over achievement of loss reduction claim			49.27
Net Expenditure (A)	10,997.96	13,449.54	13,375.60
Statutory Surplus/ Roe (B)	489.86	-	489.86
ARR (C) = (A) + (B)	11,487.82	13,449.54	13,865.46

Generation of Power

6.4 KSEB Ltd in their petition sought Rs. 2.08crore towards fuel cost for diesel generating stations. After analyzing the matter in detail, the Commission in Chapter 2 of this order has allowed the fuel cost of Rs.2.08 crore as per the accounts.

Cost of Generation of Power or Transfer cost of SBU-G

6.5 The Cost of generation of power is the transfer cost booked by SBU-G to SBU-D. After examining various expenses, the Commission has determined the transfer cost of Generation or the net cost of generation of power of SBU-G at Rs.497.50 crore as against Rs.581.91 crore sought by KSEB Ltd. Details in this regard are shown in Chapter 2 of this Order.

Cost of Intra-state Transmission or Transfer cost of SBU-T

6.6 The cost of intra state transmission is the transfer cost of SBU-T is the approved ARR of SBU-T. After examining various expenses, the Commission has determined the transfer cost of Transmission or the net cost of intra transmission of power of SBU-T at Rs.765.77 crore as against Rs.881.87 crore sought by KSEB Ltd. Details in this regard are shown in Chapter 3 of this Order.

Cost of purchase of power

6.7 The cost of power purchase including intra-state transmission charges as per the petition is Rs.7398.67 crore. Of this, the inter-state transmission charges paid to PGCIL is Rs.542.52 crore. As mentioned in Chapter 5, the

Commission after examining the details has approved the cost of power purchase at Rs.7348.15 crore for the year 2017-18

6.8 The summary of power purchase for the year 2017-18 is as shown below:

Table 4
Power Purchase for the year 2017-18

	As per petition			Арр	proved in Tru	iing up
Station	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)	Energy* (MU)	Cost (Rs Crore)	Average Rate (Rs./kWh)
Total- CGS	10,150.98	3,561.67	3.51	10,150.98	3,561.67	3.51
Total Captiuve/Co gen	258.57	98.77	3.82	258.57	90.87	3.51
Total-Thermal	66.17	201.15	30.40	66.17	201.15	30.40
Total LTA	5,573.47	2,040.74	3.66	5,573.47	2,040.74	3.66
Total Unapproved PSA	1,176.54	535.66	4.55	1,176.54	493.02	4.19
Total Short term	787.77	288.69	3.66	787.78	288.69	3.66
Total Swap/DSM	703.74	129.49	1.84	703.74	129.49	1.84
Transmission charges		542.52			542.52	
Total	18,717.24	7,398.68	3.95	18,717.24	7,348.15	3.93
Add Provision for Jindal		44.63				
Add Provision for Jhabua		90.62				
Less provision for Inox		7.89				
As per Accounts		7,526.04				

6.9 The total power purchase cost approved for 2017-18 is Rs.7348.15 crore as against Rs.7398.68 crore as per the petition. The difference in the approved power purchase cost and the actual as per the petition is on account of the reduction of the cost allowed for unapproved PPAs

O&M Expenses

6.10 As per the petition, the O&M expenses claimed by KSEB Ltd is Rs.2871.69 crore, which is inclusive of employee costs, repair and maintenance expenses and administration and general expenses. The O&M expense claimed as per the petition is the actual amount booked in the accounts. The details are given below:

Table 5
O&M expenses claimed for 2017-18

Particulars	Approved in the Suo motu Order (Rs crore)	As per Truing up Petition (Rs. crore)
Employee Cost		2,195.77
Repair & Maintenance		277.34
Administration & General Expenses		398.58
Total O&M Expenses	1596.15	2871.69

Employee expenses

6.11 The total employee cost claimed by KSEB Ltd in this petition is Rs.2195.77 crore, which excluding terminal benefits. As mentioned in chapter 2, 3 & 5, the Commission has adhered to the directions fo Hon'ble APTEL and Hon'ble High Court of Kerala and allowed Rs.1963.01 crore (Rs.2195.77 crore – Rs.232.76 crore) employee expenses excluding terminal benefits for KSEB Ltd. On a prorata basis, the employee cost allocated SBU-G, SBU-T and SBU-D as shown below:

Table 6
SBU wise Employee cost approved for 2017-18

	SBU G	SBU T	SBU D	KSEB Ltd
Net Employee costs as per petition	116.77	247.47	1831.53	2195.76
Net cost of additional employees as per the letter dated 20- 10-2020				232.76
Net employee cost of SBUs as a percentage of KSEB Ltd	5.32%	11.27%	83.41%	100%
Employee cost Allowable	104.43	221.24	1637.338	1,963.01

R&M Expenses

6.12 The total R&M expenses for KSEB Ltd as per the petition were Rs.277.34 crore. The SBU wise split up details shows that for R&M expenses for SBU-G is Rs.29.30 crore, and that of SBU-T is Rs.42.27 crore and that of SBU-D is Rs.205.77 crore. After examining the details furnished by KSEB Ltd, the R&M expenses approved as per the norms given in the Regulations are as shown below:

Table 7
Approved R&M expenses for 2017-18

Approved Rain expenses for 2011 10				
	As per truing up	Approved in the truing		
	petition	up		
	(Rs.crore)	(Rs. crore)		
SBU-G	29.30	20.99		
SBU-T	42.27	74.73		
SBU-D	205.77	225.92		
KSEB Ltd	277.34	321.64		

As per the Regulations, R&M expenses for the year is 2017-18 is to be allowed as per the norms. The R&M expenses existing generating stations of SBU-G is specified in the Regulations as Rs.20.99 crore. In the case of SBU-T, O&M expenses are specified based on the number of bays and length of transmission lines in circuit km. For SBU-D, R&M expenses are specified in the Regulations based on the parameters such as number of consumers, number of distribution transformers, length of HT lines and energy sales. Thus, based on the parameters existing at the beginning of the year, R&M costs are determined in a normative basis. Accordingly, the KSEB Ltd is eligible for R&M expenses of Rs.321.64 crore for 2017-18 as against Rs.277.34 crore as per the petition. Thus the total approved R&M expenses as per the norms is Rs.44.30 crore or about 16% more than the amount claimed in the petition.

A&G Expenses

Another component of O&M expense is A&G expenses. The A&G expenses of Rs.398.58 crore booked is inclusive of Electricity Duty amounting to Rs.115.27 crore under Section 3 of the Kerala Electricity Duty Act 1963. The Electricity Duty is not allowable as per the provisions of the Kerala Electricity Duty Act. Another main component under A&G expenses is operating expenses, which is the payment towards contract persons employed. The A&G expenses are also allowed on a normative basis as per the parameters given in the Regulations. The SBU wise A&G expenses as per the petition and approved expenses are given below:

Table 8
A&G expenses for the year 2017-18

	As per truing up petition	Approved in truing up
	(crore)	(R. crore
SBU-G	25.11	4.86
SBU-T	82.70	17.41
SBU-D	290.77	94.96
KSEB Ltd	398.58	117.24

6.15 The A&G expenses based on the parameters as per the Regulations is Rs.117.24 crore.

O&M Expenses for New Generating Stations

6.16 In their truing up petition, KSEB Ltd has sought O&M expenses for the new generating stations commissioned after the notification of the Regulations. As mentioned in Chapter 2, O&M expenses approved for the new generating stations *is Rs.8.08 crore*.

Total O&M expenses

6.17 Total O&M expenses approved for the year 2017-18 is as shown below

Table 9
SBU wise approved O&M Expenses for 2017-18

	SBI	J-G	SB	BU-T	SB	U-D	KSE	B Ltd
	As per truing up petition	Approved in Truing up	As per truing up petition	Approved in Truing up	As per truing up petition	Approved in Truing up	As per truing up petition	Approved in Truing up
	(Rs.	(Rs.	(Rs.	(Rs.	(Rs.	(Rs.	(Rs.	(Rs.
Employee Costs (Excluding terminal benefits)	crore) 116.77	crore) 104.43	247.47	221.24	crore) 1831.53	crore) 1,637.34	crore) 2,195.77	crore) 1,963.01
R&M Expenses	29.3	20.99	42.27	74.73	205.77	225.92	277.34	321.64
A&G expenses	25.11	4.86	82.7	17.41	290.77	94.96	398.58	117.24
O&M Expenses for New stations	8.20*	8.08					8.20*	8.08
Total O&M Expenses	179.38	138.36	372.44	313.39	2,328.07	1,958.22	2,871.69	2,401.88

^{*}Not included in the revenue gap calculations

Interest and financing charges

Interest charges include, interest on long term and short term loans, interest on GPF, interest on security deposits, interest on working capital, interest on Master Trust funds, and other interest charges. Interest and finance charges as per the accounts for KSEB Ltd as a whole were Rs.1814.69crore and Rs.2000.05 crore is claimed in the petition. After examining the details of asset additions made during the year furnished by KSEB Ltd, the Commission deferred the approval of interest charges for loans for addition of assets for want of necessary details as per the provisions of the Regulations. The Commission may consider the same appropriately as and when the required information is furnished by KSEB Ltd. As mentioned in chapter 2, 3 & 5, the other interest charges are approved as per accounts. A summary of interest and financing charges approved is as shown below:

Table 10
Summary of interest and financing charges approved for 2017-18

Particulars	SBU-G	SBU-T	SBU-D	Total
	(Rs.crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Interest on Loan	65.91	80.56	125.15	271.63
Interest on Working capital	6.47	8.04	0	14.51
Interest on security deposits			174.95	174.95
Interest on GPF	8.23	15.46	132.57	156.26
Interest on Master Trust Bonds	42.90	80.55	690.95	814.40
Other Interests	0.76	0.49	5.58	6.83
Total	124.27	185.10	1,129.20	1,438.57

6.19 Total interest charges allowable for the three SBUs for the year 2017-18 is Rs.1438.57 crore.

Depreciation

6.20 KSEB Ltd in the petition has claimed depreciation of Rs.536.62 crore for the year 2017-18.

Table 11
SBU wise depreciation as per accounts and as per petition for the year 2017-18

						,
	GFA as per accounts	GFA after deducting enhanced value	Depreciation as per accounts	Depreciation %	Depreciation as per petition	depreciation %
	Rs.crore	Rs.crore	Rs.crore		Rs.crore	
SBU-G	16,880.05	4,891.07	180.01	3.68%	143.48	2.93%
SBU-T	4,719.64	4,719.64	232.87	4.93%	156.36	3.31%
SBU-D	7,515.45	7,515.45	390.83	5.20%	236.78	3.15%
KSEB Ltd	29,115.14	17,126.16	803.71	4.69%	536.62	3.13%

- 6.21 Depreciation as per accounts has been worked out in line with IND AS and claw back depreciation was determined and credited to Claw back of grant under Note 33 (Changes in fair valuation and adjustments). But, as per MYT Regulation for the control period 2015-18, depreciation is allowable as per the provisions contained in the Tariff Regulations, 2014 in which applicable rates as well as methodology to be followed are specified therein.
- 6.22 As per the petition, the depreciation claimed for SBU-G for the year 2017-18 is Rs.143.48 crore, of transmission is Rs.156.36 crore and of Rs. 236.78 crore
- 6.23 As per the provisions of the Regulations, no depreciation is allowed on the assets created out of contribution and grants and the write off, if any, of the consumer contribution and grants at the time of the transfer scheme is also

not to be considered. Based on the provisions of the Regulations, depreciation approved for each SBU for the year 2017-18 is as shown below:

Table 12
Allowable depreciation for the year 2017-18

Depreciation for Assets 2017-18	SBU-G	SBU-T	SBU-D	KSEBLtd
	Rs.crore	Rs.crore	Rs.crore	Rs.crore
Opening GFA as on 1-4-2017	4,658.32	4,628.56	7,530.50	16,817.38
Assets >12 years old (GFA as on 1-4-2005)	2,655.68	2,230.21	2,174.08	7,059.97
Grants and contributions (upto 1-4-2005)		ı	1,413.12	1,413.12
Assets having life 12-30 yrs eligible for depreciation	2,394.38	2,079.42	455.11	4,928.91
Depreciation for Assets 12-30 years (@1.42%)	34.00	29.53	6.46	69.99
Assets < 12 years old (1-4-2005 to 31-3-2017)	2,002.64	2,398.35	5,356.42	9,757.41
Total asset addition approved	71.42	388.82	699.45	1,159.69
Total Grants and Contributions (1-4-2005 to 31-3-2018)	101.47	199.94	4,534.20	4,835.61
Value of land (Average 2.8% of GFA)	56.07	67.15	149.98	273.21
Depreciation for assets <12 years (@5.14%)	98.61	122.21	62.66	283.48
Total Depreciation for 2017-18	132.61	151.74	69.12	353.47

6.24 Thus, the total depreciation allowable for the year is Rs.353.47 crore and has been apportioned among SBU-G, SBU-T and SBU-D as Rs.132.61 crore, Rs.151.74 crore and Rs.69.12 crore respectively.

Other expenses:

- Other expenses included other debits and prior period expenses and income. The Other debits include Material cost Variance, R&D Expenses, Bad Debts and Misc Losses Written-off. The other debits as per accounts for KSEB Ltd as a whole was Rs.(-)14.17 crore, which is inclusive of Rs.8.11 crore under bad and doubtful debts, Rs.2.76 crore under miscellaneous write offs. Further material cost variance of Rs.(-)26.46 crore.
- 6.26 As per the petition the total of Other expenses including prior period credit/charges was Rs.9.24crore. Considering the details furnished by KSEB Ltd, the SBU wise other expenses approved in Chapters 2, 3, &5 are as shown below:

Table 13 Approved Other expenses for 2017-18

	As per truing	Approved in
	up Petition	truing up
	(Rs.crore)	(Rs. crore)
SBU-G	-0.92	-0.92
SBU-T	3.84	3.84
SBU-D	-17.09	-23.14
KSEB Ltd	-14.17	-20.22

Return on equity

6.27 KSEB Ltd in their petition claimed return on equity of Rs.489.87 crore at the rate of 14% for the SBUs. As per the petition, the total equity mentioned for KSEB Ltd is Rs.3499 crore. The SBU wise apportionment of equity is as shown below:

Table 14
Return on equity claimed and approved for 2017-18

As per truing	As per truing up petition		
Amount of	Return on	Return on	
Equity	equity	equity	
Rs. Crore	Rs. crore	Rs. Crore	
831	116.38	116.38	
857	119.99	119.99	
1,811	253.50	253.50	
3,499	489.87	489.87	
	Amount of Equity Rs. Crore 831 857 1,811	Amount of Equity Return on equity Rs. Crore Rs. crore 831 116.38 857 119.99 1,811 253.50	

6.28 Based on the above, the Commission approved the ROE as sought by KSEB Ltd.

Carrying cost for past revenue gaps

6.29 KSEB Ltd claimed carrying cost for the approved revenue gap upto 2017-18. In the case of revenue gap for 2017-18 average revenue gap is considered for claiming the carrying cost. The Commission has analyzed in details the matter in the Chapter 5 of this Order and accordingly the carrying cost for the year 2017-18 is approved after deducting considering the funds available as GPF contribution and the balance amount of security deposit after considering the working capital requirements.

Table 15
Carrying cost for the accumulated revenue gap

Total revenue gap till 1-4-2017	6,778.74
Less Average GPF balance (2029.93+2207.33)/2	-2,118.63
Less Balance Security Deposit Available (after working capital requirements)	-1,019.70
Balance Revenue gap	3,640.41
Interest Rate applicable	9.47%
Carrying cost for unbridged revenue gap as on 1-4-2017	344.75
Carrying cost for Current year Revenue gap (2017-18)	
Revenue gap before the carrying cost (current year)	80.32
Interest charges @9.47%	3.80
Total carrying cost	348.55

As seen in Table above, while revenue gap as on 1-4-2017 as per the truing up Orders was Rs.6778.74 crore, the average GPF available for 2017-18 was Rs.2118.63 crore. The security deposit available after meeting the requirements of working capital is Rs.1019.70 crore. Thus, the net revenue gap for this period was Rs.3640.41 crore for which carrying cost of Rs.334.75 crore is allowed at the average loan interest rate of 9.47%. The carrying cost for the current year revenue gap is Rs.3.80 Crore. Thus, the total carrying cost allowed is Rs.348.55 crore

Non Tariff income

As per the details furnished in the petition, consolidated non-tariff income for the year is Rs.537.51 crore as per the petition. After considering the details, the Commission has approved the SBU wise non-Tariff income as shown below:

Table 16
Non Tariff income approved for 2017-18

	SBU-G	SBU-T	SBU-D	Total
	(Rs.crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Total Non Tariff Income as per petition	24.99	28.06	513.55	566.60
Non-Tariff income approved	24.99	28.06	513.55	566.60

Revenue from operations

6.32 As mentioned in the previous chapters, the income from tariff as per the petition and as approved is given below:

Table 17
Revenue from Tariffs

	Revenue					
	As per truing up	Approved for truing up				
	petition					
	(Rs. crore)	(Rs. crore)				
SBU-G	581.91	497.50				
SBU-T	881.87	765.67				
SBU-D	11,967.05	11,967.05				
KSEB Ltd	11,967.05	11,967.05				

6.33 After examining the details furnished by KSEB Ltd, the Commission approves the revenue from sale of power of KSEB Ltd as Rs.11967.05 crore for the year 2017-18

Summary of Income, Expenses and Revenue gap after truing up

6.34 As detailed in the sections above, the summary of the income and expenses after truing up is as shown below

Table 18
Summary of Approved Truing up for KSEB Ltd for 2017-18

Summary of Approved Hulling up for NSLB Ltd for 2017-10								
	SBU-G	(Rs.crore)	SBU-T(Rs.crore)	SBU-D(Rs.crore)		KSEB Ltd(Rs.crore)
Particulars	Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved
Revenue from sale of power	581.91	497.50	881.87	765.77	11,967.05	11,967.05	11,967.05	11,967.05
Non-Tariff income	24.99	24.99	28.06	28.06	513.55	513.55	566.60	566.60
Total Revenue	606.90	522.49	909.93	793.83	12,480.60	12,480.60	12,533.65	12,533.65
Cost of Generation	-	-	-	-	581.91	497.50	-	-
Cost of intra state transmission	-	-	-	-	881.87	765.77	1	-
Fuel cost	2.08	2.08	-	-	-	-	2.08	2.08
Power Purchase	-	-	-	-	7,398.67	7,348.15	7,398.67	7,348.15
Employee expense	116.77	104.43	247.47	221.24	1,831.53	1,637.34	2,195.77	1,963.01
R&M expenses	29.30	20.99	42.27	74.73	205.77	225.92	277.34	321.64
A&G expenses	25.11	4.86	82.70	17.41	290.77	94.96	398.58	117.24
O&M for new Stations	-	8.08	-	-	-	-	1	8.08
Total O&M expenses	171.18	138.36	372.44	313.39	2,328.07	1,958.22	2,871.69	2,409.96
Unfunded Actuarial Liabilities	27.99	10.54	52.56	19.78	450.84	169.68	531.39	200.00
Interest and financing charges	146.71	124.27	204.75	185.10	1,648.59	1,129.20	2,000.05	1,438.57
Carrying cost on Accumulated Revenue gap	-	-	-	-	-	348.81	-	348.55
Depreciation	143.48	132.61	156.36	151.74	236.78	69.12	536.62	353.47
RoE	116.38	116.38	119.99	119.99	253.50	253.50	489.87	489.87
Other expenses	-0.92	-0.92	3.84	3.84	-17.09	-17.58	-14.17	-20.22
Excess cost of aux.cons	-	-0.83					-	-0.83
Gains from lower T&D Loss	-	-	-	-	49.27	48.17	49.27	48.17
Gross Expenses	606.90	522.49	909.94	793.83	13,812.41	12,570.55	13,865.47	12,617.78
Revenue gap	-	-	-0.01	-	-1,331.81	-89.95	-1,331.82	-84.13

6.35 KSEB Ltd as per their petition for truing up has claimed a revenue gap of Rs.1331.82 crore and as per Accounts the revenue gap is Rs. 784.09 crore, which excludes the RoE of Rs.489.87 crore. The Revenue gap of Rs.1331.82

- crore as per the petition is inclusive of claims such as Rs.120.11 crore under Section 3(1) duty which cannot be passed on to the consumers, excess depreciation of Rs.182.73 crore, unfunded terminal liability claim of Rs.531.39 crore, excess employee cost of Rs.232.76 crore etc.,
- 6.36 The Commission after carefully considering the petition, clarifications and objections thereof has arrived at a revenue gap of Rs.84.13 crore.

Order of the Commission

- 6.37 KSEB Ltd in their petition for truing up of Accounts has claimed a revenue gap of Rs.1331.82 crore, which is Rs.415.92 crore higher than the revenue gap of Rs.784.09 crore (excluding RoE) as per the Accounts.
- 6.38 The claim of Revenue gap of Rs.1331.82 crore as per the petition is inclusive of claims such as Rs.120.11 crore under Section 3(1) duty which cannot be passed on to the consumers, excess depreciation of Rs.182.73 crore, unfunded terminal liability claim of Rs.531.39 crore, excess employee cost of Rs.232.76 crore etc..
- 6.39 The Commission after considering in detail, the petition filed by KSEB Ltd, the objections from stakeholders and other materials placed before it, hereby approve a revenue gap of Rs.84.13 crore. The Commission has approved among other things, Rs.348.55 crore towards interest on carrying cost and Rs. 200 crore provisionally towards unfunded additional actuarial liability. In compliance of the directions contained in the judgment of Hon. High Court of Kerala in WPC 465/2015 dated 28-02-2018, Rs.232.76 crore was deducted from the claim of employee cost, based on the details furnished by KSEB Ltd. As per the provisions of Kerala Electricity Duty Act 1963, claim of Rs.120.11 crore was also deducted from the approved expenses.

6.40 The following directions are issued to KSEB Ltd for compliance

Directives

a) KSEB Ltd shall within 3 months of the date of this Order, file a petition showing details of actuarial liability including assumptions and data used for its estimation, till 2020-21 and the proposed recovery mechanism in consultation with the Government for the review of the operations of the Master Trust.

- b) KSEB Ltd shall within three months of the date of this Order submit the asset register (including a soft copy) showing details such as name/class of asset, location of assets, date of capitalisation, gross value, life of the asset, depreciation charged so far, written down value as on 31-3-2018, identification marks if any.
- c) In the light of the qualified opinion of Auditors under item 1(c) Property, plant and equipment and capital work in progress, KSEB Ltd shall while seeking approval for asset addition ie., capitalisation for each new and existing project, furnish complete details of Asset capitalisation including management certificate auidted by the Auditor showing accompanying financial details such as project cost, funding details, cost incurred so far, amount capitalised, balance amount to be capitalised etc for the projects for which CoD is declared.
- d) KSEB Ltd shall file petition for approval of PPAs of all Central Stations for which approval has not been taken so far.
- e) The amount of Rs,200 crore provisionally allowed under unfunded actuarial liability shall be deposited in the Master Fund Account and proof to be produced before the Commission.
- f) The Commission hereby clarifies that the revenue gap of Rs.84.13 crore as brought out in para 6.39 is as per the Regulatory Accounts, and for Regulatory purpose only. The Actual loss for the year 2017-18 for all other purpose is Rs.784.09 crore as shown by the Statutory Auditor vide their Audit Certificate dated 29-09-2018 and Certificate of Audit dated 04-06-2019 issued by CAG of India.
- 6.41 With the above, the petition is disposed off and ordered accordingly.

Sd/-A.J.Wilson Member (Law) Sd/-Preman Dinaraj Chairman

Approved for issue

Sd/-Secretary

ANNEXURE

LIST OF PERSONS ATTENDED THE PUBLIC HEARING HELD AT THE CONFERENCE HALL, PWD REST HOUSE, PATHADIPALAM, ERNAKULAM ON 22-12-2020

- 1) Sarath. R, FACT Ltd
- 2) Arun MS, CUMI
- 3) Aneesh R, Apollo Tyres Ltd, Kalamassery
- 4) GK Nair, CII
- 5) Rajesh J Kurivilla, Carborandum Univaersal Ltd
- 6) Krishnajitha M.U, Idam Infrastructure
- 7) Saji Mathew, MRF Ltd
- 8) Viswanathan K, BPCL, Kochi Refinery
- 9) Dejokoppan, Pala
- 10) Sanjeev R, TCC Ltd
- 11) Aswani R, CUMI
- 12) Satheesh A.R, HT & EHT Association
- 13) Prini Peter, CUMI
- 14) Prabhakaran KV, HT & EHT Association
- 15) Krishna Kumar K, GTN Textile Ltd, Aluva
- 16) Jiju R, Patspin India Ltd, Palakkad
- 17) Satheesh Kumar KP, Carborandum Universal
- 18) Dhilsu Ms, WRI India
- 19) PM Ali, FACI
- 20) Ajith R, TCC Ltd
- 21) Premkumar PK, Dy CE, KSEBL
- 22) KGP Namboothiri, EE, KSEBL
- 23) Manu Senan V, AEE, KSEBL
- 24) Seema P Nair, AEE, KSEBL
- 25) Rajesh R, AEE, KSEBL
- 26) Shine Raj, AE, KSEBL
- 27) Babukkuttan, DA
- 28) Job Sebastian, Hindalco Industries
- 29) Jayanth Ganguly, Hindalco Industries
- 30) James M Dev,
- 31) Sivasankaran, FACT
- 32) M. Mohanchandran, FACT, Ambalamedu
- 33)KA Thomas, KSEBL
- 34)KA Nassar, KSEBL
- 35) M.M Jabbar, FACT
- 36) VM Ali, INTUL, KSEBL
- 37) Pareeth Rai, AK, INTUL, KSEBL
- 38) Satheesh Kumar Pai, CIAL