

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present : **Shri T K Jose, Chairman**
Adv. A.J Wilson, Member
Shri B Pradeep, Member

OP. No 17/2023

In the matter of : Petition for the Truing up of accounts of
M/s KSEB Ltd for the financial year 2021-22

Petitioner : Kerala State Electricity Board Ltd
Vydhuyathi Bhavanam,
Pattom Thiruvananthapuram

ORDER DATED 03.10.2023

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 2021-22 filed by the Kerala State Electricity Board Limited on 23.12.2022, published a summary of this petition in the Malayala Manorama daily and The Hindu on 26.03.2023. Thereafter, as per Regulation 32 of KSERC (Conduct of Business) Regulations, 2003, a public hearing on the petition was held on 26.04.2023 at Court Hall of the Commission, 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, 2018, the Commission hereby pass the following Order.

Dated this the 03rd day on October 2023

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

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CHAPTER -1

INTRODUCTION

Background

- 1.1 Kerala State Electricity Board Limited (hereinafter referred to as KSEB Ltd or licensee), on 23.12.2022, filed the petition 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 2021-22. The petition was filed as per the provisions of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 (*hereinafter referred to as the Regulations*).
- 1.2 Along with the petition, KSEB Ltd has filed a petition for condonation of delay in filing the truing up accounts for 2021-22. KSEB Ltd submitted that as per proviso to Regulation 10 (1) (b) of the KSERC (Terms and Conditions for the Determination of Tariff) Regulations, 2018 Truing up petition for 2021-22 was due to be filed on 30.11.2022. However, the petition could be filed only on 23.12.2022. KSEB Ltd submitted the following reasons for the delay in filing the petition:
- (i) Truing up petition is filed on the basis of the accounts audited and certified by the statutory auditors, received on 28.07.2022. The supplementary audit report was issued by C&AG on 06.10.2022. The audited accounts were approved and adopted by KSEB Ltd vide the Annual General Body Meeting held on 19.12.2022.
 - (ii) The truing up Order for 2018-19 was issued on 14.06.2022, Truing up for the year 2019-20 was issued on 21.06.2022 and Truing up for the year 2020-21 was issued on 24.06.2022. Further, Order on ARR, ERC and Tariff for the MYT period from 2022-23 to 2026-27 was issued on 25.06.2022. The matter of redetermination of employee strength in KSEB Ltd was decided on 14.07.2022. The team engaged in preparation of Truing up petition was engaged in other matters related to implementation of Tariff revision, fuel surcharge petitions. Due to the paucity of time, the Truing up petition could not be completed within the time limit.
 - (iii) KSEB Ltd vide its letter dated 30.11.2022 had appraised these details before the Commission and sought one-month time extension for filing the Truing up petition for the year 2021-22. KSEB Ltd filed the petition on 23.12.2022, within the time extension sought by KSEB Ltd.
 - (iv) KSEB Ltd, therefore, in the interest of justice, prayed before the Commission to condone the delay in filing the Truing up petition for the year 2021-22.
- 1.3 The Commission, considering all these reasons for delay as above stated by the petitioner, is of the considered view that, the delay of 22 days in filing the truing up petition for the financial year 2021-22 can be condoned.

Statutory Provisions

- 1.4 Section 61 of the Electricity Act 2003 (EA-2003) confers power on the Electricity Regulatory Commissions to specify by regulations, the terms and conditions for the determination of tariff in accordance with the principles stipulated therein. Section 62 of the EA-2003 empowers the Commission to determine tariff for generation of electricity, transmission of electricity, wheeling of electricity and for retail sale of electricity. Section 64 of the Act prescribes the procedure for determination of tariff and issuance of tariff order. The Commission has, in exercise of its powers under Section 61 of the Act, and after following the due process issued vide notification No.2076/F&T/2017/KSERC dated 26-10-2018, the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018, which specify the detailed principles and procedures for determination of tariff.
- 1.5 Clause (f) of Section 61 of the Electricity Act, 2003, stipulates that MYT Principles shall be introduced while issuing the tariff regulations and the Commission has incorporated MYT Principles in the Tariff Regulations, 2014. Clause (h) of para 5.11 of the Tariff Policy, 2016, also stipulates the guidelines for introduction of MYT Tariff. As per Regulation 8, for determination of Tariff, multi-year tariff frame work shall be applicable. Relevant provisions are extracted below:

8. Multi-year tariff (MYT) framework. – (1) *The multi-year tariff framework under these Regulations shall be applicable for determination of tariff for a generating business/company, transmission business/licensee, distribution business/licensee and the State Load Despatch Centre.*

(2) *The multi-year tariff framework for the generating business/company, transmission business/licensee, distribution business/licensee and State Load Despatch Centre shall, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges, be based on the following elements:*

(a) *Forecast of Aggregate Revenue Requirement (ARR) for the Control Period along with the expected revenue from existing and proposed tariffs and charges separately for each year of the Control Period;*

(b) *Truing up of expenses and revenue of the respective year based on audited accounts of the business/licensee vis-à-vis the Commission approved forecast and variation caused by controllable factors and uncontrollable factors, as specified in Regulation 15 of these Regulations;*

(c) *The mechanism for pass-through of approved gains or losses on account of uncontrollable factors as specified by the Commission in Regulation 13 of these Regulations;*

(d) *The mechanism for sharing of approved gains arising out of controllable factors as specified by the Commission in Regulation 14 of these Regulations;*

(e) *Approval of the Aggregate Revenue Requirement of the business/licensee by the Commission for the Control Period along with the determination of tariff for each year of the Control Period;*

(f) *Mid-term Performance Review (MPR) in the year 2019-20 which shall comprise the truing up of the year 2018-19 and annual performance review upto September 2019 on account of uncontrollable parameters and for the variations in performance on account of controllable parameters for the Control Period vis-à-vis the ARR approved for the Control Period and the revised forecast for the years 2020-21 and 2021-22 on account of anticipated variations if any on controllable and uncontrollable parameters;*

- 1.6 Regulation 9 of the Tariff Regulations 2018, provides that the control period shall be four years starting from 2018-19 to 2021-22. The relevant provisions are given below:

“9. Control Period. – (1) The Control Period is the period for which the principle and norms specified under these Regulations shall be applicable.

(2) The Control Period shall be a block of four financial years starting from the First day of April, 2018 and ending on the Thirty First day of March 2022.

Provided that the Commission may if considered necessary, through an Order extend the validity of these Regulations beyond the Thirty First day of March 2022 to such period or periods as deemed appropriate”

- 1.7 As per the Second Transfer Scheme notified by the Government under Section 131 of the Electricity Act, 2003, the activities of the KSEB Ltd are being carried out through the three Strategic Business Units (SBUs) for each of the functions of generation, transmission and distribution. Accordingly, in compliance with the provisions in the Tariff Regulations 2018 and the MYT Order dated 08- 07-2019 issued by the Commission for the control period 2018-19 to 2021-22, KSEB Ltd had filed the function wise details of the ARR and ERC for True up for the year 2021-22.

- 1.8 The summary of the consolidated ARR, ERC and Revenue gap claimed by KSEB Ltd for True up for the year 2021-22 is given below.

Table-1.1
Summary of the ARR, ERC and Revenue gap claimed for Truing up petition

Particulars	Approved	Actual	Truing up petition	Difference over approval
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Generation of Power	0.00	1.17	1.17	1.17
Purchase of power	8967.44	8532.16	8432.58	-534.86
Interest & Finance Charges	1943.62	1618.25	2169.38	225.76
Depreciation	612.26	1139.74	586.83	-25.43
O&M cost	3512.24	4775.93	3456.86	-55.38
Other Expenses	0.00	164.19	164.19	164.19
Interest on Additional Bond to Trust	200.00	0.00	300.00	100.00
Gains out of T&D loss reduction			125.25	125.25
Amortization of past gap	850.00		346.39	-503.61
RoE	489.87		489.87	0.00
Incentive, Amortization and interest			11.23	11.23
Exceptional item		17.91	17.91	17.91
Pay revision expenses			534.28	534.28
Total Expenditure (A)	16575.43	16249.35	16635.94	60.51
Non-Tariff Income	681.88	618.69	1009.64	327.76
Revenue from tariff & external sale	14895.02	16366.93	15626.31	731.29
Total Income (B)	15576.90	16985.62	16635.94	1059.04
Revenue surplus (Gap) (B-A)	-998.53	736.27	0.00	998.53

- 1.9 The copy of the petition was placed in the website of the Commission for the information and comments of the public and stakeholders. Further, as per the provisions of the Electricity Act, 2003 and KSERC (Conduct of Business) Regulations 2003 and its amendments, KSEB Ltd published the summary of the petition in the following dailies:
- (a) Malayala Manorama daily dated 26.03.2023,
 - (b) The Hindu dated 26.03.2023
- 1.10 The Commission vide the letter dated 17.03.2023 had directed KSEB Ltd to submit additional clarifications on the Truing Up petition for the year 2021-22, and KSEB Ltd vide the letter dated 25.04.2023 has submitted the same.
- 1.11 Public hearing on the petition is held on 26.04.2023 at the Court Hall of the Commission. The list of stakeholders participated in the hearing is given as Appendix-1. The summary of the deliberations during the hearing is given below.
- (1) Shri Rajesh Kuruvilla on behalf of HT & EHT Consumers' Association presented the detailed comments on the Truing Up petition filed by KSEB Ltd. The summary of the presentations is given below;
 - a) The Commission may direct KSEB Ltd to provide detailed information on spill and machine outage regarding energy generation from their own stations.
 - b) The Association requested that, the Commission may deduct only normative Auxiliary Consumption and energy consumed for colony and projects from the actual hydel energy generated.
 - c) Disallow the claim of Rs. 1.27 Crore under "cost of generation", since no energy was scheduled from KSEB Ltd own hydel stations.
 - d) There is mismatch in the length of transmission lines as per the audited accounts and truing up petition adopted for estimating normative O&M expenses.
 - e) The Commission may verify the computation of Transmission Availability, as certified by SLDC, based on the weightage of different elements.
 - f) Under Power Purchase Cost, the Commission should disallow the Fixed Cost for RGCCPP, as it imposes an unnecessary burden on the consumers of the State. The cost of purchase from IPPs (Jindal II and Jhabua II) should be capped at the BALCO rate, as per previous orders. Additionally, any delayed payment charges included in the power purchase cost should be disallowed, along with any excess costs resulting from non-adherence to Merit Order Dispatch principles. Fixed charges should be disallowed if the availability is lower than normative availability.
 - g) Regarding Pay Revision, expenses incurred for pay revision may be allowed after a prudence check based on the availability of documentary evidence.

- h) For Interest on Working Capital shall be allowed as proposed by the Association, taking into consideration of the revised normative O&M expenses and revised GFA.
 - i) The Carrying Cost on the past Revenue Gap should be allowed as proposed by the Association.
 - j) In terms of Return on Equity, the Association requests the Commission to allow a return on equity of Rs 217.42 Cr for KSEB Ltd, in accordance with APTEL's Judgment dated 18 November 2015, Appeal No. 247 of 2014 (Kerala HT EHT Industrial Consumers Association v/s KSEB Ltd & KSERC).
 - k) Regarding Interest on Loan, the additional claim on the determination of normative loan balance should be disallowed as KSEB Ltd's appeal before the Hon'ble APTEL is still sub-judice. The Association is requested to the Commission to verify whether any penal interest is included in the average interest rate.
 - l) For Capitalization, the Commission may allow actual capitalization subject to a prudence check. This should be based on a detailed analysis to be provided by KSEB Ltd, taking into account prior approval for capex, if applicable.
 - m) Other expenses claimed against Provisioning for Bad Debts, Miscellaneous Losses, Loss on account of flood cyclone, etc., should be disallowed. It should be noted that material cost variance is not considered as an expense.
- (2) Shri. Prabhakaran.K.V submitted that Page no 271(Table 6.1) should be verified by the Commission since, the details provided in the petition is inadequate.
- (3) Shri. Raymant Antony, Consumer, Palakkad submitted that, the long pending arrears of KSEB Ltd in HT category (including Government) on district wise, shall be published separately.
- (4) Shri. Saji Mathew submitted that several relevant and important formats in the Truing up petition have either not been filled up by KSEB Ltd, thereby not providing the relevant information to the Commission and stakeholders. He further submitted that, the KSEB Ltd has not provided any detailed information and justification regarding the "office expenses" claimed under A& G expenses in SBU- T in the which is 79% of the total expenses.
- 1.12 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 2021-22 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 within the State.
- 2.2 As per the Annual Report for 2021-22, as on 31.03.2022, KSEB Ltd has 38 hydel stations with a total capacity of 2058.76 MW, two LSHS based thermal station with a capacity of 159.96 MW, 1 wind plant with a capacity of 2.025 MW and 30.28 MW of solar PV plants. Thus, the total installed capacity of the KSEB Ltd own power stations as on 31.03.2022 is 2259.03 MW. The details are given as Annexure-1
- 2.3 The summary of the ARR&ERC of SBU-G for the year 2021-22 claimed by KSEB Ltd is given below.

Table 2.1
Transfer Cost of SBU-G as per truing up petition for the year 2021-22 (Rs. Crore)

No	Particulars	MYT Order dated 08.07.2019	Actuals	KSEB Truing Up petition	Difference over approval
		(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)
1	Cost of Generation of Power		1.17	1.17	-1.17
2	Interest & Finance Charges	186.12	32.97	122.17	63.95
3	Depreciation	196.26	180.23	132.24	64.02
4	O&M Expenses	172.01	289.05	150.52	21.49
5	RoE (14%)	116.38	154.45	116.38	0.00
6	Other Expenses & PP expenses		0.01	0.01	-0.01
7	Exceptional Items - Flood		0.33	0.33	-0.33
8	Pay revision expenses			33.69	-33.69
10	Additional contribution to Master Trust	10.26		15.12	-4.86
11	ARR	681.03	658.21	571.63	109.40
12	Less Non-Tariff Income	41.17	11.00	31.41	9.76
13	Net ARR (Transferred to SBU-D)	639.86	647.21	540.22	99.64

2.4 The Commission has examined the ARR of SBU-G claimed by KSEB Ltd viz-a-viz the audited accounts, ARR Order dated 08.07.2019, KSERC (Terms and Conditions of Determination of Tariff) Regulations, 2018, and other relevant details and decided as follows.

Expenses of SBU-G

Generation from internal generating stations

2.5 KSEB Ltd in their submission has submitted that the total gross generation from internal generating stations for the year 2021-22 was 9858.27 MU. The total auxiliary consumption reported is 95.22 MU and the net generation is 9763.05 MU. The source wise details of the internal generation is given below:

Table 2.2
Generation from internal generating stations for the year 2021-22

Source	MYT Order dated 08.07.2019			Truing up petition as per accounts		
	Gross generation	Aux. consumption	Net generation	Gross generation	Aux. consumption	Net generation
	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)
Hydro	7074.51	72.64	7001.87	9836.91	94.06	9742.85
BDPP	0.00	0.00	0.00	0.00	0.61	-0.61
KDPP	0.00	0.00	0.00	0.00	0.54	-0.54
Wind	2.08	0.00	2.08	1.16	0.00	1.16
Solar	47.60	0.50	47.10	20.20	0.00	20.20
Total	7124.19	73.14	7051.05	9858.27	95.22	9763.05

Hydro generating stations

2.6 The total generation from all hydro generating stations owned by KSEB Ltd for the year 2021-22 was 9836.91 MU as against the approved quantity of 7074.51 MU. The increase in hydel generation over approved level is 2762.40 MU over approved level in the year 2021-22. The excess generation was due to the higher inflow received during the year 2021-22.

2.7 The station wise details of the hydro generation during the year 2021-22 is given as Annexure-2.

2.8 The month wise details of the hydel generation for the year 2021-22 and auxiliary consumption is given in the Table below.

Table 2.3
Hydel Generation for FY 2021-22 (MU)

Month	Generation	Aux Consumption	Net hydro Generation	Month	Generation	Aux Consumption	Net hydro Generation
Apr-21	646.09	7.77	638.32	Oct-21	1049.99	8.77	1041.22
May-21	728.90	8.43	720.47	Nov-21	1131.16	8.10	1123.06
Jun-21	737.40	8.90	728.50	Dec-21	763.23	7.05	756.18
Jul-21	971.94	8.86	963.08	Jan-22	657.61	6.40	651.21
Aug-21	1004.74	8.37	996.37	Feb-22	603.39	6.33	597.06
Sep-21	726.49	7.24	719.25	Mar-22	815.97	7.84	808.13
				Total	9836.91	94.06	9742.85

2.9 The month wise details of the inflow received is given as Annexure-3.

Comments of the Stakeholders

2.10 High Tension and Extra High Tension (HT-EHT) Association submitted that the auxiliary consumption shall be allowed as per the norms specified in the Tariff Regulations, 2018. The Association also requested to verify the month wise and station wise details of the spillage water.

Provisions in the Regulations

2.11 Regulation 41 of the Tariff Regulations, 2018 specifies the norms of operation for hydroelectric generating stations. Regulation 41(2) specifies the normative auxiliary consumption of the existing and new hydroelectric generations which is extracted below.

“41(2) Auxiliary energy consumption including transformation losses for existing and new hydro-electric generating stations shall be as specified in the table below:

Sl. No.	Type of station	Auxiliary consumption
(i)	Surface hydro-electric generating stations with rotating exciters mounted on the generator shaft	0.7 Percent
(ii)	Surface hydro-electric generating stations with static excitation system	1 percent.
(iii)	Underground hydro-electric generating station with rotating exciters mounted on the generator shaft	0.9 percent
(iv)	Underground hydro-electric generating station with static excitation system	1.2 percent.

2.12 In the case of SHPs and other Renewable projects, the first proviso to Regulation 35 of the Tariff Regulations, 2018 provide as follows.

“35. Applicability. – (1) The Regulations specified in this Chapter shall apply to the 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.”

Accordingly, the provisions of KSERC (Renewable Energy and Net metering) Regulations, 2020 shall apply to the other small hydro projects. As per these Regulations, the auxiliary consumption for the small hydro projects is fixed at 1%.

Analysis and decision of the Commission

2.13 The Commission carefully examined the details of the hydel generating stations of KSEB Ltd for the year 2021-22. The Commission also noted that the normative auxiliary consumption provided under Regulation 41(2) of the Tariff Regulations, 2018, is higher than the actual auxiliary consumption. As per the MYT Order dated 08.07.2020, the Commission has allowed the auxiliary consumption

of 72.64MU out of 7074.51 MU of gross hydel generation. i.e., the auxiliary consumption allowed as per the Regulation is 1.03% of the gross generation. However, the actual auxiliary consumption reported for hydel generation is 94.06 MU, which is 0.956% of the gross generation. The actual auxiliary consumption is less than the norms specified in the Tariff Regulations 2018.

- 2.14 KSEB Ltd also submitted the methodology adopted for measuring the auxiliary consumption of its hydro stations, which is extracted below.

“KSEB Ltd is having metering arrangement at generator terminal side, evacuation points and auxiliary supply panels.

The switch yard of the generating station is considered as a node and the sum of generation from the plant and feeder imports to the switch yard are considered as energy input. The feeder exports from the switch yard are considered as the energy output. The difference between these two ((Generation +Import)-Export) is considered as the auxiliary consumption. The above calculation accounts for the transformer loss and the switchyard loss of the generating station loss.”

- 2.15 **Since the auxiliary consumption is less than the norms specified in the Tariff Regulations, 2018, the Commission here by approve the hydel generation and auxiliary consumption as per the Truing Up petitions.**

Diesel Stations

- 2.16 KSEB Ltd submitted that, due to high variable cost, KSEB Ltd had managed the grid without generation from the thermal stations.

Cost of Generation including fuel cost, lube oil etc.

- 2.17 KSEB Ltd further submitted that, Rs 1.17 crore was incurred towards the cost of fuel and lubricants for all generating stations including hydel stations owned by KSEB Ltd. Its details are given below.

Table 2.4
Fuel Cost claimed by KSEB Ltd

Particulars	KDPP	BDPP	Hydro stations	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Oil				
HSD oil	0.004			0.004
Lub oil	0.088		0.125	0.214
Lubricants and consumable stores	0.002		0.950	0.952
Station supplies				
Total	0.094	0.000	1.075	1.170

Objection of the Stakeholders

- 2.18 The HT&EHT Association submitted that, though there was no generation from diesel stations, KSEB Ltd has claimed Rs 1.17 crore towards fuel cost. The Association not considered the cost of generation of diesel stations while appraising the Truing up petition 2021-22.

Analysis and decision of the Commission

2.19 The Commission examined the details of fuel cost of Rs 1.17 crore claimed by KSEB Ltd. The licensee vide the letter dated 16.05.2023 submitted that, the lubricating systems, is an essential part of any power plant maintenance. Any piece of equipment with moving parts depends on some type of lubricant to reduce friction and wear and to extend its life. In most cases, a lubricant also dissipates heat, prevents rust or corrosion, acts as a seal to outside contaminants, and flushes contaminants away from bearing surfaces. The hydraulic oil is used for the purpose of governor action for speed /load control.

Further, the diesel oil is used for boiler operation and lube oils are used for bleeding purpose in connection with regular routine maintenance to upkeep the machines of KDPP in working condition. Hence governor oil and lubricating oils are very much essential and hence such cost may kindly be approved.

2.20 ***The Commission, after examining the details submitted by KSEB Ltd, decided to approve the cost of lube oil, lubricants etc amounting to Rs.1.17 crore as per the audited accounts.***

O&M expenses

2.21 As per the Tariff Regulations,2018, O&M expenses comprises of Employee Expenses, R&M Expenses and A&G Expenses. The O&M expenses as per the audited accounts and the same claimed by the KSEB Ltd in the truing up petitions is given below.

Table 2.5
O&M expenses of SBU-G claimed by KSEB Ltd

No	Particulars	MYT Order dated 08.07.2019	Actual as per accounts	Truing up petition
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Employee Expenses	172.01	214.78	150.52
2	A&G Expenses		43.79	
3	R&M Expenses		30.48	
4	Sub total		289.05	

2.22 KSEB Ltd submitted that, the actual O&M expenses of SBU-G as per the audited accounts was Rs.289.050 crore as against the approved O&M expenses as per the MYT Order dated 08.07.2019 amounts to Rs. 172.01 crore. However, for the purpose of Truing-up, KSEB Ltd has claimed the O&M expenses of Rs.150.52 crore strictly as per the norms only. KSEB Ltd had also submitted that, as per the Tariff Regulations, 2018, the O&M expenses for existing generating stations of KSEB Ltd is Rs 142.63 crore.

2.23 In addition to the above, KSEB Ltd had claimed O&M expenses of the following new generating stations, which was not commissioned while finalizing the Tariff Regulations, 2018. The details of the O&M expenses of New Generating Stations claimed by KSEB Ltd is detailed as Annexure-4.

Objection of the Stakeholders

2.24 The HT-EHT Association submitted that, the O&M expenses may be approved only as per the norms specified in the Tariff Regulations, 2018. The O&M expenses against the SOURA Scheme Projects, which are setup by consumers shall not be allowed. Further, O&M cost for new projects has to be allowed in proportion of the number of days of operation, based on the CoD of the project.

Analysis and Decision of the Commission

2.25 The Commission had examined in detail the O&M expenses of SBU-G as per the audited accounts and the KSEB Ltd claim in the Truing up as per the provisions of the Tariff Regulations, 2018. The details are discussed in the following paragraphs.

2.26 As per the Tariff Regulations, 2018, O&M expenses of SBU-G includes the following expenses, namely,

- (1) Employee expenses,
- (2) Administration and General expenses (A&G expenses), and
- (3) Repair and Maintenance Expenses (R&M expenses).

2.27 The various provisions in the Tariff Regulations 2018 with respect to the O&M expenses is discussed in the following paragraphs.

Provisions in the Regulations

2.28 Regulation 45 of the Tariff Regulations, 2018 deals with the Operation and Maintenance Expenses of SBU-Generation of KSEB Ltd. The relevant Regulation is extracted below.

“45. Operation and maintenance expenses. – (1) (a) In the case of existing generating stations of the generation business of KSEB Limited shall be allowed to recover operation and maintenance expenses for each financial year of the Control Period, as per the norms specified in Annexure-VII to these Regulations:

Provided that in the case of one time maintenance of special nature, not in the form of routine repair and maintenance if any is required and is undertaken for the generating stations/unit, expenses for such maintenance may be allowed by the Commission after prudence check considering the details and justification furnished by the Generating business/company for incurring such an expenditure to the satisfaction of the Commission.

(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 payable by KSEB Limited to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.

(2) In the case of new generating stations, the generating company shall be allowed to recover during the Control Period, the operation and maintenance expenses as specified hereunder, -

- a) the operation and maintenance expenses in the first year of operation shall be four 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 Control Period shall be determined using the escalation rate*

on the operation and maintenance expenses for the first year as determined above.

(3) The Commission may revise the norms for operation and maintenance expenses applicable to subsequent Control Periods.”

2.29 The Annexure-VII of the Tariff Regulations, 2018 specifies the O&M expenses of SBU-G of KSEB Ltd, for the Control Period as follows.

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

	Control period			
	2018-19 (Rs. crore)	2019-20 (Rs. crore)	2020-21 (Rs. crore)	2021-22 (Rs. crore)
O&M Expenses	123.77	129.77	136.05	142.63

2.30 The Commission has examined the O&M expenses allowable as per the norms specified in the Tariff Regulations, 2018, and also the prudence of the O&M for the Control Period as per the audited accounts in detail in the subsequent paragraphs.

O&M expenses of SBU-G, as per Norms

2.31 O&M for the Control Period for Existing Generating Stations

- (1) As discussed in the preceding paragraphs and as specified under Annexure-VII of the Tariff Regulations, 2018, O&M expenses admissible for the ‘existing generating stations of KSEB Ltd’ for the year 2021-22 is Rs 142.63 crore.
- (2) The O&M expenses, as specified in the Regulation is based on the approved True up O&M expenses such as ‘Employee Expenses, A&G expenses and R&M expenses’ for the year 2016-17. The Commission noted that, each of the components of O&M expenses such as ‘Employee Expenses, A&G expenses and R&M expenses’ are separate expenses and controllable parameter. Further, KSEB Ltd is also accounting each item separately in their audited accounts. Hence, the Commission has decided to approve each item of the O&M expenses separately in the Truing up process so that, each component of the O&M expenses is carefully considered and approved with reference to the audited accounts. Such an effect also facilitates identification of areas of cost reduction, inefficiency, lack of prudent cost control etc which will enable the utility to effect appropriate corrective action.
- (3) Hence the Commission decided to apportion the O&M expenses admissible as per norms among the three components of O&M expenses viz-a-viz employee expenses, A&G expense and R&M expenses in the ratio of these expenses in approved True up O&M expenses of SBU-G for the year 2016-17, since 2016-17 is considered as the base year adopted for arriving the norms specified in the Tariff Regulations, 2018.

Table 2.6
Ratio of approved O&M expenses of the year 2016-17 among O&M components

Particulars	SBU-G for 2016-17	Ratio of the components of O&M expenses
	(Rs. crore)	(%)
Employee expense	81.89	77.03%
R&M expenses	19.83	18.65%
A&G expenses	4.59	4.32%
Total	106.31	100.00%

- (4) Based on the above, the O&M expenses allowable for each component of SBU-G is apportioned as detailed below.

Table 2.7
Component wise O&M expenses of SBU-G of existing stations eligible as per
Tariff Regulations for the year 2021-22

Particulars	Amount (Rs. Cr)	Ratio of the total O&M
Employee expense	109.87	77.03%
R&M expenses	26.60	18.65%
A&G expenses	6.16	4.32%
Total	142.63	100.00%

2.32 O&M expenses of New Generating Stations added after finalizing the Tariff Regulations 2018 (added during the control period)

- (1) As detailed under paragraph 2.23 above, KSEB Ltd had claimed that, they had commissioned 34.32 MW new generating stations during the control period 2018-22 up to 31.03.2022. Out of this 17.00 MW is SHP and balance 17.32 MW is solar plants at various locations of the State.
- (2) As per the Regulation 45(2) of the Tariff Regulations 2018, the O&M expenses for new stations is allowable @4% of the original project cost excluding cost of rehabilitation and re-settlement work.

However, the new generating stations commissioned as detailed in paragraph 2.23 above are Renewable Power plants such as solar and Small Hydel Plants. The operating norms and other technical and financial norms for determination of tariff of such RE plants are governed by separate RE Regulations.

The paragraph 3.48 of the MYT Order dated 08.07.2019 specified the O&M expenses applicable for the SHPs and Solar plants during the MYT period from 2018-19 to 2021-22, and the same is extracted below.

“ 3.48 The Commission has examined the details furnished by KSEB Ltd. The O&M expenses for the SHPs and new solar projects are to be as per the KSEB (Renewable Energy) Regulations and in its absence, norms of Central Commission are applicable. Since for the year 2018-19, norms are not available under the Commission’s Regulations, CERC norms are to be made applicable. The escalation rates for the control period is 4.84%. Accordingly, the O&M expenses per MW for the SHPs and solar projects for the control period are determined as shown below:

Base level and escalated O&M expenses for new SHP and Solar projects

	2017-18	2018-19	2019-20	2020-21	2021-22
SHP >5MW	21.00	22.02	23.08	24.20	25.37
SHP < 5MW	29.00	30.40	31.88	33.42	35.04
Solar	7.34	7.69	8.07	8.46	8.87

“

- (3) In reply to the objections raised by the HT&EHT Association regarding that the O&M expenses shall not be allowed to Soura Scheme Projects, KSEB Ltd submitted as follows;

“The Government of Kerala has launched the project “Soura” to add 1000MWp Solar Power Plants to the network of KSEB Ltd, under Urja Kerala Mission, a vision to develop the energy sector in the state to global standards and in line with the true spirit of National goal of achieving 100 GW of solar capacity by the year 2022.

As part of the Soura project, KSEB Ltd aims to establish 500 MWp of Solar Power Plants by utilizing the Roof Top of domestic, public and private buildings including educational institutions, hospitals and commercial establishments.

BUSINESS MODELS put forth to consumer in Soura Phase - I

Model-1: Under this scheme, KSEB Ltd will utilize the rooftop of consumers for installing solar plant and maintenance of the plant for 25 years, incurring full cost by KSEB Ltd. The energy generated will be fed into the grid for a period of 25 years and a fixed percentage of generation (10 %) will be given to the consumer, free of cost for utilizing his / her/ their roof. This energy will be adjusted in the electricity bill of consumer.

Model-2: KSEB Ltd will install rooftop plant on consumer premises and the energy generated will be sold to the consumer at fixed price for 25 years. KSEB will install and maintain the plant for 25 years, incurring full cost by KSEB Ltd.

Hence both the model involves KSEB Ltd investment and for this, regulation permit KSEB Ltd to avail O&M Charges.

- 2.33 The Commission noted the submission of KSEB Ltd. Based on the above, the O&M expenses approved for the new generating stations commissioned during the year 2021-22 is given below.

Table: 2.8
O&M expenses for new generating stations for the year 2021-22

Project	CoD	Capacity- MW	O&M cost (Rs/Lakh/MW)	Addl (O&M cost (Rs. Cr)
Small Hydro Projects				
Perunthenaruvi	23.10.2017	6.00	25.37	1.52
Kakkayam	16.07.2018	3.00	35.04	1.05
Chatahknottunada SHEP Stage – II	20.06.2021	6.00	25.37	1.19
Upper Kallar	30.09.2021	2.00	35.04	0.35
Sub total		17.00		4.11

Project	CoD	Capacity-MW	O&M cost (Rs/Lakh/MW)	Addl (O&M cost (Rs. Cr)
Solar Projects				
Solar Project (Annexure G1)	FY 2018-19	3.32	8.87	0.29
Solar Project commissioned FY 2019-20 (Annexure G2)	FY 2019-20	0.65	8.87	0.06
Banasurasagar Floating solar	04-12-2017	0.50	8.87	0.04
Nelliampathi & Parambikulam Off Grid Solar Project	04-04-2017	0.08	8.87	0.01
Soura Solar	FY 2020-21	2.13	8.87	0.19
Soura Solar	FY 2021-22	6.64	8.87	0.29
Agali	22.01.2022	1.00	8.87	0.01
Kanjikode	19.02.2022	3.00	8.87	0.03
Sub total		17.32		0.93
Total		34.32		5.04

As above, the additional O&M expenses that can be allowed for New Generating stations is Rs.5.04 crore for the year 2021-22 as against Rs 7.90 crore claimed by KSEB Ltd.

- 2.34 The additional O&M expenses also apportioned among the various O&M components in the ratio discussed in the paragraph 2.31 above. The details are given below.

Table 2.9
O&M expenses eligible for New Generating Stations

Particulars	Amount (Rs.Cr)	Ratio of the total O&M expenses
Employee expense	3.88	77.03%
R&M expenses	0.94	18.65%
A&G expenses	0.22	4.32%
Total	5.04	100.00%

Thus, the total O&M expenses of generating stations (including new stations) eligible as per the norms specified in the Regulations is given below.

Table 2.10
Total O&M expenses eligible for SBU-G as per norms for the year 2021-22

Particulars	Existing stations	New Stations	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Employee expense	109.87	3.88	113.75
R&M expenses	26.60	0.94	27.54
A&G expenses	6.16	0.22	6.38
Total	142.63	5.04	147.67

Pay revision and related expenses

2.35 The approval of pay revision arrears and related expenses of KSEB Ltd for the year 2021-22 is discussed under paragraphs 6.47 to 6.60 of this Order. As per Table 6.30 of Chapter-6, the apportionment of pay revision arrears of SBU-G approved for the year 2021-22 is Rs 28.63 crore.

Total O&M expenses approved for SBU-G of KSEB Ltd including pay revision

2.36 As discussed in the preceding paragraphs, the total O&M expenses approved for SBU-G in the Truing up of accounts for the year 2021-22 is detailed below.

Table 2.11
Total O&M expenses of SBU-G of KSEB Ltd approved for the year 2021-22

Particulars	ARR Order	As per audited accounts	KSEB Ltd claim in the Truing up petition	KSERC approved
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Employee expenses	172.01	214.78	150.52	147.67
A&G expenses		43.79		
R&M expenses		30.48		
Arrears of pay revision	NA	33.69	33.69	28.63
Total	172.01	322.74	184.21	176.30

As above, the Commission approves the O&M expenses of SBU-G of KSEB Ltd for the year 2021-22 at Rs.176.30 crore as against Rs.184.21 crore claimed by KSEB Ltd.

Depreciation

2.37 The details of the approval of depreciation for the year 2021-22 is discussed under paragraphs 6.25 to 6.35 of Chapter-6 of this Order. As per Table 6.17 of this Order, the depreciation approved for SBU-G of KSEB Ltd for the year 2021-22 is Rs 132.80 crore.

Interest and financing charges

2.38 The interest charges claimed by KSEB Ltd for SBU-G in the truing-up petition is Rs 122.17 crore as against Rs 186.12 crore approved in the MYT Order dated 08.07.2019. The actual interest as per the audited accounts is Rs.177.29 crore. The details of the interest & finance charges claimed by KSEB Ltd is given below.

Table 2.12
Interest and financing charges claimed in the petition for 2021-22 (Rs in crore)

No	Particulars	Approved	Actual	TU	Difference
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on Outstanding Capital Liabilities	133.9	128.22	73.27	60.63
2	Interest on GPF	11.21	8.97	8.97	2.24
3	Other Interests		1.06	1.06	-1.06
4	Interest on Master Trust Bonds	33.41	32.84	32.84	0.57
5	Interest on Working capital	7.6	6.2	6.03	1.57
6	Sub Total	186.12	177.29	122.17	63.95

2.39 The Commission has carefully considered each item of the interest and financing charges for SBU-G for the year 2021-22 as discussed in the subsequent paragraphs.

Interest on long term loans on normative basis

2.40 The approval of the interest on long term loans on normative basis is detailed under paragraphs 6.36 to 6.46 of this Order. As per Table 6.22, the interest on normative loan of SBU-G for the year 2021-22 is Rs 61.66 crore.

Interest on working capital

2.41 The Commission vide the MYT Order dated 08.07.2019 in OP No.15/2018 had approved Rs.7.60 crore towards the interest on working capital of SBU-G for the FY 2021-22. However, in the truing up petition, KSEB Ltd has claimed Rs.6.03 crore towards interest on working capital for SBU-G. The details are given below.

Table 2.13
KSEB Ltd claim on Interest on working capital for SBU-G for the year 2021-22

Sl.No	Particulars	Amount
1	Cost of fuel for FY 2021-22	1.17
2	Cost of fuel for one month	0.10
	O&M expenses	
i	As per norms	142.63
ii	O&M Expenses for new stations	7.89
iii	Pay revision expenses	33.69
iv	Additional contribution to Master Trust	15.12
3	Total (I to iv)	199.33
4	O&M Expenses for one month	16.61
5	Opening GFA - Plants and Equipment for FY 2021-22	5028.07
6	Cost of maintenance of spares at 1% of historical	50.28
7	Total requirement of working Capital	66.99
8	Base rate as on 01-04-2021 (%)	7.0%
9	Interest rate on working capital (%)	9.0%
10	Interest on working capital	6.03

Comments of the Stakeholders

2.42 The HT&EHT Association submitted that, they had computed interest on working capital of Rs.5.88 crore against Rs.6.03 crore filed by SBU-G for FY 2021-22.

Provisions in the Regulations

2.43 The Regulation 32(1)(a) to 32(1)(c) of the Tariff Regulations, 2018 deals with the computation of the working capital requirement of generating business of KSEB Ltd. The relevant Regulations is extracted below.

“32. 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 shallcomprise of,-

- (i) cost of liquid fuel for one month corresponding to approved generation; plus
 - (ii) operation and maintenance expenses for one month; plus
 - (iii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
 - (iv) receivables equivalent to fixed charges and energy charges for sale of electricity for one month calculated at the approved 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 approved generation; plus
 - (ii) operation and maintenance expenses for one month; plus
 - (iii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
 - (iv) receivables equivalent to fixed charge and energy charge for sale of electricity for one month calculated at approved 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 of plant and equipments; 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

- 2.44 As per the Regulation 32 of the Tariff Regulations, 2018, 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.
- 2.45 The Commission vide the MYT Order dated 08.07.2019, has not allowed any schedule from the liquid fuel stations due to the excessive variable cost using LSHS.
- 2.46 Considering these aspects, as per the Regulation 32 of the Tariff Regulations, the working capital requirement of KSEB Ltd includes the following;
- (1) O&M expenses for one month (as per norms)
 - (2) Cost of maintenance of spares (1% of the historical cost of the plants and equipment).
 - (3) Receivables – nil (since there is no cash flow between SBU–G, SBU-T and SBU-D of KSEB Ltd).

2.47 As per the Regulation 32(2) of the Tariff Regulations, 2018, interest rate for computing interest on working capital for the year is 2% higher than base rate of SBI on 1st April 2021 for a tenor of one year.

Base rate as on 01.04.2021 for one year tenor = 7.00%

Accordingly, the interest rate for arriving 'interest on working capital' = 9.00%

2.48 Based on the above, the interest on normative working capital of SBU-G approved in the Truing up of accounts for the year 2021-22 is detailed below.

Table 2.14

Interest on working capital approved for SBU-G for the year 2021-22

Sl	Particulars	Amount (Rs. Cr)
1	O&M expenses of SBU-G for the year 2021-22	176.30
2	O&M expenses of SBU-G for one month = (1)/12	14.69
3	Gross Fixed Asset of SBU-G as on 31.03.2021	5028.07
4	Cost of maintenance of spares (1% of the historical cost)	50.28
5	Total working capital eligible as per Regulation = (2)+(4)	64.97
6	Base rate as on 01.04.2021	7.00%
7	Interest rate on working capital = Base rate+2%	9.00%
8	Interest on working capital = (5)x (7)	5.85

2.49 ***As above, the interest on working capital approved for SBU-G for the year 2021-22 is Rs 5.85 crore, as against Rs.6.03 crore claimed by KSEB Ltd.***

Interest on security deposits

2.50 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 2021-22.

Interest on GPF

2.51 KSEB Ltd submitted that, vide the MYT Order dated 08.07.2019, the Commission has approved Rs.11.21 crore towards interest on GPF. But the actual interest paid on PF accounted under PF was Rs.8.97 crore. Following are the reasons submitted by KSEB Ltd for the variation in the interest on GPF.

- (1) The average GPF considered by the Commission in the MYT Order dated 08.07.2018 for the year 2021-22 was Rs 2732.33 crore. However, the actual average GPF balance for 2021-22 is 2607.17 crore.
- (2) The Commission had considered 8% as the interest on GPF, however the actual was 7.10% for the year 2021-22. The actual interest on GPF as per the audited accounts is given below.

Table 2.15

Interest on GPF (Rs Cr)

Item	SBU G	SBU T	SBU D	Total
Interest on GPF	8.97	16.22	152.86	178.06

Comments of the stakeholders

2.52 The HT -EHT Association requests to approve the Interest on the General Provident Fund as per the audited accounts for FY 2021-22 at Rs. 8.97 crore for SBU-G as claimed by KSEB Ltd.

Analysis and decision of the Commission

2.53 *As per the Accounts, the interest charges booked for GPF is Rs.178.06 crore. Out of this, the share of SBU-G is Rs. 8.97 crore, which is allowed for Truing up of accounts for the year 2021-22.*

Interest on Master Trust Bonds

2.54 The approval of the interest on Master Trust Bonds of KSEB Ltd is detailed under Paragraphs 6.61 to 6.78 of Chapter-6 of this Order. As per Table 6.34 of Chapter-6, **the contribution of interest on Master Trust Bonds approved for the year 2021-22 as part of Truing up of accounts is Rs 32.84 crores.**

Summary of the I&F charges of SBU-G approved for the Year 2021-22

2.55 As detailed in the preceding paragraphs, the summary of the interest and finance charges of SBU-G approved for the Year 2021-22 is given below.

Table 2.16
Summary of the interest and finance charges of SBU-G for the year 2021-22

No	Particulars	Truing up petition	KSERC Approved
		Rs. Cr	Rs. Cr
1	Interest on Outstanding Capital Liabilities	73.27	61.66
2	Interest on GPF	8.97	8.97
3	Interest on Master Trust Bonds	32.84	32.84
4	Other interest	1.06	0.000
4	Interest on Working capital	6.03	5.85
5	Total	122.17	109.32

Additional funds to the Master Trust

2.56 The approval of the additional funds to the Master Trust is detailed under paragraphs 6.79 to 6.88 of Chapter-6 of this Order. As per Table 6.36 of this Order, the contribution of additional fund to the Master Trust for the year 2021-22 is Rs 15.12 crore.

Other expenses

2.57 KSEB Ltd has claimed Rs 0.01 crore under Research and Development expenses for the year 2021-22 and accounted it under other expenses of SBU-G.

The Commission approves Other Expense of Rs. 0.01 crore as other expenses of SBU-G for the year 2021-22.

Return on equity

2.58 The approval of the Return on Equity to KSEB Ltd is detailed under paragraphs 6.89 to 6.96 of Chapter-6 of this Order. As per Table 6.38 of this Order, ***the contribution of RoE to the SBU-G of KSEB Ltd for the year 2021-22 is Rs 116.38 crore.***

Exceptional items

2.59 Expenses incurred for the restoration of assets damaged due to natural calamities are accounted under this head. SBU wise break up of exceptional items claimed by KSEB Ltd is given below.

Table 2.17
Exceptional items (Rs. Cr)

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Exceptional items	0.33	0.00	17.58	17.91

KSEB Ltd requested before the Commission to approve the exceptional items as above.

Analysis and Decision of the Commission

2.60 The Commission noted that, during the Monsoon season, the State of Kerala has faced a huge deluge resulting in massive loss of life and property. KSEB Ltd claimed that, SBU-G had incurred Rs. 0.33 crore towards one-time urgent steps taken to overcome the situation and to restore supply and to ensure safety of the general public.

2.61 ***In view of the unexpected circumstances, the Commission hereby approves Rs 0.33 crore towards exceptional items under SBU-G of KSEB Ltd.***

Non-Tariff income

2.62 In the truing up petition, KSEB Ltd submitted that, the Commission vide the MYT Order had approved Rs.41.47 crore towards 'Non-Tariff Income'. The Non-Tariff Income includes, income from sale of scrap, interest on advances to contractors, interest on staff loans and advances, rent from buildings etc.

KSEB Ltd submitted that, the actuals as per accounts is Rs 31.41 crore and requested to approve the same. The details of the Non-Tariff Income of SBU-G claimed by KSEB Ltd is given below.

Table 2.18
Non-tariff income claimed for the year 2021-22

Sl. No	Particulars	Amount (Rs. Cr)
1	Rebate received	0.02
2	Interest-Advance to suppliers / contractors	3.7
3	Income from sale of bulb, scrap, tender	7.84
4	Miscellaneous receipts	15.52
5	Interest from banks	2.06
6	Other receipts	2.27
7	Total	31.41

2.63 Out of the above, Rs.15.52 crore pertains to the miscellaneous receipts. The details of the miscellaneous receipt of the SBU-G for the year 2021-22 is given below.

Table 2.19
Details of the miscellaneous receipt of SBU-G

No	Particulars	Amount (Rs. Cr)
1	Rental from staff quarters	0.07
2	Rental from contractors	0.12
3	Rent from others	0.75
4	Infra dev charges and supervision charges	0.11
5	SD Forfeited	0.02
6	Sale of trees	0.02
7	Usufructs	0.09
8	Penalty/LD from contractors/suppliers	3.13
9	Outside students-project	0.01
10	Registration and Application fee-Roof Top Solar Power Plants	0.38
11	Testing fee from contractors	0.19
12	Centage from Govt deptt/ agencies	0.01
13	Course fee received from training institution as reimbursement	0.02
14	Other Income-Performance Incentive from MNRE	10.60
	Total	15.52

Comments of Stakeholders

2.64 The HT-EHT Association submitted that the Non-tariff income of SBU-G amounts to Rs.31.41 crore may be true-up as claimed by KSEB Ltd for the year 2021-22.

Provisions in the Regulations

2.65 Relevant Regulations regarding Non-Tariff income is given below:

“46. Other income. - (1) The amount of Other 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.”

Analysis and decision of the Commission

2.66 ***The Commission after considering KSEB Ltd’s submission of the details, approves the non-tariff income of Rs.31.41 crore for SBU-G for the year 2021-22 as claimed by KSEB Ltd for SBU-G.***

Summary and Transfer Cost of SBU-G

2.67 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 the ARR&ERC approved cost of Rs.639.86 crore, KSEB Ltd in their truing up petition has claimed the SBU-G transfer cost as Rs.540.22 crore for the year 2021-22.

2.68 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.520.02 crore. Total approved revenue requirements for SBU- G are the transfer cost of internal Generation to SBU-D as shown below:

Table 2.20
Approved Transfer Cost of SBU-G for 2021-22 (Rs. Cr)

No	Particulars	KSERC	KSEB Ltd		KSERC - Approved for Truing Up (Rs. Cr)
		ARR Approval	As per accounts	Claimed for Truing Up	
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	
1	Cost of Generation of Power	0	1.17	1.17	1.17
2	Interest & Finance Charges	186.12	32.97	122.17	109.32
3	Depreciation	196.26	180.23	132.24	132.80
4	O&M Expenses				
	(i) Employee expenses		214.78		
	(ii) A&G expenses	172.01	43.79	150.52	147.67
	(ii) R&M expenses		30.48		
	(iv) Provision for pay revision	0		33.69	28.63
	(v) Total O&M expenses	172.01	289.05	184.21	176.30
5	RoE (14% of Rs 1454.53 Cr)	116.38	154.45	116.38	116.38
6	Other Expenses & PP expenses	0	0.01	0.01	0.01
7	Exceptional Items – Flood	0	0.33	0.33	0.33
10	Interest on additional bond to Master Trust	10.26		15.12	15.12
11	ARR	681.03	658.21	571.63	551.43
12	Less Non-Tariff Income	41.17	11.00	31.41	31.41
13	Net ARR (Transferred to SBU-D)	639.86	647.21	540.22	520.02

2.69 As shown in the Table above the approved gross transfer cost of SBU-G is Rs.551.43 crore. After deducting Rs.31.41 crore on account of Non-Tariff Income the net transfer cost is arrived at Rs. 520.02 crore.

Revenue Gap/Surplus of SBU-G

2.70 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.520.02 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 2021-22.

CHAPTER -3

TRUING UP OF ACCOUNTS OF SBU-T of KSEB Ltd

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 of Kerala State. It manages the construction, operation and maintenance of EHT substations and transmission lines. It also coordinates the activities of transmission system development. At present SBU-T is also entrusted with the responsibility of managing the State Load Despatch Centre (SLDC) activities and of the management of protection and communication system.
- 3.2 SBU-T of KSEB Ltd at present operates the following voltage levels, 220kV, 110 kV, 66 kV and 33 kV. As on 31.03.2021, KSEB Ltd owns one 400 kV substation, 29 nos of 220 kV substations, 174 nos of 110kV substations, 58 nos of 66kV substations and 161 nos of 33kV substations. The 400 kV lines and the other 400 kV substations in the State are owned and managed by the PGCIL. There are 3781.30 km of 220 kV lines, 5818.37 km of 110 kV lines, 1541.43 km of 66 kV lines and 2304.90 km of 33 kV lines in the State.
- 3.3 The SBU-T is geographically organized into two zones, 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. The implementation of Transgrid 2.0, long term transmission plan is entrusted with the Chief Engineer-Transgrid with headquarters at Shoranur.

Transmission loss

- 3.4 The total energy delivered to the transmission system during 2021-22 was 26703.19 MU. The actual peak demand met during the year 2021-22 was 4380 MW on 17.03.2022. Based on the load flow studies conducted up to 33 kV level using computer simulation model in “Mi-Power” Software, the transmission losses are segregated. The methodology adopted for study is similar to that suggested by CEA and adopted by Forum of Regulators (FOR) for loss assessment. The actual energy losses in the transmission system were 740.762 MU. The transmission loss approved by the Commission for the year 2021-22 and the actual are furnished below.

Table 3.1
KSEB petition- Transmission Losses for the year 2021-22

No	Voltage Level (kV)	Approved	Losses	Losses upto the	Actual Losses up to voltage level (%)
		(%)	MU	voltage level	
1	400		52.71	52.71	
2	220		313.19	365.90	
3	110		313.47	679.37	
4	66		61.40	740.76	
6	Transmission loss	3.75	740.76		2.77

As above, the actual transmission loss reported by KSEB Ltd is 2.77% as against 3.75% approved vide the MYT order dated 08.07.2019 for the FY 2021-22.

Auxiliary consumption of substations of Transmission SBU

3.5 The Commission had approved an auxiliary consumption of 18.04 MU for the year 2021-22. The actual auxiliary consumption claimed by KSEB Ltd was 20.77 MU as tabulated below. The auxiliary consumption in substations comprise of energy required for lighting, air compressors, battery charging, switch gears operating mechanism etc. KSEB Ltd in their petition has submitted the month wise auxiliary consumption as follows:

Table 3.2
Total Auxiliary consumption of Substations for 2021-22 in MU

April	1.79
May	1.67
June	1.61
July	1.6
August	1.61
September	1.64
October	1.66
November	1.62
December	1.77
January	1.88
February	1.83
March	2.09
Total	20.77

3.6 The auxiliary energy consumption is actually measured by meters in the respective substations.

Expenses of SBU-T

3.7 As per the Truing up petition filed by KSEB Ltd, the expenses of SBU-T inclusive of Return on equity is Rs. 1152.24 crore as against Rs 1283.52 crore approved by the Commission vide the MYT Order dated 08.07.2019. The details are given below.

Table 3.3
KSEB Ltd- Expenses of SBU-T as per the True up petition for 2021-22

No	Particulars	Approved	Actual	Claimed for True up	Variation over approval
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest & Finance	434.87	201.54	323.18	111.69
2	Depreciation	261.09	276.66	201.61	59.48
3	O&M Expenses	491.28	574.35	459.07	32.21
4	Return on equity	119.99	205.24	119.99	0
5	Amortization of			6.78	-6.78
6	Other items – Other		1.55	1.55	-1.55
7	Other items		-5.7	-5.7	5.7
8	Additional	22.64		27.33	-4.69
9	Incentive on			4.45	-4.45
10	Pay revision	0	0	63.24	-63.24
11	ARR	1329.87	1252.08	1199.95	129.92
12	Less: Non-tariff	46.35	41.94	47.72	-1.36
13	Net ARR (Cost)	1283.52	1210.14	1152.24	131.28

3.8 The Commission has carried out a prudence check of each of the heads of expenditure viz-a-viz the Regulations. The details are discussed under subsequent paragraphs.

O&M Expenses

3.9 O&M expenses comprises of Employee expenses, R&M expenses and A&G expenses. According to KSEB Ltd, total O&M expenses for the year 2021-22 of SBU-T was Rs.574.35 crore as per the accounts. However, KSEB Ltd in the petition had claimed Rs.459.07 crore. In addition to the above, KSEB Ltd has claimed Rs 63.24 crore towards pay revision. The details are shown below:

Table 3.4
O&M expenses for SBU-T for 2021-22 as per petition

No	Particulars	Approved in MYT order	As per Accounts*	As per True-up petition
		Rs. Crore	Rs. Crore	Rs. crore
1	Employee expenses	(Total O&M expenses as per norms)	416.07	(Total O&M expenses as per norms)
2	A&G Expenses		123.90	
3	R&M Expenses		34.38	
4	Sub Total (O&M Expenses)	491.28	574.35	459.07
5	Provision for pay revision			63.24
6	Total	491.28	574.35	522.31

* Includes provision for pay revision

As detailed above, KSEB Ltd had claimed the O&M expenses as per the norms specified in the Tariff Regulations, 2018. In addition, KSEB Ltd also claimed Rs 63.24 crore towards provision for pay revision.

3.10 As per the Tariff Regulations, 2018, O&M expenses of Transmission is governed by the following two parameters i.e., no. of bays and length of circuit lines. The number of bays and circuit kilometers as per the ARR Order dated 08.07.2019 and actuals for the year 2021-22 are as given below:

Table 3.5
KSEB Ltd claim of O&M expenses

Item	Approved in MYT Order	Actual
Substation Bays*	3007	2794
Tran Lines***	11130.965	10582
* Excluding 33 kV bays		*** (in Ckt Kms)

3.11 KSEB Ltd further submitted the norms for O&M expenses and the amount of O&M expenses admissible as per the norms specified in the Regulation. The details are given below.

Table 3.6
O&M of Transmission business for the year 2021-22

Item	Actual	Norm
Substation Bays*	2794	Rs.12.34 Lakh/bay
Tran Lines***	10582	Rs.1.08 Lakh/Ckt-km
* Excluding 33 kV bays		*** (in CktKms)
O&M Cost = Rs. (12.34 * 2794 + 10582* 1.08) Lakh = Rs.459.07 Cr		

Comments of the Stakeholders

3.12 The HT-EHT Association submitted that, O&M expenses of SBU-T may be allowed as per the norms specified in the Tariff Regulations, 2018. The Association also recommended to approve Rs.456.60 crore against Rs.459.07 crore claimed by KSEB Ltd towards O&M expenses of SBU-T for the year 2021-22. Further the Association submitted that, the actual liability towards the approved level of employee strength may be allowed as per the Tariff Regulations, 2018.

Analysis and Decisions of the Commission

3.13 The Commission had examined in detail the O&M expenses of SBU-T as per the audited accounts and the KSEB Ltd claim in the Truing up as per the provisions of the Tariff Regulations, 2018. The details are discussed in the following paragraphs.

3.14 O&M expenses of SBU-T includes the following expenses, namely,

- (i) Employee expenses,
- (ii) Administration and General expenses (A&G expenses), and
- (iii) Repair and Maintenance Expenses (R&M expenses).

3.15 The Commission vide the Tariff Regulations, 2018, has specified the norms for O&M expenses for each SBUs of KSEB Ltd separately. The norms are arrived based on the O&M expenses including 'employee expenses, A&G expenses and R&M expenses' approved for True up of the year 2016-17.

3.16 The various provisions in the Tariff Regulations 2018 with respect to the O&M expenses is discussed in the following paragraphs.

Provisions in the Regulations

3.17 Regulation 58 of the Tariff Regulations 2018, deals with the Operation and Maintenance expenses of SBU-T of KSEB Ltd. The relevant Regulations is extracted below.

“58. 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 in case one time maintenance of special nature not in the form of routine repair and maintenance if any is required and is undertaken for transmission system, expenses for such maintenance may be allowed by the Commission after prudence check considering the details and justification furnished by the Transmission business/licensee for incurring such an expenditure to the satisfaction of the Commission

Provided further that the transmission business of KSEB Limited shall be allowed to recover the annual pension contribution to the Master Trust, based on actuarial valuation, in respect of the personnel allocated to the transmission business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses.

Explanation :-

- (i) *For the purpose of deriving normative O&M expenses, 'bay' shall mean a set of accessories that are required to connect an electrical equipment at 66 kV and above voltages such as transmission line, bus section breakers, potential*

transformers, power transformers, capacitors and transfer breaker and the feeders emanating from the bus at sub-station of the transmission business/licensee.

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

3.18 Further, Annexure VIII of the Tariff Regulations 2018, specifies the O&M expenses of SBU-T for the control period as follows.

O&M norms for the transmission business of KSEB Ltd

Particulars	2016-17	2017-18	Control period			
			2018-19	2019-20	2020-21	2021-22
O&M cost for Bay (Rs.lakh/Bay)	9.75	10.22	10.71	11.23	11.77	12.34
O&M cost per Circuit km (Rs.lakh/circuit km)	0.85	0.89	0.93	0.98	1.03	1.08

The O&M expenses for any year of the control period shall be allowed by multiplying the normative O&M costs for that year with the actual number of bays and transmission line length in circuit kilometer at the end of the previous year, i.e., the O&M expenses for the financial year 2018-19 shall be allowed by multiplying the normative O&M costs for the financial year 2018-19 with the actual number of bays and transmission line length in circuit kilometer at the end of the previous financial year 2017-18.

3.19 The Regulation 14(3) of the Tariff Regulations, 2018 deals with the 'pay revision and related issues' which is extracted below.

"(3) Expenses relating to pay revision, if any, during the control period for the same level of employees as admitted in the truing up of accounts for the year 2016-17 of the Generation business/company or Transmission business/licensee or distribution business/licensee may be considered for pass through after due prudence check."

3.20 The Commission has examined the O&M expenses allowable as per the norms specified in the Tariff Regulations, 2018, and also the prudence of the O&M expenses as per the audited accounts in detail in the subsequent paragraphs.

O&M expenses of SBU-T, as per Norms

3.21 The Commission has examined in detail the O&M expenses of SBU-T claimed by KSEB Ltd in the process of Truing up of accounts for the year 2021-22. KSEB Ltd has claimed the O&M expenses as per the Regulation 58 of the Tariff Regulations, 2018.

3.22 As per Regulation 58, SBU-T is entitled for recovery of O&M expenses (employee expenses, R&M expenses, A&G expenses) in a composite manner benchmarking against the no. of bays and circuit length (kms). The details are given below.

Table 3.7
Norms for O&M expenses for Bays as per Regulation for the Year 2021-22

Item	As Approved in MYT Order	As per petition	Allowable as per norms
O&M expenses for Bay (Rs lakh /Bay)	12.34	12.34	12.34
O&M expenses (Rs.lakh /circuit km)	1.08	1.08	1.08
Bays (No.) (for Previous year)	3007.00	2794.00	2794.00
Line (Ckt-Km)(for previous year)	11130.97	10582.00	10582.00
Normative O&M expenses (Rs.Crore.)	491.28	459.07	459.07

- 3.23 The O&M expenses, as specified in the Regulation is based on the approved True up O&M expenses such as 'employee expenses, A&G expenses and R&M expenses' for the year 2016-17. The Commission noted that, each of the components of O&M expenses such as 'employee expenses, A&G expenses and R&M expenses' are separate expenses elements and controllable parameter. Further, KSEB Ltd also accounts each item separately in its audited accounts. Hence, the Commission has decided to approve each item of the O&M expenses separately in the True up process so that, each component of the O&M expenses is carefully considered and approved with reference to the audited accounts. Such an approach also facilitates identification of areas of cost reduction, inefficiency, lack of prudent cost control etc which will enable the utility to effect appropriate corrective action.
- 3.24 Hence the Commission decided to apportion the O&M expenses admissible as per norms among the three O&M expenses components viz-a-viz employee expenses, A&G expense and R&M expenses in the ratio of these expenses in approved True Up O&M expenses of SBU-T for the year 2016-17, since 2016-17 is considered as the base year for arriving at the norms specified in the Tariff Regulations, 2018.

Table-3.8
Ratio of the Trued-up O&M expenses 2016-17

Particulars	SBU-T for 2016-17	Ratio of the components of O&M expenses
	(Rs. crore)	(%)
Employee expense	233.76	72.94%
R&M expenses	70.20	21.90%
A&G expenses	16.53	5.16%
Total	320.49	100.00%

- 3.25 Based on the above, the O&M expenses allowable for SBU-T for the year 2021-22 as per Tariff Regulations 2018 is apportioned among the various components of the O&M expenses, as detailed below.

Table 3.9
Component wise O&M expenses of SBU-T approved for the year 2021-22

Particulars	Amount (Rs.Cr)	Ratio of the total O&M expenses
Employee expense	334.84	72.94%
R&M expenses	100.54	21.90%
A&G expenses	23.69	5.16%
Total	459.07	100.00%

Pay revision and related expenses

- 3.26 **As detailed under paragraphs 6.47 to 6.60 and Table 6.30 of Chapter-6 of this Order, the apportionment of pay revision arrears of SBU-T approved for the year 2021-22 is Rs 53.73 crore.**

Total O&M expenses approved for SBU-T of KSEB Ltd.

3.27 As discussed in the preceding paragraphs, the total O&M expenses approved for SBU-T in the Truing up of accounts for the year 2021-22 is detailed below.

Table 3.10
Total O&M expenses of SBU-T of KSEB Ltd approved for the year 2021-22

No	Particulars	Approved in MYT order	As per Accounts*	As per True-up petition	KSERC Approval as per norms
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Employee expenses	(Total O&M expenses as per norms)	416.07	(Total O&M expenses)	(Total O&M expenses as per norms)
2	A&G Expenses		123.90		
3	R&M Expenses		34.38		
4	Sub Total (O&M Expenses)	491.28	574.35	459.07	459.07
5	Provision for pay revision			63.24	53.73
6	Total	491.28	574.35	522.31	512.80

Depreciation

3.28 The approval of the depreciation of KSEB Ltd is detailed under paragraphs 6.25 to 6.35 and Table 6.17 of Chapter-6 of this Order. **As per Table 6.18, the depreciation of SBU-T approved for the year 2021-22 is Rs 195.08 crore.**

Interest and financing charges of SBU-T for the year 2021-22

3.29 KSEB Ltd has claimed Rs.323.18 crore towards the interest and finance charges of SBU-T as against Rs 434.87crore approved vide the MYT Order dated 08.07.2019 in Petition OA No. 15/2018. 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. The claim of KSEB Ltd on interest and financing charges for the year 2021-22 is given below:

Table 3.11
Summary of the interest and finance charges of SBU-T claimed by KSEB Ltd for 2021-22

No	Particulars	MYT Order dated 08.07.2019	Actual	KSEB petition on Truing up
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on Outstanding Capital Liabilities	313.12	179.77	227.66
2	Interest on GPF	24.74	16.22	16.22
3	Interest on Master Trust Bonds	73.73	59.35	59.35
4	Interest on Working capital	23.28	11.20	18.40
5	Other charges	0.00	1.55	1.55
6	Sub total	434.87	268.09	323.18

3.30 The Commission has examined each item of the interest and financing charges for SBU-T for the year 2021-22 and the decision of the Commission is discussed in the following paragraphs.

Interest of long-term loan on normative basis.

3.31 The approval of interest of long-term loans on normative basis is detailed under paragraphs 6.36 to 6.46 of Chapter-6 of this Order. As per Table 6.23, the interest of long-term loans approved for the year 2021-22 is Rs 203.38 crore.

Interest on working capital

3.32 KSEB Ltd submitted that, as per the Regulation 32(2) of the Tariff Regulations 2018, interest on working capital for SBU-T is allowed on normative basis at a rate equal to two per cent higher than the base rate as on the first day of the financial year in which petition is filed. The interest on working capital claimed in the Truing up petition is Rs. 18.40 crore. The details are given below.

Table 3.12
Interest on working capital claimed by KSEB Ltd for the year 2021-22

Particulars	Approved	Actual	True up
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
O&M Expenses As per norms	491.28		459.07
Pay revision expenses			63.24
Additional contribution to Master Trust			27.33
Total O&M expenses			549.64
GFA Plants and Equipment	8147.73		6335.02
Transmission charges	1283.53		1152.24
O&M Expenses for one month	40.94		45.80
1% of Historical cost of plants & Equipment	81.48		63.35
Receivables (Transmission charges for one month)	106.96		95.26
Total requirement of working capital	229.38		204.41
Rate of interest	10.15%		9.00%
Interest on Working Capital	23.28	11.20	18.40

Provisions in the Regulations

3.33 Regulation 32(1)(d) of the Tariff Regulations, 2018 provides for computation of working capital requirements of the Transmission business/ licensee. The relevant Regulations is extracted below.

“32(2)(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 of plant and equipment; 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.”

Comments of stakeholders

3.34 HT&EHT Association estimated the interest on working capital eligible for the year 2021-22 at Rs.17.32 crore as against Rs.18.40 crore claimed by KSEB Ltd.

Analysis and decision of the Commission

3.35 As per the Regulation 32 of the Tariff Regulations, 2018, 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.

3.36 As per Regulation 32(1)(d) of the Tariff Regulations, 2018, the working capital requirement of KSEB Ltd includes the following.

- (1) O&M expenses for one month; plus
- (2) Cost of maintenance of spares at 1% of the historical cost of the plants and equipment; plus
- (3) Receivables equivalent to transmission charges for one month

3.37 As per the Regulation 32(2) of the Tariff Regulations, 2018, interest rate for computing interest on working capital for the year is 2% higher than base rate (MCLR Rate) of SBI on 1st April 2020 for a tenor of one year.

Base rate as on 01.04.2021 for one-year tenor = 7.00%

Accordingly, the interest rate for arriving 'interest on working capital' = 9.00%

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

Table 3.13
Estimation of interest on working capital for SBU-T for the year 2021-22

Sl No	Particulars	Amount (Rs.Cr)
1	O&M expenses of SBU-T for the year 2021-22	512.80
2	O&M expenses of SBU-T for one month = (1)/12	42.73
3	Gross Fixed Asset (historical cost only) as on 31.03.2021 (plants and equipments only)	6157.64
4	Cost of maintenance od spares (1% of the historical cost)	61.58
5	Transmission charges	1105.18
6	Receivable for one month	92.10
7	Total working capital eligible as per Regulation = (2)+(4)+(6)	196.41
8	Base rate as on 01.04.2021	7.00%
9	Interest rate on working capital = Base rate+2%	9.00%
10	Interest on working capital = (5)x (7)	17.68

3.39 ***As above, the Commission approves Rs 17.68 crore towards interest on working capital of SBU-T for the year 2021-22.***

Interest on security deposits

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

Interest on GPF

3.41 KSEB Ltd submitted that, vide the MYT Order dated 08.07.2019, the Commission has approved Rs 24.74 crore towards interest on GPF. But the actual interest paid on GPF was Rs 16.22 crore only. Following are the reasons submitted by KSEB Ltd for the variation in the interest on GPF.

- (1) The average GPF considered by the Commission in the MYT Order dated 08.07.2018 for the year 2021-22 was Rs 2732.33 crore. However, the actual average GPF balance for 2021-22 is 2607.17 crore.
- (2) The Commission had considered 8% as the interest on GPF, however the actual was 7.10% for the year 2021-22. The actual interest on GPF as per the audited accounts is given below.

Table 3.14
Interest on GPF (Rs Cr)

Item	SBU G	SBU T	SBU D	Total
Interest on GPF	8.97	16.22	152.86	178.06

Comments of the stakeholders

- 3.42 The HT -EHT Association requests to approve the Interest on the General Provident Fund as per the audited accounts for FY 2021-22 at Rs. 16.22 Crore for SBU-T, as claimed by KSEB Ltd.

Analysis and decision of the Commission

- 3.43 As per the Accounts, the interest charges booked for GPF is Rs.178.06 crore. ***Out of this, the share of SBU-T is Rs. 16.22 crore, which is approved for Truing up of Accounts in the year 2021-22.***

Interest on Master Trust Bonds to the Master Trust

- 3.44 The approval of the interest on Master Trust Bonds is detailed under paragraphs 6.61 to 6.78 of this Order. ***As per Table 6.34, the contribution of interest on Master Trust Bond of SBU-T approved for the year 2021-22 is Rs 59.35 crore.***

Other charges

- 3.45 KSEB Ltd has claimed Rs 1.55 crore towards other charges, as part of interest and finance charges. However, KSEB Ltd has not submitted the details of such claims. ***Without details and proper justifications of such claims, the Commission cannot approve such claims, and hence the same is rejected.***

Summary of the interest and finance charges of SBU-T

- 3.46 As detailed in the preceding paragraphs, the summary of the interest and finance charges are as follows:

Table 3.15

Summary of the interest and finance charges of SBU-T for the year 2021-22

No	Particulars	Truing up	KSERC
		petition	Approval
		Rs. Cr)	Rs. Cr)
1	Interest on Outstanding Capital Liabilities	227.66	203.38
2	Interest on GPF	16.22	16.220
3	Interest on Master Trust Bonds	59.35	59.35
4	Interest on Working capital	18.40	17.68
5	Other charges	1.55	0.00
6	Total	323.18	296.63

As detailed above, the interest and finance charges approved for the year 2021-22 for SBU-T is Rs. 296.63 Crore against Rs.323.18 crore claimed by KSEB Ltd.

Additional funds to the Master Trust

3.47 The approval of the additional funds to the Master Trust is discussed in paragraphs 6.79 to 6.88 Chapter-6 of this Order. As per Table 6.36, the contribution of additional Fund to the Master Trust of SBU-T for the Year 2021-22 is Rs 27.33 Cr.

Other items

3.48 KSEB Ltd in the Truing up petition has claimed Rs 5.70 crore as gain under this head. The detailed breakup of the claim of KSEB Ltd under this head is given below.

Table 3.16
Other items of SBU-T for the year 201-22

SI No	Items	Amount (Rs.Cr)
1	Material cost variance	0.31
2	Cost of trading / manufacturing activity	-6.16
3	Miscellaneous losses and write offs	0.15
4	Sub total	-5.70

KSEB Ltd further submitted that, cost of trading and manufacturing activity includes sale proceeds of fixed assets and insurance claims received. As per the details submitted by KSEB Ltd, at Transmission circle, Kannur, Rs 6.1544 crore is booked under sale proceeds and Rs 0.31 lakh is booked as insurance claim.

The Commission after examining the details, decided to approve the gain of Rs 5.70 crore under other items.

Return on equity

3.49 ***The approval of the Return on Equity of SBU-T of KSEB Ltd is detailed in paragraphs 6.89 to 6.96 and Table 6.38 of Chapter-6 of this Order.***

Amortisation of intangible assets

(a) Edamon-Kochi Line

3.50 KSEB Ltd submitted that, the State Government vide G.O.(Ms) No.29/ 2015/ PD dated 30/07/2015 of Power (C) Department, approved a revised Special Compensation Package, meant exclusively for the construction of 400 kV transmission line in the Edmon – Kochi sector, as a special case.

3.51 KSEB Ltd further submitted that, the Commission, as per Order dated 09.08.2019 in OP 58/2018, has provisionally approved 50% of the additional financial liability due to the special compensation package of the 400 KV Edamon - Kochi transmission line as KSEB Ltd's share as per the orders of the Government. KSEB Ltd share of compensation actually paid was allowed to be recovered in 12 years with interest as part of truing up.

3.52 KSEB Ltd submitted that, during the year 2021-22, an amount of Rs 40.65 crore was transferred to the District Collector, Ernakulam as compensation. The details are given below.

Table 3.17
Amount disbursed under Special Compensation Package in 2021-22

Amount	Payment Details	Remarks
Rs.40,64,60,000	Ch.No. 936755 dtd 31.12.21.	Sanctioned vide BO (FTD) No.633/2021/D(T& SO)T/Koodamkulam/2021-22 dated 18-8-2021

3.53 Out of the above, the share of KSEB Ltd is Rs 20.32 crore has been accounted under intangible assets.

3.54 KSEB Ltd further submitted that, a sum of Rs.18 Cr was paid during 2019-20 out of which, KSEB Ltd share was Rs.9 Cr. In addition to the above, a sum of Rs 22.00 crore was paid as compensation during the year 2020-21, out of it the share of KSEB Ltd was Rs 11.00 crore.

3.55 KSEB Ltd has proposed to amortize 1/12th of the KSEB Ltd share during the year 2021-22. Further, KSEB Ltd has also claimed interest for balance share of KSEB Ltd @9.57%.

3.56 The details of the interest and amortization of the intangible assets as part of the special compensation package of Edamon-Kochi scheme is given below.

Table 3.18
Details of amortization of intangible assets as part of compensation package of Edamon-Kochi Transmission line

Sl.	Amount (Rs Cr)	Year of disbursement	KSEB Ltd share (Rs.Cr)	2019-20		2020-21		2021-22		
				Amortization (Rs Cr)	Balance (Rs Cr)	Amortization (Rs Cr)	Interest @ 9.88%	Amortization (Rs. Cr)	Balance (Rs Cr)	Interest @ 9.57%
1	5.20	2019-20	2.60	0.22	2.38	0.22	0.24	0.22	1.95	0.19
2	0.80	2019-20	0.40	0.03	0.37	0.03	0.04	0.03	0.30	0.03
3	12.00	2019-20	6.00	0.50	5.50	0.50	0.54	0.50	4.50	0.43
4	22.00	2020-21	11.00			0.92	0.38	0.92	9.16	0.88
5	40.65	2021-22	20.33					1.69	18.63	1.78
6	80.65	Total	40.33	0.75	8.25	1.67	1.20	3.36	34.54	3.31

(b) Pugalur- Thrissur Line

3.57 KSEB Ltd submitted that, Government of Kerala vide G.O(MS)No.7/2019/PD dated 04.05.2019 and G.O.(MS) No.15/2019/Power dated 19-7-2019 have issued special compensation package for construction of Thrissur to Pugalur +-320 KV HVDC transmission line from Thrissur to Pugalur forming part of the Raigarh-Pugalur-Thrissur HVDC scheme and for the Line in Line out construction of Thrissur to Kochi. Government vide Order dated 18-5-2021 has ordered that the financial liability due to special compensation package shall be shared equally between Government of Kerala and KSEB Ltd. The approximate estimate of compensation to be paid in accordance with the orders is worked out as Rs.45 Crore and KSEB Ltd share is estimated as Rs.25.11 Cr at 50:50 sharing of expense by KSEB Ltd/GoK.

KSEB Ltd further submitted that, the licensee will be submitting separate petition before the Commission seeking approval of the Special Compensation package of Pugalur-Thrissur line.

As per the details submitted by KSEB Ltd, an amount of Rs. 2.56 Crore has been transferred to the District Collector, Ernakulam during the year 2021-22 towards compensation of Pugalur-Thrissur Line. The details are given below.

- 3.58 The total amortisation of intangible assets and interest for the year 2021-22 amounts to Rs 6.78 crore. The details are given below.

Table 3.19
Total amortization of Edamon-Kochi and Pugalur-Thrissur line claimed for the year 2021-22

Sl. No.	Transmission Line	Amortization amount (Rs. Cr.)
1	Edamon-Kochi	6.67
2	Pugalur-Thrissur	0.11
3	Total	6.78

Analysis and Decision of the Commission

- 3.59 The Commission has examined in detail the amortization of intangible assets as part of Special Compensation package of Edamon- Kochi Transmission line, part of Kudankulam Transmission system. The Commission has also noted the proposal to amortize the compensation paid towards special compensation of Pugalur-Thrissur line.

- 3.60 The Commission vide Order dated 09.08.2019 in Petition OP No. 58/2018 had approved the special compensation package of Edamon-Kochi Transmission system. The relevant part of the Order is extracted below/

“18. The Commission after examining the petition filed by KSEB Ltd as per the provisions of the Electricity Act, 2003, KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018, Ind As 38 and other relevant facts and documents, hereby orders the following.

(1) The Commission provisionally approves 50% of the additional financial liability due to the ‘special compensation package’ of the 400 kV Edamon- Kochi Transmission line, as KSEB Ltd’s share as per the orders of the State Government.

(2) The share of KSEB Ltd under additional special compensation package shall be treated as the ‘intangible assets’ of KSEB Ltd of the financial year(s) in which KSEB Ltd actually make the payment to the farmers and landowners, and it shall be allowed to be amortized over a period of 12 years from the year(s) from which KSEB Ltd actually make the payment.

(3) KSEB Ltd shall, along with the petitions on truing up of the relevant year(s) in which the payment towards the additional special compensation is made, submit the details of the additional special compensation paid to farmers and landowners in connection with the construction of the 400 kV Edamon-Kochi line.

(4) The Commission shall allow recovery of the yearly amortization amount along with interest, as expense of KSEB Ltd and to be recovered through tariff.

(5) The Commission shall not allow O&M expenses, return on equity or any such expenses over and above the ‘amortisation amount with interest’ to the intangible assets so created towards the KSEB Ltd share of additional special compensation

package as per the orders of the State Government. Further, since the intangible asset so created is being amortised over a period of 12 years no separate provision for depreciation shall be provided.

The petition is disposed of accordingly.”

3.61 As extracted above, the Commission vide Order dated 09.08.2019 in OP No. 58/2018 ordered that, KSEB Ltd shall share 50% of the amount paid to land owners and farmers as compensation as part of the special compensation package of Edamon-Kochi transmission system. The Commission further ordered that, the share of KSEB Ltd shall be treated as ‘intangible assets’ and permit KSEB Ltd to amortize the same over a period of 12 years. **The Commission shall allow recovery of the yearly amortization amount along with interest, as expense of KSEB Ltd. KSEB Ltd is permitted to claim these amounts as part of Truing up petition.**

3.62 The Commission has examined the amount paid by KSEB Ltd as part of special compensation package with the above provisions of the Order dated 09.08.2019 and noted the following.

- (1) As part of the special compensation package of the Edamon-Kochi line, KSEB Ltd had disbursed Rs 18.00 crore during the year 2019-20. Out of it, the share of KSEB Ltd allowed to pass on to the consumers is Rs 9.00 crore.
- (2) Further, KSEB Ltd has disbursed Rs 22.00 crore as special compensation in the year 2020-21, and its share to KSEB Ltd allowed to pass on to the consumers through tariff is Rs 11.00 crore.
- (3) In addition to the above, KSEB Ltd has disbursed Rs 40.65 crore in the year 2021-22 as special compensation package of Edamon- Kochi Line, and out of it KSEB Ltd share is Rs 20.325 crore.
- (4) The Commission has permitted KSEB Ltd to amortise the intangible assets over a period of 12 years.
- (5) KSEB Ltd computed the interest on the intangible assets @9.57% per annum instead of 9.52% per annum as per the Truing up petition, i.e., the average interest rate of the loan availed by SBU-T of KSEB Ltd for the year 2021-22.

3.63 With the above observation, the Commission has determined the yearly amortisation and interest admissible for the year 2021-22, for Edamon-Kochi line as detailed below.

Table 3.20
Amortization and interest of the compensation paid towards Edamon-Kochi Transmission line

Sl.	Total compensation paid (Rs Cr)	Year of disbursement	KSEB Ltd share (50%) (Rs.Cr)	Amortization for 2021-22 (1/12th of the compensation) (Rs. Cr)	Balance share as on 31.03.2022 (Rs Cr)	Interest admissible @ 9.52%	Total amount admissible towards amortisation & interest (Rs.Cr)
1	5.20	2019-20	2.60	0.22	1.95	0.186	0.406
2	0.80	2019-20	0.40	0.03	0.30	0.029	0.059
3	12.00	2019-20	6.00	0.50	4.50	0.428	0.928
4	22.00	2020-21	11.00	0.92	9.16	0.872	1.792
5	40.65	2021-22	20.33	1.69	18.63	1.774	3.464
6	Total			3.36	34.54	3.288	6.648

- 3.64 KSEB Ltd on 08.05.2023, had filed a petition for approval of the compensation package of the 320kV HVDC Pugalur-Thrissur line. The Commission is in the process of appraisal of the petition, and may issue appropriate orders after conducting hearing and detailed appraisal.

However, in the process of Truing up for the year 2021-22, KSEB Ltd has submitted that, it had paid an amount Rs 2.5586 crore towards special compensation of the Pugalur-Thrissur Transmission line. Out of it, the share of KSEB Ltd is Rs 1.28 crore. KSEB Ltd has proposed to amortize 1/12th of the KSEB Ltd share, i.e, 1/12th of Rs 1.28 crore= Rs 0.11 crore in the Truing up for the year 2021-23.

The Commission has examined the submission of KSEB Ltd in detail and decided to provisionally approve to amortise Rs 0.11 crore towards the disbursements for special compensation package of Pugalur Thrissur line.

- 3.65 ***As discussed in the preceding paragraphs, the Commission here by approve Rs 6.758 crore towards the amortization of intangible assets of Edamon-Kochi Transmission line and Pugalur-Thrissur Transmission line. The details are given below.***

Table 3.21
Amortization and interest of the intangible assets for the year 2021-22

Sl No	Transmission line	Amortisation (Rs.Cr)	Interest (Rs.Cr)	Total (Rs.Cr)
1	Edamon- Kochi Transmsion line	3.36	3.29	6.65
2	Pugalur-Thrissue Transmission line	0.11	0	0.11
	Total	3.47	3.29	6.76

Transmission availability and incentive

- 3.66 KSEB Ltd submitted that, the transmission system of KSEB Ltd could achieve an availability of 98.38% as against the target availability of 98%. KSEB Ltd further submitted that, as per the Regulation 56(2) of the Tariff Regulations, 2018, the licensee is eligible for incentive for achieving annual availability above the target availability for the year 2021-22. KSEB Ltd also submitted the certificate of SLDC certifying the target availability of 98.38%. KSEB Ltd has claimed Rs 4.45 crore towards incentive for achieving the transmission availability above the target for the year 2021-22.

Analysis and Decision of the Commission

- 3.67 The Commission has examined the achievement of transmission availability at 98.38% as against the target of 98%, and also noted the claim of Rs 4.45 crore towards incentive for achieving the transmission availability above the target as per the Tariff Regulations, 2018.

The Commission appreciate the efforts of KSEB Ltd in achieving the transmission availability above the target availability as per the Tariff Regulations, 2018. KSEB Ltd is eligible for incentive of Rs 4.45 crore as per the Regulations. However,

considering the huge unbridged revenue gap of Rs 7130.74 crore as on 31.03.2021, and the significant revenue gap approved for the control period 2022-27, requiring substantial upward revision in retail tariff, the Commission has taken the considered decision to defer the claim of incentive on transmission availability in the year 2021-22. However, once the approved revenue gap of KSEB Ltd is brought down to manageable levels, KSEB Ltd can claim the incentives subsequently.

Non-Tariff income

3.68 KSEB Ltd has claimed Rs.47.72 crore towards Non-tariff income from the SBU-Transmission. The details are given below.

Table 3.22
Non-Tariff income claimed for SBU-T for 2021-22 (Rs. Cr)

Sl.	Particulars	Amount (Rs. Cr)
1	Rebate received	0.04
2	Interest-Advance to suppliers / contractors	6.39
3	Income from sale of bulb, scrap, tender	19.94
4	Miscellaneous receipts	16.99
5	Interest-Staff loans and advances	0.01
6	Interest from banks	2.09
7	Other receipts	2.26
8	Total	47.72

The details of the miscellaneous receipts of SBU-T claimed for the year 2021-22 is given as Annexure-5 of this Order.

Comments of the Stakeholders

3.69 The HT&EHT Association submitted that non-tariff income may be approved as sought by KSEB Ltd for SBU-T for the year 2021-22.

Analysis and decision of the Commission

3.70 The Commission examined the claim of KSEB Ltd. ***The Commission after considering KSEB Ltd's submission of the details, approves the non-tariff income of Rs.47.72 crore for SBU-T for the year 2021-22 as claimed by KSEB Ltd for SBU-T.***

Summary and Transfer cost of SBU-T

3.71 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.1283.52 crore, KSEB Ltd in their truing up petition has claimed the SBU-T transfer cost as Rs. 1152.24 crore, i.e., a decrease of Rs.131.28 crore over the approved ARR&ERC figures.

3.72 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 to the SBU-D of KSEB Ltd. The transfer cost of SBU-T to the SBU-D approved for the year 2021-22 is Rs.1105.18 crore as detailed below:

Table 3.23
Approved Transfer Cost of SBU-T for 2021-22

No	Particulars	Approved	Actual	Claimed for True up	KSERC Approval
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest & Finance Charges	434.87	201.54	323.18	296.63
2	Depreciation	261.09	276.66	201.61	195.08
3	O&M Expenses	491.28	574.35	459.07	459.07
4	Return on equity (14%)	119.99	205.24	119.99	119.99
5	Amortization of intangible assets			6.78	6.76
6	Other items		-5.70	-5.70	-5.70
7	Additional contribution to Master Trust	22.64		27.33	27.33
8	Incentive on Transmission Availability			4.45	0.00*
9	Pay revision expenses	0.00	0.00	63.24	53.73
10	ARR	1329.87	1252.08	1199.95	1152.89
11	Less: Non-tariff Income	46.35	41.94	47.72	47.72
12	Net ARR (Cost Transferred to SBU-D)	1283.52	1210.14	1152.24	1105.18

*Deferred

- 3.73 ***As above, the Commission hereby approve the gross ARR of SBU-T in the process of Truing Up at Rs.1152.89 crore for the year 2021-22. The net transfer cost after accounting the Non-Tariff Income is Rs.1105.18 crore for the year 2021-22.***

Revenue Gap/Surplus of SBU-T

- 3.74 The Commission after analyzing the petition and the submissions of the petitioner KSEB Ltd and the stakeholders, arrives at a net transfer cost of Rs.1105.18 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 the year 2021-22.

CHAPTER-4

ENERGY SALES AND T&D LOSS

- 4.1 KSEB Ltd in the Truing up petition submitted that, the Commission vide the MYT Order for the control period for 2018-19 to 2021-22 dated 08-07-2019 had approved an energy sale of 24991.45 MU for the year 2021-22. As against the approval, the actual energy sale within the State was 23449.59 MU only. In addition to the direct sale, KSEB Ltd had sold 2094.93 MU outside the State.
- 4.2 A comparison of the energy sales approved and the actuals are given as Annexure-6 to this Order.
- 4.3 As detailed in Annexure-6, the actual energy sale within the State during the year 2021- 22 was less by 1491.86 MU from the approved level. Except domestic category and LT Industrial category, the energy consumption of all other categories was less than the energy consumption approved by the Commission. According to KSEB Ltd, the reduction in energy sale was mainly due to the following;
- (1) Reduction in energy demand owing to the restrictions due to Covid Pandemic in the first half of the financial year, especially in the commercial and industrial category.
 - (2) 2021-22 was blessed with distributed rain throughout the year, due to which agriculture consumption decreased by 7% compared to previous year.
 - (3) Further, the HT&EHT consumers availed 253.37 MU through open access during the year 2021-22.
 - (4) In addition to the above, the solar generation and consumption by prosumers from Solar plants is 263.84 MU, captive generation from SHPs is 89.27 MU and Wind is 17.48 MU.
- 4.4 The details of the open access consumption, and generation and consumption by prosumers and captive consumers are detailed below.

Table 4.1
Details of the open access consumption and captive consumers

Category	Open access import (at consumer end) (MU)	Generation and consumption by prosumers and Captive consumers (MU)				Total (MU)
		SHP	Solar	Wind	Sub total	
LT			159.10		159.10	159.10
HT	24.36		60.13	17.48	77.61	101.97
EHT	227.42	89.27	38.20		127.47	354.89
KMRL	0.00		6.41		6.41	6.41
Bulk licensees	1.59				0.00	1.59
Total	253.37	89.27	263.84	17.48	370.59	623.96

- 4.5 Total import of open access consumers at Kerala periphery is 268.69 MU and the net drawl at consumer periphery is 253.37 MU. Thus, the losses on account of the wheeling is 15.32 MU. In addition to the above, one IPP generator sold 44.04 MU outside the State by availing open access at Kerala periphery, and the net injection

at the generator bus was 45.84 MU. The losses associated with the open access transactions are detailed below.

Table 4.2
Energy availed and sold through Open Access by embedded open access consumers in 2021-22 (MU)

Particulars	Energy at Kerala Periphery (MU)	Energy at injection/ drawl point	Loss on account of wheeled units
	(MU)	(MU)	(MU)
Import (+)	268.69	253.37	15.32
Export (-) for Sale outside	-44.04	-45.84	1.80
Total loss			17.12

- 4.6 In addition to the above, for meeting the auxiliary consumption at RGCCPP, Kayamkulam, M/s NTPC Ltd has availed 8.22 MU from KSEB Ltd.
- 4.7 Thus, total energy demand of the consumers including open access and captive consumption including the net energy banked by prosumers is 24131.77 MU. The details are given below.

Table 4.3
Total energy consumption of consumers for the Year 2021-22

Sl No	Particulars	Quantity (MU)
1	Energy sale by KSEB Ltd	23499.59
2	Open access consumption	253.37
3	Prosumers and captive consumers	370.59
4	Auxiliary consumption of RGCCPP- Kayamkulam	8.22
	Total	24131.77

- 4.8 The segregation of the energy sales to different categories of consumers for the year 2021-22 is given below.

Table 4.4
Energy Sales pattern for 2021-22

No	Category	Energy sales	
		MU	%
1	LT Domestic	12679.39	54.0%
2	LT Industrial	1165.21	5.0%
3	LT Agriculture	374.09	1.6%
4	LT Commercial	3309.96	14.1%
5	LT Public Lighting	362.83	1.5%
6	HT &EHT Total	4771.54	20.3%
7	EHT Railway Traction	318.29	1.4%
8	KMRL	11.37	0.0%
9	Bulk Supply	506.91	2.2%
10	Total sales to consumers (within state)	23499.59	100.0%

Analysis and Decision of the Commission

- 4.9 The Commission has examined in detail the energy sale of KSEB Ltd to different categories of consumers as above in the year 2021-22. The energy sale within the State is 23499.59 MU as against 24991.45 MU approved by the Commission. The

Commission noted that, the actual energy sale during the year 2021-22 was less by about 1491.86 MU compared to the energy sale approved in the MYT Order dated 08.07.2019. This reduction in energy consumption was mainly due to the restrictions imposed in the State due to Covid-19 pandemic in the State, open access consumption and also due to the self-consumption of prosumers and captive consumers by installing roof top solar power plants and other RE sources.

- 4.10 A comparison of the energy sale during the year 2020-21 and 2021-22 is given as Annexure-7 of this Order.

As detailed in Annexure-7, the overall increase in energy sale in 2021-22 compared to the year 2020-21 is 6.09%. It is also noted that, there is a considerable increase of energy sale of 21.85% by HT&EHT category. This is mainly due to the lower energy consumption in the previous year 2020-21 due to the restrictions imposed due to Covid-19 pandemic.

The Commission also noted that the embedded open access consumers availed 253.37 MU at consumer end through open access. Further, the captive consumers has generated and consumed 370.59MU. Thus, including the open access consumption and captive generation, the total energy consumption within the State was 24131.77 MU in the year 2021-22.

Thus, after examining the details submitted by KSEB Ltd, the Commission approves the energy sale of 23499.58 MU for the year 2021- 22.

Transmission and Distribution Loss (T&D Loss) for the year 2021-22

- 4.11 KSEB Ltd in the Truing up petition submitted that the Commission vide the MYT Order dated 08.07.2019 had approved the loss reduction target of 0.40% for the year 2021-22 from the previous year 2020-21. The approved loss reduction target for the year 2021-22 is 11.62% when compared with the previous year approved loss level target of 12.02%. However, the actual T&D loss achieved for the year 2021-22 was 10.19%. According to KSEB Ltd, excess loss reduction achieved is 1.43% over the approved level (11.62%-10.19%). The details of the T&D loss claimed by KSEB Ltd is given as Annexure-8 of this Order.
- 4.12 KSEB Ltd further submitted that, KSEB Ltd has been continuously reducing the T&D loss since the year 2001-02. KSEB Ltd was able to reduce the T&D loss from 30.76% in 2001-02 to 10.19% during the year 2021-22. KSEB Ltd also submitted that, the distribution loss in KSEB Ltd was one of the lowest among the distribution licensees in the Country.

Distribution loss

- 4.13 KSEB Ltd in their Truing up petition submitted that, as explained under Chapter- 3 of this order, the transmission losses in the system upto 66kV level is 2.77% and 740.76 MU out of the total energy handled by the system. After segregating the transmission losses, KSEB Ltd assessed the distribution loss in the KSEB Ltd's distribution system for the year 2021-22 at 7.62%. The details are given below.

Table 4.5
Distribution loss claimed by KSEB Ltd for the year 2021-22

SI No	Particulars	Quantum	Unit
(i)	Total Generation and Power Purchase at Kerala	26,703.19	MU
(ii)	Transmission loss	740.76	MU
(iii)	Total energy input into the distribution system (i)-	25,962.43	MU
(iv)	Total energy output (item B.v of Table D7)	23,983.42	MU
(v)	Distribution loss (iii)-(iv)	1,979.01	MU
(vi)	Distribution loss in % (v)*100/(iii)	7.62	%

4.14 The collection efficiency reported by KSEB Ltd during the year 2021-22 is 99.31%.

4.15 KSEB Ltd further submitted that, due to loss reduction of 1.43% above the target of 11.62%, KSEB Ltd could reduce the power purchase by 420.76MU. Considering the average cost of power purchase @Rs 4.465/unit, KSEB Ltd was able to save Rs 187.87 crore in cost of power purchase.

KSEB Ltd further submitted that, as per Regulation 14 of Tariff Regulations, 2018, 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

KSEB Ltd requested before the Commission to approve to retain with KSEB Ltd 2/3rd of the savings in cost of power purchase amounting to Rs 125.25 crore and balance 1/3rd is proposed to pass on to the consumers. The details are given below.

Table 4.6
KSEB Ltd claim on savings in cost of power purchase due to over achievement of T&D Loss reduction target

SI No	Particulars	Quantum	Unit
1	Energy sales by KSEB Ltd	23730.04	MU
2	Energy input needed at 11.62% loss	26850.02	MU
3	Energy input needed for 2021-22	26429.26	MU
4	Energy savings	420.76	MU
5	Power Purchase cost saved due to over achievement of loss	187.87	Cr.
6	2/3 of savings	125.25	Cr.

Comments of the Stakeholders

4.16 HT&EHT Association requested to approve the incentive for over achievement of T&D loss reduction at Rs. 109.58 Crore against Rs. 125.25 Crore claimed by KSEB Ltd (SBU-D).

Provisions in the Regulations

4.17 Regulation 72 of the Tariff Regulations 2018 deals with ‘distribution loss’, which is extracted below for ready reference.

“72. Distribution losses.—.....

- (2) The Commission shall approve the target of distribution loss for each financial year of the Control Period considering the opening loss levels, filings of the distribution business/licensee, submissions and objections raised by stakeholders and findings of the Commission.
- (3) 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 Control Period, 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 purchased 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.
 - (c) Export of power to other states if any and the revenue thereof shall be considered by the Commission appropriately while determining the disallowance on account of excess distribution loss.”

Analysis and decision of the Commission

4.18 The Commission carefully examined the T&D loss reduction claimed by KSEB Ltd. The Commission vide the MYT Order dated 08.07.2019 has fixed a loss reduction target of 0.25% for the year 2018-19 and 0.40% annually for the years 2019-20 to 2021-22 from the actual loss 13.07% in the year 2017-18. The actual loss reduction claimed by KSEB Ltd against the target fixed by the Commission is shown in the Table below.

Table 4.7

Target and actual loss level achieved during the year 2021-22

Year	MYT Order dated 08.07.2019			Actuals claimed by KSEB Ltd	
	loss reduction target over previous year (%)	Loss level fixed (%)	Remarks	T&D loss achieved (%)	Reduction achieved over previous year (%)
2017-18		13.07	Actual	13.07	
2018-19	0.25	12.82	Target	12.47	0.60
2019-20	0.40	12.42		12.08	0.39
2020-21	0.40	12.02		10.32	1.76
2021-22	0.40	11.62		10.19	0.13

KSEB Ltd, while approving the Truing Up petition for the 2020-21 has submitted that, the abnormal variation in loss level is due to the nationwide lock down imposed in the State for combatting the Covid-19 pandemic. Hence the loss level

achieved for the year 2020-21 is not realistic and it cannot be considered as a benchmark for its performance. Hence, while approving the Truing up of accounts for the year 2020-21, the Commission has not allowed incentives for the excess loss reduction achieved during the year 2020-21.

- 4.19 Based on the details available, the Commission has also assessed the actual T&D loss level for the year 2021-22. The details are given as Annexure-9 of this Order.
- 4.20 As detailed in Annexure-9, actual loss was 10.19% as against the targeted loss level of 11.62% approved by the Commission. The actual loss approved for the previous year was 10.32%. Thus, comparing to the actual loss reduction with the previous year, the reduction achieved for the current year is (10.32%-10.19%) is 0.13% compared to the target of 0.40% ordered to achieve by KSEB Ltd from the previous year T&D loss level.
- 4.21 The Commission also noted that, the loss reduction target for the MYT period from 2018-19 to 2021-22 was to reduce the T&D loss from 13.07% to 11.62%, i.e., to reduce the loss by 1.45% during the MYT period. However, during the said period, KSEB Ltd could reduce the T&D loss from 13.07% to 10.19%, i.e, achieved a loss reduction of 2.88%. The T&D loss target achieved is (2.88%-1.45%) 1.43% higher than the target approved by the Commission. This is a remarkable achievement.

KSEB Ltd could reduce the power purchase by 424.76MU during the year 2021-22 by way of achieving the excess loss reduction target of 1.43% over the target approved by the Commission during the period. At an average cost of power purchase (including the self generation) at the rate of Rs 2.98/unit, KSEB could achieve a reduction in cost of power purchase of Rs 126.58 crore during the year 2021-22.

Table 4.8
Savings in cost of power purchase due to excess loss reduction over target

SI No	Particulars	Quantum	
1	Energy sale by KSEB Ltd (including aux supply to RGCCPP)	23499.59	MU
2	Energy input required at approved loss level of 11.62%	26589.26	MU
3	Actual energy input of KSEB Ltd in the year 2021-22 at the actual loss level of 10.19%	26164.51	MU
4	Savings in power purchase = (2)-(3)	424.76	MU
5	Average power purchase cost (including self-generation)	2.98	Rs/unit
6	Savings in cost of power purchase due to the over achievement of loss reduction target	126.58	Rs. Cr

- 4.22 As per the Regulation 14 of the Tariff Regulations, 2018, 2/3rd of the savings in cost of power purchase due to the over achievement of the loss reduction is permitted to retained by the licensee at its discretion and the remaining 1/3rd required to be passed on to the consumers as a rebate in tariff. Accordingly, as per the Tariff Regulations, 2018, KSEB Ltd is eligible to retain 2/3rd of savings (Rs 126.58 crore), equal to Rs 84.39 crore with them.
- 4.23 At the same time, considering the huge unbridged revenue gap of Rs 7130.74 crore as on 31.03.2021, and the significant revenue gap approved for the control period 2022-27, requiring substantial upward revision in retail tariff, the

Commission is constrained to utilize the entire savings in cost of power purchase to bring down the revenue gap at this stage, as a contribution of the licensee towards efficiency gains, as a purely provisional measure. This is only a deferment for the time being and once the approved revenue gap of KSEB Ltd is brought down to manageable levels, KSEB Ltd can claim the 2/3rd of savings subsequently. With this observation, the Commission proposes to pass on the entire savings in cost of power purchase due to excess loss reduction over the target approved during the MYT period from 2018-19 to 2021-22 to the consumers of KSEB Ltd in the year 2021-22, provisionally.

CHAPTER - 5 TRUING UP OF ACCOUNTS OF SBU-D of KSEB Ltd

- 5.1 KSEB Ltd is the incumbent distribution licensee in the State of Kerala. As on 31.03.2022, KSEB Ltd has been supplying electricity to about 134 lakh consumers in the State. The key statistics of the distribution network of KSEB Ltd as on 31.03.2022 is given as Annexure-10.
- 5.2 KSEB Ltd further submitted that, it had ensured 100% availability of electricity in State. There was no power cut or load shedding in the State even during extreme summer months, except for emergency supply interruptions caused by uncontrollable factors. The gross availability of electricity supply for the year 2021-22 as per Tariff Regulations 2018 was 110%.

Energy sales

- 5.3 The details of the energy sales and T&D loss during the year 2021-22 is discussed in detail in Chapter-4 of this Order. The total energy sale by KSEB Ltd to its consumers is 23499.59 MU. The T&D loss level attained in the year 2021-22 was 10.19%.

Aggregate Revenue Requirement

- 5.4 Summary of the Aggregate Revenue Requirement, Revenue from Tariff and the Revenue gap of SBU-D as per the petition filed by KSEB Ltd for the year 2021-22 is given in the Table below.

Table 5.1
KSEB Ltd claim- ARR, ERC and Revenue gap of SBU-D for the year 2021-22 (Rs. Cr)

Particulars	MYT dated 08.07.2019	Actual	Truing up petition	Difference
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Cost of Generation (SBU-G)	639.86	647.21	540.22	99.64
Cost of Power Purchase incl RLDC	8967.44	8532.16	8432.58	534.86
Cost of Intra-State Transmission (SBU-T)	1283.52	1210.14	1152.24	131.28
Interest & Finance Charges	1322.63	1383.73	1724.03	-401.40
Depreciation	154.91	682.85	252.98	-98.07
O&M Expenses	2848.95	3912.53	2847.27	1.68
Pay revision arrears			437.36	-437.36
Return on equity (14%)	253.50	376.58	253.50	0.00
Other Expenses		169.88	169.88	-169.88
Exceptional items		17.58	17.58	-17.58
Sharing the gains of higher T&D loss			125.25	-125.25
Recovery of past gap	850.00		346.39	503.61
Additional contribution to Master Trust	167.10		257.55	-90.45
Total ARR	16487.92	16932.67	16556.82	-68.91
Tariff Income incl fuel surcharge	14523.36	16366.93	14640.61	-117.25
Less Power factor incentive	33.95		38.61	-4.66
Revenue from external sale	405.61		1024.31	-618.70
Non-Tariff Income	594.36	565.75	930.51	-336.15
Total ERC	15489.38	16932.67	16556.82	-1067.45
Net Revenue Gap (-)/ Surplus (+)	-998.54	0.00	0.00	-998.54

5.5 The Commission has examined in detail, the various expenses as claimed by KSEB Ltd in the petition for the Truing up of accounts for the year 2021-22. The analysis and decision of the Commission on various expense components of KSEB Ltd for the year 2021-22 is discussed in the subsequent paragraphs.

Cost of Internal Generation (Transfer cost of SBU-G)

5.6 Cost of generation claimed by KSEB Ltd in the truing up petition is the transfer cost of SBU-G of KSEB Ltd, which includes the cost of internal hydel generation and its two LSHS stations BDPP and KDPP. The transfer cost of SBU-G is discussed in detail under Chapter-2 of this order. As against the claim of Rs.540.22 crore, the Commission has approved Rs.517.37 crore as transfer cost of SBU-G of KSEB Ltd for the year 2021-22.

5.7 The summary of the internal generation and transfer cost of SBU-G approved for the year 2021-22 is given below.

Table 5.2
Summary of the internal generation and transfer cost of SBU-G
approved for the year 2021-22

Source	Gross Generation (MU)	Aux consumption (MU)	Net Generation (MU)	Transfer cost of SBU-G approved (Rs. Cr)
Hydro	9836.91	94.06	9742.85	520.02
BDPP	0.00	0.61	-0.61	
KDPP	0.00	0.54	-0.54	
Wind	1.16	0.00	1.16	
Solar	20.20	0.00	20.20	
Subtotal	9858.27	95.22	9763.05	

As above, the net transfer cost of SBU-G approved for transfer to SBU-D of KSEB Ltd is Rs.520.02 crore for the year 2021-22.

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

5.8 Cost of Intra State Transmission is the transfer cost of SBU-T to SBU-D. The Commission has appraised in detail the transfer cost of SBU-T in detail and approved the transfer cost of intra-state transmission at Rs.1105.18 crore as against the claim of Rs.1152.24 crore for the year 2021-22.

Purchase of Power

5.9 KSEB Ltd, in the petition has submitted that, the Commission vide the MYT Order dated 08.07.2019 had approved the purchase of 22055.46 MU at a total cost of Rs.8964.44 crore for the year 2021-22. As against the approval, the actual power purchase was 18887.65 MU at the total cost of Rs 8532.14 crore. However, in the petition for True up, KSEB Ltd requested to approve Rs.8432.58 crore for the year 2021-22. The details of the power purchase along with the reasons for the variations over approval are detailed in the subsequent paragraphs.

5.10 The summary of the power purchase cost claimed by KSEB Ltd from different sources is given below.

Table 5.3
Summary of the power purchase for the year 2021-22

No	Particulars	Approved			Actual			Truing up				
		Energy	Cost	Avg tariff	Energy	Cost	Avg tariff	Energy	Cost	Avg tariff	Difference over approval	
		(MU)*	(Rs Cr)	(Rs/kWh)	(MU)*	(Rs Cr)	(Rs/kWh)	(MU)*	(Rs Cr)	(Rs/kWh)	Quantum (MU)	cost (Rs. Cr)
1	Central Gen. Stations	11274.77	4244.91	3.76	9505.46	3753.30	3.95	9505.46	3753.3	3.95	-1769.31	-491.61
2	Renewable purchase	2133.62	651.78	3.05	652.53	222.48	3.41	652.53	222.48	3.41	-1481.09	-429.30
3	RGCCPP, Kayamkulam (net)	0	0		0.00	104.23		0	104.23		0.00	104.23
4	Captive/Solar prosumer injection**				299.84	3.03	0.10	299.84	3.03	0.10	299.84	3.03
4	Long Term Contracts	8647.06	3510.51	4.06	7721.30	3192.24	4.13	7721.3	3071.27	3.98	-925.76	-439.24
5	Short term / Exchanges/UI/Swap	0	0		708.52	249.37	3.52	708.52	249.37	3.52	708.52	249.37
8	Transmission charges		557.24			1023.62		0	1023.62		0.00	466.38
9	Other charges in connection with sale					5.27		0	5.27		0.00	5.27
10	Provisions for energy through banking transactions, which was not returned during FY 2021-22					-21.41					0.00	0.00
11	Total	22055.45	8964.44	4.06	18887.65	8532.14	4.52	18887.65	8432.58	4.46	-3167.80	-531.86
	Average Power Purchase cost (Rs/unit)	4.065			4.52			4.46				

* Energy at KSEB Bus
**Energy injection during 2021-22 is shown in the table: Settled energy during FY 2021-22 in case of solar prosumers is 33.75 MU and that of captive consumers is 7.91 MU

5.11 As above, KSEB Ltd during the year 2021-22 had purchased power from the following sources such as;

- (a) Central Generating Stations,
- (b) Wind, solar, small hydro and other IPPs within the State,
- (c) Power Purchase from Thermal IPPs,
- (d) Power purchase from IPPs/Traders outside the state,
- (e) Power purchase considered under short term contracts including Traders, exchanges and Deviation Settlement Mechanism (DSM)

Before going into the details of the power purchase, the Commission has examined the provisions in the Tariff Regulations, 2018 regarding the power purchase and related aspects.

Provisions in the Regulations

5.12 Regulations 76 and 77 of the Tariff Regulations, 2018 deals with power purchase and related issues. Based on the above provisions of the Tariff Regulations, 2018, the Commission has carefully examined the purchase of power from each source in detail. The Commission's analysis, findings, results and recommendations are given in the subsequent paragraphs.

A. Purchase of power from Central Generating Stations (CGS)

5.13 The total power purchase from the CGS for 2021-22 is 9845.13 MU (ex-bus) and the cost of this power purchase as per the accounts is Rs.3753.30 crore. The details of the power purchase from CGS is given below.

Table – 5.4
Power Purchase from Central Generating Stations for the year 2021-22

Sl No	Station	Approved		Audited accounts		True up requirement		Variation	
		Energy* (MU)	Cost (Rs Cr)	Energy * (MU)	Cost (Rs Cr)	Energy * (MU)	Cost (Rs Cr)	Energy* (MU)	Cost (Rs Cr)
1	RSTPS I & II	1808.01	590.84	1329.76	491.30	1329.76	491.30	-478.25	-99.54
2	RSTPS III	453.27	147.65	385.26	147.04	385.26	147.04	-68.01	-0.61
3	Talcher Stage-II	3172.90	783.89	2887.83	743.34	2887.83	743.34	-285.07	-40.55
4	Simhadri TPS Stg II	584.87	259.53	428.97	244.70	428.97	244.70	-155.90	-14.83
5	NLC Stage-I	397.35	137.22	303.59	107.19	303.59	107.19	-93.76	-30.03
6	NLC Stage-II	567.42	197.35	447.46	157.94	447.46	157.94	-119.96	-39.41
7	NLC 1 Expansion	429.02	150.28	385.49	137.29	385.49	137.29	-43.53	-12.99
8	NLC II Expansion	282.78	140.83	267.46	137.14	267.46	137.14	-15.32	-3.69
9	MAPS	123.59	35.76	40.68	10.58	40.68	10.58	-82.91	-25.18
10	KAIGA	486.76	187.79	560.64	191.64	560.64	191.64	73.88	3.85
11	Kudankulam	1538.37	670.31	1847.60	765.49	1847.60	765.49	309.23	95.18
12	Vallur	347.05	171.03	214.54	133.98	214.54	133.98	-132.51	-37.05
13	NTPL	501.99	242.22	247.52	150.07	247.52	150.07	-254.47	-92.15
14	Kudgi	742.20	412.03	315.87	260.40	315.87	260.40	-426.33	-151.63
15	Bhavini	271.21	118.17			0.00	0.00	-271.21	-118.17
16	NNTPS			182.46	75.21	182.46	75.21	182.46	75.21
17	Eastern region				0.00	0.00	0.00	0.00	0.00
	Total	11706.79	4244.90	9845.13	3753.31	9845.13	3753.31	-1861.66	-491.60
	*Energy at exbus								

5.14 The Commission noted that, vide the MYT Order dated 08.07.2019, the Commission has not approved the schedule of power from New Neyveli Thermal Power Station (NNTPS). KSEB Ltd submitted that, the power purchase from New Neyveli Thermal Power Station (NNTPS) which was not included in the approved sources of CGS in the MYT Order dated 08.07.2019. The first unit of NNTPS (500MW) declared CoD on 28.12.2019 and unit-II (500MW) declared CoD on February 2021. KSEB Ltd has an allocation of 32.40 MW from NNTPS. Hon'ble CERC vide Order dated 29.01.2020 has determined the interim tariff of NNTPS for the period from anticipated COD of units to 31.03.2021. KSEB Ltd scheduled 182.46 MU during 2021- 22 for Rs 75.21 crore.

5.15 KSEB Ltd further submitted that, as detailed in Table 5.4 above, there is an overall reduction in power schedule from CGS by 1861.66 MU from the approved quantum during the year 2021-22. Further, the cost of power purchase from CGS had also been less by Rs 491.60 crore from the amount approved by the Commission. KSEB Ltd had submitted the following reasons for the reduction in schedule of power from CGS;

- (i) The resurgence of Covid Pandemic in April and May-2021 resulted in reduction of electricity demand, and this was managed by merit order surrender and external sale.

- (ii) As per the CERC Tariff Regulations, 2020, there is revision in normative auxiliary consumption of the CGS compared to the auxiliary consumption adopted by the Commission for estimating the energy availability from CGS vide the MYT Order dated 08.07.2019.

5.16 Regarding the variation in cost of power purchase, KSEB Ltd submitted the following reasons for the considerations of the Commission.

- (a) In the case of Central Generating Stations, the power purchase cost includes fixed cost, variable charges, RLDC charges, incentive claims and the various supplementary claims etc. The fixed charges and variable charges payable to a thermal generating station for a calendar month is calculated in accordance with the formula specified in the CERC tariff regulation for the control period. The fixed charges of each CGS is approved by CERC from time to time. KSEB vide the MYT order dated 08.07.2019 approved fixed charges for the financial year 2021-22 by deducting 2 % annually on the fixed charges for FY 2018-19 in anticipation of reduction in return on equity in the subsequent CERC Tariff regulations to be notified. The CERC notified Tariff Regulations 2019 on 07.03.2019, with effective date as 01.04. 2019. In the notified Tariff Regulations there was no reduction in return on equity. Further the tariff orders based on the CERC Regulations 2019-2024 is yet to be issued except RSTPS-Stage-III and Simhadri. The fixed charges are being continued at the same tariff as before, this results in increase in fixed charges when compared to the approved in tariff order.
- (b) In the order dated 08.07.2019, the variable charges of various stations for the control period including 2021-22 were calculated by giving an escalation of 2% on annual basis, on the actual variable charges for the first half of the year 2018-19. As per the notified CERC Tariff Regulations 2019-24, there has been revision in normative station heat rate and auxiliary consumption for various stations. Accordingly, energy charges increased considerably compared to the estimation. The impact of CERC Tariff regulations was not captured in the tariff of 2021-22 approved in the MYT order. In addition to the above, the variation of energy charges depends on the price notified for each mine which are different from mine to mine, grade of coal, blending ratio of imported coal and domestic coal, receipt of coal from different sources, distance from source (Coal mines), mode of transport etc. The variable charges depend on the cost of fuel and the transportation cost. The transportation cost by rail depends on the latest freight charges of railways. In the case of coal-based stations the linkage of fuel is mainly from Coal India Ltd (CIL) and Singareni Collieries Ltd (SCCL). Due to shortage from linkage sources, the generating stations has to augment coal from other domestic sources and imported coal as well. Coal from Eastern Coal Fields (ECL) and SECL is expensive as compared to coal from Mahanadi coal fields (MCL) under Coal India Ltd due to the variations in grade of coal and other reasons. Price of coal from Singareni

Collieries (SCCL) is based on the price notifications of Singareni Collieries from time to time whereas price of Coal India Ltd (CIL) is based on the notification dated 08.01.2018. There are frequent revisions in SCCL price notification compared to CIL.

- (c) The market prices as well as the fuel cost was high on account of severe coal shortages persisting after August 2021. This also result in increase in variable cost during 2021-22.
- (d) Further the actual power purchase cost includes RLDC charges, incentive claims and various supplementary claims approved vide corresponding regulations/CERC orders which is not considered while approving the ARR of FY 2021-22 vide order dated 08.07.2019.
- (e) All the above factors contribute to variation in the per unit power purchase cost of FY 2021-22 and these are beyond the control of utility. Thus, the power purchase cost is dependent on Tariff Regulations and variations in coal price from time to time and is an uncontrollable factor. Therefore, Hon'ble Commission may kindly approve the power purchase cost as submitted in the true up petition.

Energy surrender details

5.17 KSEB Ltd has also submitted the details of the energy surrendered from CGS during the low demand period including monsoon months. The details are given as Annexure-11 of this Order. The month wise details of surrender from CGS and IPPs during the Year 2021-22 is given as Annexure-13 of this Order.

As detailed in the Annexures, KSEB Ltd has surrendered 2084.77 MU from CGS and 822.51 MU from IPPs with LTA during the year 2021-22.

5.18 KSEB Ltd further submitted that, they had strictly followed the merit order despatch principles for scheduling the power from CGS and IPPs. Accordingly, during low demand period and period of excess hydel generation to avoid spillage, KSEB Ltd has surrendered power from the stations having high variable cost. The details are given below.

Table 5.5
Details of energy schedule and surrender from CGS and IPPs

Station	Annual declared Availability	Schedule	Surrender	Variable Charge	Surrender as a (%) of total availability
	MU	MU	MU	Rs/unit	
JITPL	727.64	665.17	62.47	1.21	8.6%
BALCO	531.57	487.37	44.20	1.21	8.3%
Jindal Power Limited ((Bid I)	1506.60	1403.46	103.14	1.37	6.8%
Jindal Power Limited ((Bid II)	1129.96	1052.75	77.21	1.37	6.8%
Talcher	3012.97	2788.20	224.78	1.83	7.5%
Jhabua Power Limited ((Bid I)	774.56	707.36	67.20	2.13	8.7%
Jhabua Power Limited ((Bid II)	673.62	615.09	58.53	2.14	8.7%
NNTPP	188.26	176.16	12.09	2.27	6.4%
MAITHON (MPL)	1101.65	1009.11	92.54	2.49	8.4%
MAITHON (MPL)	1101.64	1009.08	92.55	2.49	8.4%

NLC EXP	491.00	372.08	118.92	2.51	24.2%
NLC21	413.68	293.05	120.63	2.75	29.2%
NLC22	528.68	432.04	96.64	2.75	18.3%
NLC II EXP	289.90	258.26	31.63	2.81	10.9%
RSTPS (Unit 1 to 6)	1671.23	1284.35	386.88	2.87	23.1%
RSTPS (Unit 7)	483.41	372.07	111.34	2.89	23.0%
DVC-MEJIA	696.92	541.24	155.67	3.00	22.3%
Simhadri	618.19	414.11	204.08	3.11	33.0%
DVC RAGHUNATHPUR	299.65	230.66	69.00	3.12	23.0%
NTPL	382.53	239.05	143.48	3.34	37.5%
VALLUR	351.41	207.12	144.29	3.45	41.1%
KUDGI	794.92	304.90	490.03	4.14	61.6%
Total	17769.98	14862.69	2907.29		16.4%

As detailed above, KSEB Ltd has generally followed the merit order despatch principles for surrendering the power from CGS and IPPs during low demand period and during the period of excess hydel generation to reduce the spillage of water in the reservoirs.

Availability linked fixed charges of the CGS

- 5.19 As per the CERC Tariff Regulations, 2019, the tariff of the CGS and IPPs whose tariff determined by CERC comprises of fixed charges for recovering the annual fixed charges approved by CERC and variable cost for recovering the primary and secondary fuel cost. The fixed charges/capacity charges payable to thermal stations for a calendar month is calculated in accordance with the formula specified as per Regulation 42(2) of the CERC Tariff Regulations, 2019, which is applicable for the control period from 2019-20 to 2023-24.
- 5.20 The normative annual plant availability factor (NAPAF) in percentage for coal based station is 85% and that for NLC Stage-1 stations are 72%. The CERC Regulation provide for recovering the fixed cost of generation under two segments in an year, for high demand season (for three months) and low demand (period of remaining nine months).
- 5.21 The details of the PAF in low demand months (May-2021 to January-2021) and high demand months (April 2021, February 2022 and March 2022), the fixed cost payable at normative availability and the fixed cost actually paid for the year 2021-22 is given as Annexure-12 to this Order.
- 5.22 KSEB Ltd further submitted that, as part of Truing up claim of CGS during the previous tariff period of 2014-21, the AFC paid/ adjusted during the year 2021-22 is given below.

Table 5.6
Fixed charges of the previous years claimed during the year 2021-22

SI No	Name of the Station	Amount (Rs. Cr)
1	NTPC- Simhadri	13.09
2	NTPC- RSTPS Stage-III	1.99
3	Maithon Power Ltd-I	-54.28
4	Maithon Power Ltd-II	-52.00
5	Total	-91.20

Comments of the HT & EHT Association

- 5.23 The Association requested before the Commission to verify whether the licensee has followed the Merit Order Despatch principles while scheduling the power from CGS. The Commission may also verify whether the licensee has incurred prudent fixed cost payments, linked to normative availability.

Analysis and decision of the Commission

- 5.24 The Commission has examined in detail the power purchase from CGS in the year 2021-22 as detailed above.
- 5.25 The Commission noted that, except for the power purchase from New Neyveli Thermal Power Station (NNTPS), all other sources are approved in the MYT Order dated 08.07.2019. The Commission vide the Order dated 22.02.2023 in petition OP No. 69/2022 had granted approval of the PPA dated 03.11.2010 with NTPC Ltd for the purchase of 111.72 MW from its Kudgi Super Thermal Power Station at Karnataka and also granted approval of the PPA dated 10.12.2010 entered by KSEB Ltd with M/s NLC Ltd for the purchase of 32.40MW from its Neyveli New Thermal Power Station in Tamilnadu.
- 5.26 The Commission has examined the details of energy schedule from CGS, the details of energy surrendered during the year 2021-22, the fixed cost and variable cost paid during the year 2021-22, and noted the following;
- (a) The Commission vide the MYT Order dated 08.07.2019 had approved the energy availability from CGS at 11706.78 MU. As against the same the actual availability was 11929.83 MU, which includes 194.55 MU from NLC New Thermal power station. However, out of the 11929.83 MU, KSEB Ltd had surrendered 2084.70 MU during the low demand periods and also due to increase in hydel generation to avoid spillage of water.
- KSEB Ltd has also submitted the month wise details of the energy surrendered from CGS and other IPPs during the year 2021-22, and the reasons for the surrender. The details are given in Table 5.5 above. KSEB Ltd has also submitted the source wise details of the energy surrender and the variable cost of energy generation of the year 2021-22, as detailed in Annexure-11 of this Order. KSEB Ltd has generally followed the merit order dispatch principles while scheduling power from the CGS and IPPs, based on the variable cost of generation in the year 2021-22. The details are given in the Table –5.5 above.
- (b) The Commission has also noted the plant availability of each station, fixed charges payable at normative plant load factor, actual plant availability and the fixed charge paid during the year 2021-22. The total fixed charges payable at Normative plant availability was Rs 1000.99 crore, however few stations such as NLC II Exp II, NLC Tamilnadu Power Ltd, Neyveli New Thermal Power Plant etc could not achieve the normative plant availability for claiming the full fixed charges. The actual fixed charges paid to CGS during the year was Rs 924.15 crore. In addition to the above, KSEB Ltd

has paid Rs 15.08 crore towards fixed charges for the previous years subsequent to the final tariff orders issued by the CERC. Thus the total fixed charges paid during the year 2021-22 was Rs 939.23 crore.

- (c) The Commission has also noted that, the tariff of all CGS except the power plant coming under the Department of Atomic Energy is determined by CERC as per the provisions of the Electricity Act, 2003. The tariff of the Atomic Power Plants such as MAPS, KAIGA and Kudamkulam plants are determined by the Department of Atomic Energy, Government of India.
- (d) The summary of the power purchase from CGS including the total cost claimed during the year 2021-22 is given as Annexure-14.

The Commission, after examining the details furnished by KSEB Ltd hereby approve the total power purchase of 9845.13 MU at ex-bus at a total cost of Rs.3753.30 crore from Central Generating Stations (CGS) for the year 2021-22. The details are given below.

Table 5.7
CGS- cost of power purchase approved for the year 2021-22

Sl No	Station	MYT Order dated 08.07.2019			True up petition			KSERC Approval		
		Energy* (MU)	Cost (Rs Cr)	Avg. tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg. tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg. tariff (Rs/ kWh)
1	RSTPS I & II	1808.01	590.84	3.27	1329.76	491.30	3.69	1329.76	491.30	3.69
2	RSTPS III	453.27	147.65	3.26	385.26	147.04	3.82	385.26	147.04	3.82
3	Talcher Stage-II	3172.90	783.89	2.47	2887.83	743.34	2.57	2887.83	743.34	2.57
4	Simhadri TPS Stg II	584.87	259.53	4.44	428.97	244.70	5.70	428.97	244.70	5.70
5	NLC Stage-I	397.35	137.22	3.45	303.59	107.19	3.53	303.59	107.19	3.53
6	NLC Stage-II	567.42	197.35	3.48	447.46	157.94	3.53	447.46	157.94	3.53
7	NLC 1 Expansion	429.02	150.28	3.50	385.49	137.29	3.56	385.49	137.29	3.56
8	NLC II Expansion	282.78	140.83	4.98	267.46	137.14	5.13	267.46	137.14	5.13
9	MAPS	123.59	35.76	2.89	40.68	10.58	2.60	40.68	10.58	2.60
10	KAIGA	486.76	187.79	3.86	560.64	191.64	3.42	560.64	191.64	3.42
11	Kudankulam	1538.37	670.31	4.36	1847.60	765.49	4.14	1847.60	765.49	4.14
12	Vallur	347.05	171.03	4.93	214.54	133.98	6.24	214.54	133.98	6.24
13	NTPL	501.99	242.22	4.83	247.52	150.07	6.06	247.52	150.07	6.06
14	Kudgi	742.20	412.03	5.55	315.87	260.40	8.24	315.87	260.40	8.24
15	Bhavini	271.21	118.17	4.36	0.00	0.00		0.00	0.00	
16	NNTPS				182.46	75.21	4.12	182.46	75.21	4.12
	Total	11706.79	4244.90	3.63	9845.13	3753.31	3.81	9845.13	3753.31	3.81
	*Energy at exbus									

B. Power Purchase from Wind and small IPPs within the state:

- 5.27 KSEB Ltd, in their petition has submitted that, it had purchased 453.90 MU at the cost of Rs 166.11 crore against the MYT approved quantum of 280.70 MU at Rs 103.78 Crore from wind and small independent power producers within the State. The details of the power purchase from wind and small IPPs located within the State in the year 2021-22 is given as Annexure-15. The details are given below.

Wind IPPs:

- 5.28 KSEB Ltd in the Truing up petition has submitted that the Commission vide the MYT Order dated 08.07.2019 had approved 121.97 MU from various wind IPPs for a total cost of Rs.45.61 crore against which, KSEB Ltd purchased 114.43 MU at the total cost of Rs. 42.91 crore.

All sources of wind IPPs except Kosamattom was approved by the Commission vide the MYT order dated 08.07.2019. KSEB Ltd further submitted that, at the time of MYT order, the approval of PPA with M/s Kosamattom Finance Ltd was only under process. The plant was connected to grid on 20.03.2018. The Commission vide the Order dated 04/12/2019 approved the levelized tariff for the electricity generated from the 1 MW WEG installed by M/s KFL at Ramakkalmedu at Rs 4.23 per unit without the benefit of accelerated depreciation and Rs 3.93 per unit, if the benefit of accelerated depreciation is to be availed of. The Commission vide order dated 27.10.2020 approved the draft PPA of the generator with certain modifications @ Rs 3.93 per unit and KSEB Ltd entered PPA with M/s Kosamattom Finance limited for purchasing power from the 1MW Wind Mill at Ramakkalmedu at a tariff of Rs.3.93/unit availing the benefit of accelerated depreciation. The summary of the power purchase from wind IPPs is given below.

Table 5.8
Summary of the power purchase from Wind IPPs

Station	MYT Order dated 08.07.2019			Truing up petition		
	(MU)	(Rs.Cr)	Avg. Tariff (Rs/kWh)	(MU)*	(Rs Cr)	Avg. Tariff (Rs/ kWh)
Wind- Ramakkalmedu	27.87	8.75	3.14	23.79	19.83	3.14
Wind-Koundikkal	12.56	3.94	3.14	10.07		3.14
Wind- Agali	29.72	9.33	3.14	28.95		3.14
Wind Ahalya	20.98	10.97	5.23	17.42	9.11	5.23
INOX	30.84	12.61	4.09	32.97	13.48	4.09
Kosamattom	0.00	0.00		1.24	0.49	3.95
Wind Sub total	121.97	45.61	3.74	114.43	42.91	3.75

Small Hydro IPPs:

- 5.29 KSEB Ltd submitted that, the Commission vide order dated 08.07.2019 approved 88.65 MU from various small hydel IPPs @ of Rs.30.84 Cr. KSEB Ltd has procured 175.52 MU at a cost of Rs 60.81 crore as detailed in the Table 5.9 below.
- 5.30 The Commission had already approved the power purchase from Ullumkal SHP, Iruttukkanam SHP, Karikkayam SHP and Meenvalom SHP and the Commission vide the MYT Order dated also approved the power purchase from these sources. Subsequently, Commission vide the Order dated 06.09.2019 in petition OA No. 08/2018 had approved the power purchase from 8 MW Pathamkayam SHP of M/s Minar Renewable Energy Ltd @Rs 3.94/unit with the benefit of accelerated depreciation. However, KSEB Ltd had made the payment at the provisional rate of Rs 3.49/unit since the petitioner is yet to sign the Power Purchase Agreement with KSEB Ltd at the tariff of Rs 3.94/unit approved by the Commission.

Further, the Commission vide the interim Order dated 25.10.2021 in petition OP No. 01/2021 had approved the interim tariff @Rs 4.00/unit for the electricity generated from the 8 MW SHP of M/s Anakampoil Power Pvt Ltd. The Commission had directed KSEB Ltd to purchase the electricity generated from the Anakampil Power Plant at this rate till the Commission determine the tariff of the electricity generated from the SHP. The Commission further directed that, 'once the Commission approves the project specific tariff for the 8MW Anakampoil SHP, the provisional payments made, shall be adjusted to the project specific tariff, and the excess payment/ shortfall in payment, if any shall be adjusted in the future bills'. During the year 2021-22, KSEB Ltd had purchase 24.53 MU and effected the provisional payment @Rs 4.00/unit.

The Commission vide the Order dated 14.09.2020 in petition OP No. 56/2019 had approved the interim tariff at the average cost of power purchase from sources other than from KSEB Ltd's own plants as applicable for each of the Financial Years for the electricity generated and supplied to KSEB Ltd from the 50kW Diviar Micro Hydel Project established by M/s Hydro Power Ltd. During the year 2021-22, KSEB Ltd has purchased 0.13 MU at the rate of Rs 3.85/unit.

In addition to the above, KSEB Ltd has also accounted 6.40MU of energy injected from the Arippara SHP of M/s CIAL, however not effected the payment of power purchase from the project. The Commission vide the Order dated 08.03.2023 had approved the tariff of the electricity generated from the Arippara SHP @Rs 4.30/unit. The summary of the power purchase from SHPs developed as IPPs during the year 2021-22 is given below.

Table 5.9
Summary of the power purchase from SHPs during the year 2021-22

Station	MYT Order dated 08.07.2019			Truing up petition		
	(MU)	(Rs.Cr)	Avg. Tariff (Rs/kWh)	(MU)*	(Rs Cr)	Avg. Tariff (Rs/ kWh)
Ullunkal(EDCL)	17.79	4.34	2.44	25.36	6.19	2.44
Iruttukanam Stage-I & II(Viyyat)	24.69	6.67	2.70	26.37	7.25	2.75
Karikkayam HEP(AHPL)	37.56	15.62	4.16	58.76	24.45	4.16
Meenvallom(PSHCL)	8.44	4.12	4.88	8.71	4.25	4.88
Kallar of Idukki District Panchayat	0.08	0.04	5.00	-	-	
Mankulam of Grama Panchayat	0.09	0.04	4.44	-	-	
Minar Renewables				25.27	8.82	3.49
Deviar micro hydro				0.13	0.05	3.85
Anakkampoil				24.53	9.81	4.00
Arippara				6.40	-	
SHEP subtotal	88.65	30.84	3.48	175.52	60.81	3.46

Solar IPPs:

- 5.31 KSEB Ltd submitted that, the Commission vide the MYT order dated 08.07.2019 had approved 70.08 MU from Kasargod solar park (IREDA) for a total power purchase cost of Rs 27.33 Cr. The actual power purchase during the year 2021-22 was 75.90 MU at a total cost of Rs 29.07 crore.

KSEB Ltd further submitted that, it had absorbed 2.33 MU of energy injected from solar Project Kuzhalmannam of ANERT. As per the direction of the State Government, KSEB Ltd provisionally remitted Rs.0.63 Cr towards the power purchase cost to ANERT @ Rs 2.69/unit on the condition that, the final tariff approved by the Commission shall be retrospectively applied for the entire energy injected from ANERT. The Commission is yet to approve the tariff of the electricity generated from the 2 MW Solar Plant of ANERT established at Kuzhalmannam, Palakkad.

KSEB Ltd further submitted that, the 50 MW solar project by THDCIL Paivalikala at Kasargod district was commissioned on 31.12.2020 and KSEB Ltd started scheduling energy from January 2021 onwards. KSEB Ltd procured 84.65 MU during this year. KSEB Ltd has also submitted that, it had purchased 17.24 MU from the project during the year 2020-21. KSEB Ltd had effected the payment of Rs 32.69 crore during the year 2021-22 towards the total purchase of 17.24 MU in 2020-21 and 84.65MU in 2021-22. Summary of the power purchase from Solar IPPs during the year 2021-22 is given below.

Table 5.10
Summary of the power purchase from Solar IPPs during the year 2021-22

Station	MYT Order dated 08.07.2019			Truing up petition		
	(MU)	(Rs.Cr)	Avg. Tariff (Rs/kWh)	(MU)*	(Rs Cr)	Avg. Tariff (Rs/ kWh)
Solar IREDA	70.08	27.33	3.90	75.90	29.07	3.83
Solar IPP ANERT				2.33	0.63	2.70
THDCIL				84.65	32.69	3.86
CIAL Ettukudukka				1.07		
Solar IPPs	70.08	27.33	3.90	163.95	62.38	3.80

Analysis and decision of the Commission

5.32 The Commission has examined the power purchase from wind, SHPs and solar IPPs during the year 2021-22 and noted the following.

a) **Wind IPPs.**

All the sources of wind IPPs except power purchase from the Kosamattom plant (1MW) are approved by the Commission in the MYT Order dated 08.07.2019. The tariff for power purchase from the respective wind IPPs and their rates are also approved by the Commission.

The Commission vide Order dated 04.12.2019 had approved Rs 3.93/unit as the tariff of the power generated from 1MW Wind plant of M/s Kosamattom Finance Ltd. Subsequently, the Commission vide the Order dated 27.10.2020 had approved the PPA of the Kosamattom plant to be entered with the licensee KSEB Ltd.

Based on the above approvals, the total cost of power purchase from wind IPPs is Rs 42.91 crore for the purchase of 114.43 MU. **The Commission hereby approves Rs.42.91 crore the cost of power purchase of wind IPPs as claimed by KSEB Ltd.**

b) Small Hydro IPPs

The Commission noted that, except the power purchase from Anakampoil SHP (8MW), Arippara SHP of M/s CIAL and 50MW Deviar Micro hydel project of M/s Hydro Power Ltd, all other sources were approved by the Commission vide the Order dated 08.07.2019.

The Commission vide the interim Order dated 25.10.2021 in petition OP No. 01/2021 had approved the interim tariff @Rs 4.00/unit for the electricity generated from the 8MW SHP of M/s Anakampoil Power Pvt Ltd. Further, the Commission vide the Order dated 14.09.2020 in petition OP No. 56/2019 had approved the interim tariff at the average cost of power purchase from sources other than from KSEB Ltd's own plants as applicable for each of the Financial Years for the electricity generated and supplied to KSEB Ltd from the 50kW Diviar Micro Hydel Project established by M/s Hydro Power Ltd.

In addition to the above, KSEB Ltd has also accounted 6.40MU of energy injected from the Arippara SHP of M/s CIAL, however not effected the payment of power purchase from the project. The Commission vide the Order dated 08.03.2023 had approved the tariff of the electricity generated from the Arippara SHP @Rs 4.30/unit. Since the payment of the electricity purchased from M/s Arippara SHP of M/s CIAL was not effected during the year 2021-22, the Commission not approved the cost though the quantum of energy supplied is considered for the year 2021-22.

As above, the Commission hereby approves the purchase of 175.52 MU from SHPs at the total cost of Rs 60.81 crore for 2021-22.

c) Solar IPPs and Solar Prosumers

During this period, KSEB Ltd purchased 163.95MU from Solar IPPs at a total cost of Rs 62.38 crore. Out of the above, the approval of power purchase from the 50 MW Solar power plant established by M/s THDCIL was approved subsequent to the MYT Order dated 08.07.2019. The Commission vide the Order dated 17.03.2021 in petition OP No. 26/2020 had approved the tariff of electricity generated from the project and supplied to KSEB Ltd @ Rs 3.10/unit. KSEB Ltd during the year 2020-21 had purchased 17.24 MU from THDCIL, however the payment of the power purchase was not effected during the year 2020-21 for want of approval from the Commission. However, KSEB Ltd during the year 2021-22 effected the payment of Rs 32.69 crore for the entire power purchase of 101.89 MU (17.24 MU in 2020-21 and 84.65 MU in 2021-22). At the rate of Rs 3.10/unit approved by the Commission, the total tariff payable was only Rs 31.59 crore for the 101.89 MU as against Rs 32.69 crore claimed by KSEB Ltd. Hence as part of the power purchase, the Commission hereby approve the cost of power purchase for the year 2021-22 including the power purchase of 17.24 MU in the year 2020-21 @ Rs 31.59 crore only.

Though the Commission had not approved the power purchase of the 2 MW Solar plant developed by ANERT at Kuzhalmannam, ***the Commission hereby approve the cost of power purchase of 2.33 MU @Rs 0.63 crore at the average tariff of Rs 2.70/unit, subject to the condition that the final tariff to be approved shall be applicable retrospectively from date of CoD for the entire energy purchased from the project.***

In addition to the above, KSEB Ltd claimed that they had purchased 1.07MU from CIAL, Ettukudukka. Since KSEB Ltd has not submitted the details of the power purchase, and ***the Commission is yet to approve the same, KSEB Ltd has not claimed cost of the power purchase from the CIAL Ettukudukka. In the absence of sufficient details of the power purchase, the Commission also not approving the cost of power purchase from the project.*** The summary of the power purchase approved from the Solar IPPs is detailed below.

Table 5.11

Summary of the cost of power purchase from Solar IPPs during the year 2021-22

Station	Truing up petition			KSERC Approval		
	(MU)	(Rs Cr)	Avg. Tariff (Rs/ kWh)	(MU)	(Rs Cr)	Avg. Tariff (Rs/ kWh)
Solar IREDA	75.90	29.07	3.83	75.90	29.07	3.83
Solar IPP ANERT	2.33	0.63	2.70	2.33	0.63	2.70
THDCIL	84.65	32.69	3.86	84.65	31.59	3.73
CIAL Ettukudukka	1.07			1.07		
Solar IPPs	163.95	62.39	3.81	163.95	61.29	3.74

5.33 The summary of the cost of power purchase approved from the small renewable power plants within the State is given below.

Table 5.12

Summary of the power purchase approved from RE IPPs within the State for the year 2021-22

Station	MYT Order dated 08.07.2019			Truing up petition			KSERC Approval		
	(MU)	(Rs. Cr)	Avg. Tariff (Rs/ kWh)	(MU)	(Rs. Cr)	Avg. Tariff (Rs/kWh)	(MU)*	(Rs Cr)	Avg. Tariff (Rs/ kWh)
Wind IPPs	121.97	45.61	3.74	114.43	42.91	3.75	114.43	42.91	3.75
SHP IPPs	88.65	30.84	3.48	175.52	60.81	3.46	175.52	60.81	3.46
Solar IPPs	70.08	27.33	3.90	163.95	62.38	3.80	163.95	61.29	3.74
Total	280.70	103.78	3.70	453.90	166.10	3.66	453.90	165.01	3.64

C. Power purchase 200MW Wind Power through SECI on long term basis

5.34 KSEB Ltd submitted that, it had entered PSA with SECI to purchase 200 MW of wind energy on long Term basis for a period of 25 years. 75 MW of power starts scheduling from March 2021 onwards. The Commission vide the order dated 09.12.2020 approved Power Sale Agreement (PSA) for 200 MW wind power with SECI dated 14.06.2019 and its amendment dated 12.12.2019, for a period of 25 years from the Scheduled Commissioning Date (SCD) at the tariff as below.

- (i) @Rs 2.83/ kWh from the Scheduled Commissioning Date (SCD) until the commissioning of the cumulative awarded capacity/ cumulative capacity and,
- (ii) at the pooled tariff arrived @Rs 2.8237/ kWh as per the Schedule-1 of the PSA dated 14th June 2019 from the commissioning of the cumulative awarded capacity/ cumulative capacity commissioned. The Commission vide order dated 28.10.2021 approved the trading margin of Rs0.07/kWh in the Power Sale Agreement for 200MW wind power with Solar Energy Corporation of India Limited on long term basis.

KSEB Ltd submitted that, it had procured 198.63 MU during the year 2021-22 for a power purchase cost of Rs 56.37 crore.

Analysis and Decision of the Commission

- 5.35 The Commission vide the order dated 09.12.2020 had approved the purchase of 200MW wind power through SECI for the period of 25 years from the date of SCD. KSEB Ltd had purchased 198.63 MU from the contract at the total cost of Rs 56.37 crore @ Rs 2.83/unit. Since the purchase was from the approved source, ***the Commission hereby approve the purchase of 198.63 MU of wind power through SECI at the total cost of Rs 56.37 crore in the year 2021-22.***

D. Captive power producers/ Solar prosumers

- 5.36 KSEB Ltd further submitted that, captive power producers had injected 43MW power into the grid for banking and consume the same within the settlement period. Total energy injected by the captive consumers is 143.39 MU during the year 2021-22. The total capacity of the solar prosumers as on 31.03.2022 is 276.81 MW. The energy injected by solar prosumers for banking for use in the subsequent months of the settlement period is 156.45 MU.
- 5.37 The total energy banked by the captive consumers and solar prosumers, during the year 2021-22 is given below.

Table 5.13
Energy banked by CPPs and Prosumers in the year 2021-22

Source	Energy (MU)
Energy injected into the grid for banking during the Year 2021-22	
(a) Captive consumers	143.39
(b) Solar prosumers	156.45
Sub total	299.84

- 5.38 KSEB Ltd further submitted that, out of the banked energy during the year 2021-22, KSEB Ltd had settled 33.75 MU at the rate of 3.22 per unit for Rs.10.87 Cr. Out of this Rs.2.93 Cr was accounted for the year 2021-22. Further, the settlement of captive consumers for 7.91 MU had adjusted only in the months of April-2022 and May-2022, and hence the same was not accounted for the year 2021-22. KSEB Ltd has also claimed Rs 0.11 lakh towards incentive to Solar Chalayur colony during the year 2021-22.

The details of the energy settled at APPC rate during the year 2021-22 is given below.

Table 5.14
KSEB Ltd claim on Energy settled at APPC rate in the Year 2021-22

Source	Energy (MU)	Amount (Rs Cr)
Energy settled at APPC rate (out of banked energy)		
Solar Chalayur colony*	0.076	0.11
Grid connected -solar(settlement)	33.750	2.93
captive consumer settlement	7.910	Adjusted against the bills in April and May 2022.
Total	41.736	3.03

Analysis and Decision of the Commission

5.39 The Commission had examined the details of the energy banked by the captive power producers and solar prosumers in the year 2021-22 for the use in the subsequent months of the settlement period. As per the details submitted by KSEB Ltd, during the year 2021-22, total 299.84 MU is banked by the CPPs and Solar prosumers. The details are given below.

Table 5.15
Energy banked by CPPs and Solar prosumer during the year 2021-22

Source	Quantity
Kuthungal SHP	69.59
Maniyar SHP	48.49
CIAL	32.07
Malayala Manorama	25.31
Hindalco	0.55
KMRL	3.03
Other Solar prosumers	120.80
Sub total	299.84

The Commission has also examined the part of the banked energy settled at the end of the settlement period at the APPC @Rs 2.93/unit. The Commission has also noted that, KSEB Ltd has provided an incentive of Rs 0.11 crore to Solar Chalayur Colony for the solar generation of 0.075792 MU, without the prior approval of the Commission. Hence the Commission is constrained to disallow the incentive provided by KSEB Ltd to the Chalayur colony during the year 2021-22. The summary of the cost of the energy settled with CPPs and Solar Prosumers during the year 2021-22 is given below.

Table 5.16
Summary of the banked energy settled at APPC rate in the Year 2021-22

Particulars	Truing Up petition		KSERC Approval	
	Quantity (MU)	Amount (Rs. Cr)	Quantity (MU)	Amount (Rs. Cr)
Solar Chalayur colony	0.076	0.11		
Grid connected solar(settlement)	33.75	2.93	33.75	2.930
Captive consumer settlement	7.91	Adjusted against the bills in Apr & May'22.	7.91	Adjusted against the bills in Apr & May'22.
Total	41.736	3.03	41.660	2.930

E. Fixed cost of RGCCPP- Kayamkulam plant of NTPC

- 5.40 KSEB Ltd in the petition submitted that, the Commission, vide Order dated 08.07.2019, did not approve any scheduling of power from RGCCPP for the year 2021-22 and also had not approved the fixed cost payable from 2019-20 onwards. The Commission had directed KSEB Ltd to negotiate with NTPC Ltd for bringing down the Annual Fixed Cost. As per the direction of Hon'ble Commission, KSEB Ltd and NTPC Ltd. held several rounds of discussions and in the meeting held on 12-11-2020, NTPC and KSEB Ltd agreed on a sum of Rs. 100.00 crores per annum as Annual Fixed Charges of RGCCPP, Kayamkulam for the period starting from 01.04.2019 to the end of station life as per PPA i.e up to 28.02.2025. The matter was brought to the kind attention of the Commission vide petition dated 11.01.2021 and the Commission vide Order dated 17.03.2021 was pleased to approve the fixed charges for the PPA period.
- 5.41 The total power purchase cost of RGCCPP claimed by KSEB Ltd during the year 2021-22 is given below.

Table 5.17
RGCCPP- Kayamkulam. Fixed cost claimed by KSEB Ltd for the year 2021-22

Particulars	Capacity Charges	Deviation charges	IT	Others	Total
	Rs Crores				
RGCCPP	100.00	-0.43	4.79	-0.13	104.23

KSEB Ltd further submitted that, Rs 4.79 crore claimed above is the deferred tax liability with respect to previous tariff period upto 31.03.2009. As per Regulation 67 of CERC Tariff Regulations, deferred tax liabilities for the period upto 31st March, 2009 whenever they materialise shall be recoverable directly by the generating companies or transmission licensees from the then beneficiaries or long-term customers. M/s RGCCPP raised invoices vide invoice no 602139703 dated 08.06.2021 amounting to Rs 2.35 Cr. towards the materialisation of deferred tax liability on account of difference in depreciation as per book of accounts and depreciation as per Income Tax Rules 1962, during FY 2020-21 in respect of the block of fixed assets as on 31.03.2009 of RGCCPP, Kayamkulam. Further M/s RGCCPP also raised a claim vide invoice no 602547029 dated 05.06.2022 amounting to Rs 2.44 Cr. towards the materialisation of deferred tax liability on account of difference in depreciation as per book of accounts and depreciation as per Income Tax Rules 1962, during FY 2021-22 in respect of the block of fixed assets as on 31.03.2009 of RGCCPP, Kayamkulam. Thus, the total deferred tax liability prior to 2009 amounting to Rs 4.79 crores are provided in the accounts for FY 2021-22. As per Regulation 67, KSEB Ltd is liable to pay the deferred tax liability for the period prior to FY 2009 materialised during the financial year. Hence the KSEB Ltd requested before the Commission to approve Rs 104.23 crore towards fixed cost liability of RGCCPP Kayamkulam.

Analysis and Decision of the Commission

5.42 The Commission has examined in detail the fixed cost paid by KSEB Ltd to RGCCPP Kayamkulam during the year 2021-22. KSEB Ltd and NTPC has reached a settlement towards fixed cost and other aspects in respect of the PPA of RGCCPP at Kayakulam of NTPC Ltd for the years from 2019-20 upto the end of the PPA period, i.e., upto 28.02.2025. The settlement between the NTPC Ltd and KSEB Ltd was also approved by the State Government.

5.43 The Commission vide Order dated 15.03.2021 in petition OP No. 02/2021 had approved the settlement. The relevant portion of the order is extracted below.

“25. After considering the matter in details along with the submissions of the parties and the stakeholders, the Commission hereby orders as follows:

- a. The extension of PPA with RGCCPP for a period up to 28-02-2025 is approved under Section 86 of the Electricity Act 2003, based on the settlement reached between M/s KSEB Ltd and M/s NTPC Limited as per minutes of the meeting held on 12-11- 2020, on the condition that the continuation of the compensatory allocation of 180MW of cheaper 13 power from Talcher is provided by NTPC Limited for the entire period of PPA. KSEB Ltd has to ensure the compliance to this condition.*
- b. The annual fixed charge of Rs.100 crore per annum as agreed to by the parties is also approved for the PPA period.*
- c. The rate of energy charges as agreed to by the parties is also approved considering the fact that the stock of Naphtha is to be exhausted for reducing the Fixed charges. KSEB Ltd shall seek prior approval from the Commission for further scheduling of the Plant.*
- d. KSEB Ltd shall provide necessary schedule to RGCCPP, Kayamkulam for exhausting the stock of Naphtha available with RGCCPP/ BPCL as per the terms of Agreement.*
- e. KSEB Ltd shall ensure that all litigations pending in various Courts and other judicial forum, if any are withdrawn before releasing any AFC as per this Order.”*

5.44 As above, the annual fixed charges approved by the Commission for the period from 2019-20 till 28.02.2025 is Rs 100.00 crore per annum.

5.45 The Commission has also examined the IT claim of Rs 4.79 crore pertains to the deferred tax liabilities upto 31st March 2009 as per the CERC (Terms and Conditions of Tariff) Regulations, 2019. The relevant Regulations are extracted below.

“67. Deferred Tax liability with respect to previous tariff period: Deferred tax liabilities for the period upto 31st March, 2009 whenever they materialise shall be recoverable directly by the generating companies or transmission licensees from the then beneficiaries or long term customers, as the case may be. Deferred tax liabilities for the period arising from 1.4.2009 to 31.3.2014 if any, shall not be recoverable from the beneficiaries or the long-term customers, as the case may be.”

Based on the provisions of the CERC (Terms and Conditions of Tariff) Regulations, 2019, the Commission approves Rs 4.79 crore claimed as deferred tax liability of RGCCPP Kayakulam pertains to the period upto 31.03.2009.

- 5.46 **Accordingly, as discussed in the previous paragraphs, the Commission hereby approve Rs 104.23 crore towards fixed cost liability including the deferred tax liability upto 31.03.2009 of RGCCPP, Kayakulam for the year 2021-22.**

Table 5.18
RGCCPP Kayamkulam- fixed cost approved for 2021-22 (Rs Crores)

Particulars	Capacity Charges	Deviation charges	IT	Others	Total
RGCCPP	100.00	-0.43	4.79	-0.13	104.23

F. Power Purchase through Long Term Agreements:

- 5.47 KSEB Ltd submitted that, since the power demand of the State cannot be met fully from the resources within the State, KSEB Ltd had entered into agreements with various generators outside the state. The Commission vide the MYT Order dated 08.07.2019 had approved 8994.76 MU at a total amount of Rs 3510.52 crore from various IPPs inclusive of the DBFOO contracts for the year 2021-22. As against this, the actual power purchase was 7996.74 MU at a total cost of Rs 3192.24 crore. The details are given below.

Table 5.19

Power purchase claimed by KSEB Ltd through various IPPs outside the State for the year 2021-22

Source	KSERC approval		Actual		Deviation	
	(MU)	(Rs Cr)	(MU)	(Rs Cr)	MU	Rs Cr.
Maithon Power Ltd-I	1105.73	420.43	1044.79	399.12	-60.94	-21.31
Maithon Power Ltd-II	1105.73	420.43	1044.77	397.78	-60.96	-22.65
DVC Mejia	705.50	276.32	560.59	262.01	-144.91	-14.31
DVC RTPS	348.10	137.89	238.85	124.74	-109.25	-13.15
Jindal Power Ltd-Bid I	1497.96	548.13	1453.52	498.33	-44.44	-49.80
Jhabua Power Ltd-PSA I	861.33	332.31	732.66	297.21	-128.67	-35.10
Jindal Power Ltd-Bid II	1123.47	458.33	1090.31	441.58	-33.16	-16.75
Jhabua Power Ltd-Bid II	748.98	305.56	637.09	297.13	-111.89	-8.43
JITPL	748.98	305.56	689.26	290.18	-59.72	-15.38
BALCO	748.98	305.56	504.91	184.16	-244.07	-121.40
Subtotal	8994.76	3510.52	7996.75	3192.24	-998.01	-318.28

- 5.48 The Commission has examined in detail the cost of power purchase by KSEB Ltd from various IPPs outside the State. In this matter, the Commission decided to appraise the power purchase from LTA under following heads.

- (1) Power purchase from DVC stations and Maithon stations whose tariff is approved by CERC.
- (2) Power purchase from approved DBFOO contracts,
- (3) Power purchase from provisionally approved DBFOO contracts and,
- (4) Power purchase from unapproved DBFOO contracts.

(1) Power purchase from DVC stations and Maithon Stations

- 5.49 KSEB Ltd in the petition submitted that, the Commission had approved 3265.06 MU for a total cost of Rs 1241.77 crore for the year 2021-22 from DVC and Maithon

stations. As against the approval, the actual purchase was 2955.09 MU at the total cost of Rs 1261.93 crore. The details are given below.

Table 5.20
KSEB Ltd claim- power purchase from Maithon stations and DVC stations

Source	KSERC approval			Actual		
	Energy* (MU)	Cost (Rs Cr)	Avg Tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg Tariff (Rs/ kWh)
Maithon Power Ltd-I	1105.73	420.43	3.80	1044.79	399.12	3.82
Maithon Power Ltd-II	1105.73	420.43	3.80	1044.77	397.78	3.81
DVC Mejja	705.50	276.32	3.92	560.59	262.01	4.67
DVC RTPS	348.10	137.89	3.96	238.85	124.74	5.22
Total	3265.06	1255.07	3.84	2889.00	1183.65	4.10

5.50 KSEB Ltd submitted the following reasons for the variation in cost of power purchase from the Maithon and DVC stations over approval.

(a) Maithon Stations.

The tariff of the Maithon stations are determined by the CERC. Vide the CERC Tariff Regulations, 2019, the auxiliary consumption was increased from 5.75% to 6.25%. In addition to the above, ash disposal charges amounting to Rs 8.197 crore each was admitted during the year 2021-22.

During the year 2021-22, KSEB Ltd has surrendered 92.54 MU from Maithon-I and 92.55 MU from Maithon-II during low demand periods.

(b) DVC stations

KSEB Ltd submitted that, the revised gross station heat rate in the revised CERC Tariff Regulations and usage of high cost coke grade coal resulted in increase in cost in these stations. The gross station heat rate was increased from 2371.61 to 2374.10 kCal/kWh and auxiliary consumption increased from 5.25% to 5.75% for DVC Mejja. Similarly, the gross station heat rate was increased from 2339.78 to 2352.87 kCal/kWh and auxiliary consumption was increased from 5.25% to 5.75% for DVC RTPS. Further the variation in coal prices and transportation charges also contributed to the variation in energy charges.

Analysis and Decisions of the Commission

5.51 The Commission has in the MYT Order dated 08.07.2019 approved the power purchase from Maithon and DVC Stations as per the approvals given below.

Table 5.21
Details of power purchase approvals given for Maithon and DVC stations

Source	Contracted capacity (MW)	Date of approval	Period of contract	Approved Tariff
Maithon Power	150	Order dated 26.12.2013	25 years	Approved under Section 62 of Electricity Act 2003
Maithon Power	150	Order dated 08 - 07- 2015	25 years	
DVC Mejja	100	No.500/C.Engg/DVC/2014/348 dated 28.03.2014 & Order	25 years	
DVC RTPS	50	dated 21.01.2016	25 years	

5.52 The Commission notes that tariff of these stations are being determined by the Central Electricity Regulatory Commission, as per the Tariff Regulations notified by that Commission from time to time. KSERC vide the MYT Order dated 08.07.2019 approved the energy drawal from the above stations as given below.

Table 5.22
Energy drawal from Maithon and DVC Stations as per the MYT Order dated 08.07.2019

Trader Name	Contracted capacity	Auxiliary consumption	PLF	2018-19		2019-20 to 2021-22	
				Ex-bus Energy	KSEB Ltd periphery	Ex-bus Energy	KSEB Ltd periphery
				MW	%	(%)	MU
Maithon power limited	150	6.5	90%	991.63	960.83	1,105.73	1,070.92
Maithon power limited	150	6.5	90%	991.63	960.83	1,105.73	1,070.92
DVC-Mejia TPS	100	5.25	85%	686.96	666.03	705.5	683.99
DVC-Reghunathpur TPS	50	6.5	85%	244.94	237.45	348.1	337.49
Total	450			2,915.16	2,825.14	3,265.06	3,163.32

5.53 The Commission has also examined the actual power purchase and cost from the above stations. As detailed in paragraphs above, the Commission had approved the power purchase from these stations. As mentioned earlier, the tariff of these stations are being determined by the CERC as per Section 62 of the Electricity Act, 2003. The Commission vide the MYT Order dated 08.07.2019 had approved the power purchase from these stations for the MYT period from 2018-19 to 2021-22. The Commission after appraising the entire aspects of power purchase from Maithon and DVC stations and taking note of the revisions effected by CERC in their Tariff Regulations hereby approves the power purchase from these stations for the year 2021-22, as detailed below.

Table 5.23
True up of power purchase from Maithon and DVC stations approved for the year 2021-22

Source	KSERC approval			KSEB Truing up			KSERC Approval		
	Energy* (MU)	Cost (Rs Cr)	Avg Tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg Tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg Tariff (Rs/ kWh)
Maithon Power -I	1105.73	420.43	3.80	1044.79	399.12	3.82	1044.79	399.12	3.82
Maithon Power -II	1105.73	420.43	3.80	1044.77	397.78	3.81	1044.77	397.78	3.81
DVC Mejia	705.50	276.32	3.92	560.59	262.01	4.67	560.59	262.01	4.67
DVC RTPS	348.10	137.89	3.96	238.85	124.74	5.22	238.85	124.74	5.22
Total	3265.06	1255.07	3.84	2889.00	1183.65	4.10	2889.00	1183.65	4.10

5.54 **As detailed above, the Commission hereby approve Rs.1183.65 crore towards the cost of power purchase for 2889.00 MU in the year 2021-22 at the average tariff of Rs 4.10/unit.**

(2) Power purchase from approved DBFOO contracts

- 5.55 KSEB Ltd in their petition submitted that, the Commission vide Order dated 31.08.2016 had approved the purchase of 200 MW power from the L1 bidder in Bid-1, M/s Jindal Power Limited at the rate of Rs 3.60/unit. In the same Order, the Commission had also approved the purchase of 100MW of power from M/s BALCO, the L1 bidder of Bid-2 @Rs 4.29/unit.
- 5.56 The details of the power purchase from these approved DBFOO contracts and the actuals for the year 2021-22 is given in the following table.

Table 5.24
KSEB Ltd- Details of the power purchase from approved DBFOO contracts

Source	KSERC approval			Actual		
	Energy* (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)	Energy* (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)
Jindal Power Ltd-Bid I	1497.96	548.13	3.66	1453.52	498.33	3.43
BALCO	748.98	305.56	4.08	504.91	184.16	3.65
Subtotal	2246.94	853.69	3.80	1958.43	682.49	3.48

As detailed above, as against the ARR & ERC approval of 2246.94 MU at the cost of Rs 853.69 crore @Rs 3.80/unit, the actual power purchase during 2021- 22 was 1958.43 MU at the total cost of Rs 682.49 crore @Rs 3.48/unit.

- 5.57 KSEB Ltd has also submitted the actual cost of power purchase from these stations for the year 2021-22. The details are given below.

Table 5.25
KSEB Ltd claim- cost of power purchase of approved DBFOO contracts as per accounts

Trader/Source	Energy at ex bus	Energy at Kerala periphery	Fixed charges	Variable charges	Incentive/ Penalty	Other charges	Total PP cost
	MU	MU	Rs Cr.	Rs Cr.	Rs Cr.	Rs Cr.	Rs Cr
Jindal Power Ltd-Bid I	1453.52	1403.46	376.09	192.76		-70.52	498.33
Balco	504.91	487.37	169.67	59.18	-13.46	-31.24	184.16
Total	1958.43	1890.83	545.76	251.94	-13.46	-101.76	682.49

- 5.58 The details of the energy surrender from the approved DBFOO contracts is given below.

Table 5.26
Energy schedule details (at ex bus) from the approved contracts

Source	MYT Order dated 08.07.2019 (ex bus)	Actual (ex bus)	Energy surrender	Total availability	Deviation
	MU	MU	MU	MU	MU
Jindal power Ltd-Bid I	1,497.96	1,453.52	103.14	1556.66	58.7
Balco	748.98	504.91	44.2	549.11	-199.87
LTA subtotal	2,246.94	1,958.43	147.34	2,105.77	-141.17

- 5.59 KSEB Ltd further submitted that, the reduction in availability from the approved DBFOO contracts is 141.17 MU during the year 2021-22. The availability from BALCO was less than 10 MU during September and October 2021 due to

unprecedented heavy rain fall in Korba region. The overall availability from M/s BALCO was 60% only during the year 2021-22. KSEB Ltd has levied Rs 13.45 crore as damages from BALCO during the year 2021-22.

Analysis and Decision of the Commission

5.60 The Commission vide the Order dated 30.08.2016 had adopted the tariff and final approval only for the procurement of 200 MW from Jindal Power Ltd, L1 of Bid-1. Similarly, vide the same Order the Commission has also adopted the tariff and granted approval for the procurement of 100MW from M/s BALCO, L1 of Bid-2. The details are given below.

Table 5.27
Details of power purchase approvals given for projects under DBFOO

Source	Contracted Capacity (MW)	Date of approval	Period of contract
Jindal Power Ltd-Bid I(DBFOO)	200	Order dated 30.8.2016	25 years
BALCO -Bid-I (DBFOO)	100	Order dated 30.8.2016	25 years

5.61 The Commission vide the MYT Order dated 08.07.2019 has approved the power purchase from these sources as given below.

Table 5.28
Summary of the power purchase approved vide the MYT Order dated 08.07.2019

Trader Name	Contracted capacity	Auxiliary consumption	PLF	Energy		Cost				Avg. tariff at Kerala periphery (Rs/ kWh)
	MW	%	(%)	EX bus MU	Kerala periphery MU	Fixed charge Rs Cr	Variable cost Rs Cr	Other charge Rs Cr	Total Rs Cr	
Jindal Power Limited	200	5	90%	1498	1431.81	369.4	200.31	-21.57	548.13	3.83
BALCO	100	5	90%	748.98	718.32	223.5	92.99	-10.9	305.56	4.25
Sub Total	300			2246.9	2150.13	592.9	293.3	-32.47	853.69	3.97

5.62 As against the approval, the actual schedule and the cost incurred for the purchase of power from the approved DBFOO contract is given below.

Table 5.29
Cost of Power purchase claimed from approved DBFOO contracts

Source	MYT Order dated 08.07.2019			Actual		KSEB Truing up		
	Energy at KSEB periphery	Cost	Avg. Tariff	Energy at KSEB periphery	Cost	Energy at KSEB periphery	Cost	Avg. Tariff
	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(MU)	(Rs.Cr)	(Rs/ kWh)
Jindal Power Ltd- Bid I	1431.81	548.13	3.83	1403.46	498.33	1403.46	498.33	3.55
BALCO	718.32	305.55	4.25	487.37	184.16	487.37	184.16	3.78
Total	2150.13	853.68	3.97	1890.83	682.49	1890.83	682.49	3.61

5.63 The Commission after appraising the entire aspects in detail, hereby approve the cost of power purchase of the approved DBFOO contracts as detailed below.

Table 5.30
Approved DBFOO contracts- cost of power purchase approved for the year 2021-22

Source	MYT Order dated 08.07.2019			KSEB Truing up			KSERC Approval		
	KSEB periphery	Cost	Avg. Tariff	KSEB periphery	Cost	Avg. Tariff	KSEB periphery	Cost	Avg. Tariff
	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(Rs/ kWh)
Jindal Power Ltd- Bid I	1431.81	548.13	3.83	1403.46	498.33	3.55	1403.46	498.33	3.55
BALCO	718.32	305.55	4.25	487.37	184.16	3.78	487.37	184.16	3.78
Total	2150.13	853.68	3.97	1890.83	682.49	3.61	1890.83	682.49	3.61

As above, the Commission approves Rs.682.49 crores towards the purchase of 1890.83 MU at Kerala periphery from the approved DBFOO contracts.

(2) Power purchase from provisionally approved DBFOO contracts

- 5.64 KSEB Ltd submitted that the Commission had provisionally approved the purchase of 115 MW from M/s Jhabua Power Ltd, the L2 bidder of Bid-1 @Rs 4.15/unit, vide Order dated 22.12.2016. The details of the power purchase from Jhabua Power Ltd under Bid 1 for the year 2021-22 is given in the following table.

Table 5.31
KSEB Ltd claim- Power purchase from provisionally approved DBFOO contracts

Source	KSERC approval			Actual		KSEB Truing up		
	Energy at KSEB periphery	Cost	Avg. Tariff	Energy at KSEB periphery	Cost	Energy at KSEB periphery	Cost	Avg. Tariff
	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(MU)	(Rs.Cr)	(Rs/ kWh)
Jhabua Power Ltd- Bid-1	822.57	332.22	4.04	707.36	297.21	707.36	297.21	4.20

KSEB Ltd requested to approve Rs 297.21 crore as per the accounts towards cost of the purchase of 707.36 MU at Kerala periphery in the year 2021-22.

Analysis and Decision of the Commission

- 5.65 The Commission had examined in detail the cost of power purchase claimed by KSEB Ltd for the purchase of 115 MW power from M/s Jhabua Power Ltd (L2 of Bid-1 of DBFOO contracts). The Commission vide Order dated 24.06.2022 in petition OP No.23/2022 ordered as follows;

“5.59 KSEB Ltd in its letter 15.11.2016 had requested the Commission to take appropriate decision relating to the purchase of 115 MW of power from the L2 bidder of Bid 1, i.e., M/s Jhabua Power Ltd. The Commission vide the Order dated 22-12-2016, had provisionally approved the purchase of 115 MW of power from Jabhua Power Ltd, L2 bidder of Bid 1, in view of the facts, circumstances and urgency explained by KSEB Ltd and in view of the decision of Government of Kerala in GO (Rt) No.238/2016/PD dated 31.11.2016. Relevant portion of the Order is given below:

“In view of the facts, circumstances and urgency explained by KSEBLtd and in view of the decision of Government of Kerala in GO (Rt) No.238/2016/PD dated 31.11.2016, the Commission hereby approves provisionally the purchase of 115 MW 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.”

5.60 As mentioned above, the Commission had given a conditional provisional approval for purchase of power from M/s Jhabua Power Ltd in Bid-1, subject to the approval of the Central Government on this matter. In the meantime, Ministry of Power, vide its letter dated 18.11.2016 clarified that,

“the deviations as pointed out by the KSERC would have been got vetted and approved by the before the issuance of RFQ, RFP and PSA and not at this stage. As per the Guidelines deviations on the provisions of the bidding documents are approved if necessary and not the actions taken by the utility as per practice or precedent.”

Further, the Central Government vide the letter dated 11th December 2019, reiterated the same position and clarified that, appropriate actions on the deviations as pointed out by the KSERC may take by Government of Kerala/ KSEB Ltd in consultation with KSERC.

The Commission also noted that while the Central Government had refused to approve the unauthorized deviations by KSEB Ltd in the tender process, the State Government has also neither approved the deviations pointed out by KSERC nor accorded final approval to the purchase of the unapproved DBFOO contracts.

5.61 As above, the Central Government has affirmatively communicated that, it shall not grant approval for the deviations made by KSEB Ltd for accepting the L2 bidder of Bid-1 also. Hence, it is amply clear that the tenders floated by KSEB Ltd and its further processes did not comply with the requirements of Section 63 of the Electricity Act, 2003, which is reproduced below.

“63. Determination of tariff by bidding process.- Notwithstanding anything contained in Section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government’.

5.62 Under such circumstances, **the Commission is constrained to not to approve the tariff of L2 of Bid-1 M/s Jhabua Power Ltd.** However, the Commission noted the fact that, the power from M/s Jhabua Power Ltd, L2 bidder of Bid-1 was scheduled and supplied to the consumers of the State during this period. The details of the purchase of power from M/s Jhabua Power Ltd of (L2 of Bid-1) is detailed below.

Table 5.29
Details of power purchase from provisionally approved DBFOO contracts

Source	KSERC approval			Actual		KSEB Trueing up		
	Energy at KSEB periphery	Cost	Avg. Tariff	Energy at KSEB periphery	Cost	Energy at KSEB periphery	Cost	Avg. Tariff
	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(MU)	(Rs.Cr)	(Rs/ kWh)
Jhabua Power Ltd- Bid-1	822.37	332.22	4.04	822.37	351.03	822.37	317.40	3.86

It is here relevant to point out that, the Commission, vide the MYT Order dated 08.07.2019 in petition OA No.15/2018 had, in a similar situation of scheduling of power from unapproved DBFOO contracts in Bid-2, has decided to adopt the L1 rate of Bid-2, i.e. of M/s BALCO. Since it is now clear that the Central Government has refused to approve the post tender deviations made by KSEB Ltd. while finalizing and awarding the contracts other than to L1 bidder, the Commission has decided to follow the same principle for approving the cost of purchase of power from M/s Jhabua Power Ltd for Bid-1 also. Under such circumstances, the Commission has decided to restrict the rate to that of Jindal Power Ltd (L1 of Bid-1 of DBFOO contracts) for the approval of cost of power purchase from M/s. Jhabua Power Ltd.”

5.66 The Commission has decided to follow the same principle for the year 2021-22 also for approving the power purchase from L2 of Bid-1 M/s Jhabua Power Ltd. As detailed in Table 5.30 above, the rate of Jindal Power Ltd (L1 of Bid-1) approved for the year 2021-22 is Rs 3.55/unit at Kerala periphery. Based on this rate, the cost of power purchase from the M/s Jhabua Power Ltd (L2 of Bid-1) contract is approved as detailed below.

Table 5.32
Cost of power purchase approved from Jhabua Power Ltd (115) MW (L2 of Bid-1)

Source	KSEB Truing up			KSERC Approval		
	Energy at KSEB periphery	Cost	Avg. Tariff	Energy at KSEB periphery	Cost	Avg. Tariff
	(MU)	(Rs.Cr)	(Rs/ kWh)	(MU)	(Rs.Cr)	(Rs/ kWh)
Jhabua Power Ltd-	707.36	297.21	4.20	707.36	251.11	3.55

As detailed above, the Commission provisionally approves the cost of power purchase from M/s Jhabua Power Ltd (Bid-2 of L1 bid) at Rs.251.11 crore as against Rs.297.21 crore claimed by KSEB Ltd.

Power Purchase from unapproved DBFOO contracts

5.67 KSEB Ltd in the Truing Up petition submitted that, in the case of unapproved DBFOO contracts, the Commission vide the MYT Order dated 08.07.2019 had approved scheduling of power from M/s Jindal Power Limited (150 MW), M/s Jhabua Power Limited (100 MW) and M/s Jindal India Thermal Power Ltd (100 MW), under bid II, for the limited purpose of estimating the ARR&ERC for the control period at rate equivalent to that of power from BALCO, the L1 in Bid-2 of the DBFOO contracts.

5.68 The details of the power purchase from the unapproved DBFOO contracts for the year 2021-22 is given below.

Table 5.33
KSEB Ltd claim- Cost of power purchase of unapproved DBFOO contracts for 2021-22

Source	KSERC approval			Actual			KSEB Ltd Truing up claim		
	Energy exbus (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)	Energy at Exbus (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)	Energy Exbus (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)
Jindal Power Ltd-Bid II	1123.47	458.33	4.08	1090.31	441.58	4.05	1090.31	404.78	3.71
Jhabua Power Ltd-Bid II	748.98	305.56	4.08	637.09	297.13	4.66	637.09	239.68	3.76
JITPL	748.98	305.56	4.08	689.26	290.18	4.21	689.26	263.47	3.82
Subtotal	2621.43	1069.45	4.08	2416.66	1028.89	4.26	2416.66	907.93	3.76

5.69 KSEB Ltd further submitted that, the Commission while approving the fuel surcharge petitions for the first quarter of the year 2019-20 vide the Order dated 14.02.2020 in petition OA No. 29/2019, has directed to limit the payment towards power purchase from the above mentioned three stations to the rate of M/s BALCO at Kerala periphery. In compliance of the order of the Commission, from August 2021 onwards, KSEB Ltd has limited the payment towards the power purchase of these stations at BALCO rate at Kerala periphery.

Analysis and Decision of the Commission

5.70 Regarding the approval of power purchase from unapproved DBFOO contracts, the Commission vide the Order dated 24.06.2022 in OP No. 23/2022 ordered as follows

“5.70. The Commission has examined in detail the purchase of power from the following three unapproved DBFOO contracts for True up in the year 2020-21.

- 1. 150MW from Jindal Power Limited*
- 2. 100MW from Jindal India Thermal Limited*
- 3. 100 MW from Jhabua Power Limited.*

5.71. In this matter, the Commission has noted the following.

- 1. KSEB Ltd had invited two separate bids, on Design, Build, Finance, Ownand Operate (DBFOO) basis for procuring 450MW power from December-2016 onwards for 25 years, and for procuring 400MW powerfrom October-2017 onwards for 25 years. Accordingly, the first bid was invited on 05.03.2014 (referred to as Bid 1) and the second bid was invited on 25.04.2014 (referred to as Bid 2). Bid 1 was opened on 31.10.2014 and Bid 2 was opened on 14.11.2014.*
- 2. KSEB Ltd sought approval of the Commission for the purchase of 865 MW of power under Section 63 of the Act as per petition No. OP 13 of 2015 dated 21-04-2015. The Commission vide order dated 31-8-2016 gave approval for purchase of 200 MW of power from M/s Jindal Power Ltd at the rate of Rs.3.60/ kWh being L1 of Bid -1 only. In the same order, the Commission had also approved the purchase of 100 MW of power by KSEB Ltd from M/s Bharat Aluminium Company Ltd, Chhattisgarh at the rate of Rs.4.29/ kWh being the L1 of the Bid -2 dated 25.04.2014. The relevant portion of the order is extracted below.*

“40. In view of the facts, circumstances and legal provisions explained above the Commission hereby issues the following orders,-

- 1. The purchase of 200 MW of power by KSEB Ltd from M/s Jindal Power Ltd, New Delhi at the rate of Rs.3.60 / kWh as per the Bid -1 dated 05.03.2014 which was opened on 31.10.2014, is approved.*
- 2. The purchase of 100 MW of power by KSEB Ltd from M/s Bharat Aluminium Company Ltd, Chhattisgarh at the rate of Rs.4.29/ kWh as per the Bid -2 dated 25.05.2014 which was opened on 14.11.2014, is approved.*
- 3. The approval of the following purchases of power by KSEB Ltd from the bidders other than the lowest bidder (L1) will be considered on getting the approval from Government of India for the deviations from the guidelines and on getting the views from Government of Kerala on the issues raised in paragraphs 34 and 38 of this order.*
 - a) The purchase of 115 MW of power by KSEB Ltd from M/s Jhabua Power Ltd, Gurgaon at the rate of Rs.4.15/ kWh as per the Bid -1 dated 05.03.2014 which was opened on 31.10.2014.*
 - b) The purchase of 100 MW of power at the rate of Rs.4.29/ kWh by KSEB Ltd from M/s Jindal India Thermal Power Ltd, New Delhi (L2) as per the Bid -2 dated 25.05.2014 which was opened on 14.11.2014.*
 - c) The purchase of 100 MW of power at the rate of Rs.4.29/ kWh by KSEB Ltd from M/s Jhabua Power Limited, Gurgaon (L3) as per the Bid-2 dated 25.05.2014 which was opened on 14.11.2014.*
 - d) The purchase of 150 MW of power at the rate of Rs.4.29/ kWh by KSEB Ltd from M/s Jindal Power Limited, New Delhi (L4) as per the Bid-2dated 25.05.2014 which was opened on 14.11.2014.*

- e) The purchase of 100 MW of power at the rate of Rs.4.29/ kWh by KSEB Ltd from M/s East Coast Energy Private Limited, Andhra Pradesh (L5) as per the Bid -2 dated 25.05.2014 which was opened on 14.11.2014.
4. A copy of this order will be submitted to Government of Kerala with request to communicate their views after duly considering the relevant facts and legal provisions in view of the Government Order GO (MS) No. 45/2014/PD dated 20.12.2014 sanctioning the purchase of 865 MW of power by KSEB Ltd on DBFOO basis.
5. KSEB Ltd is directed to follow up the matter in Government of India and in Government of Kerala and to submit the results to the Commission as early as possible, considering the fact that the power purchases as per Bid-1 will have to commence with effect from December, 2016.
3. Subsequently, KSEB Ltd in its letter 15.11.2016, requested the Commission to take appropriate decision relating to the purchase of 115 MW of power from M/s Jhabua Power Ltd. The Commission in the Order dated 22-12-2016, had provisionally approved the purchase of 115MW of power from Jhabua Power Ltd, L2 of Bid 1, subject to certain conditions. Relevant portion of the Order is given below:
- “In view of the facts, circumstances and urgency explained by KSEB Ltd and in view of the decision of Government of Kerala in GO (Rt) No.238/2016/PD dated 31.11.2016, the Commission hereby approves provisionally the purchase of 115 MW 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.”*
4. As is clear from the foregoing paras, the Commission had not given approval for the purchase of the following 450 MW of power contracted through DBFOO basis under-bid2, for want of approval from the Central Government for the deviations from the Central Government and approval of the State Government on the purchase.

Table 5.32

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

The Commission also noted that since M/s East Coast Energy Pvt Ltd did not commission the project as scheduled, the contract with them was cancelled by KSEB Ltd. Thus, the quantity of the unapproved contract was reduced to 350MW.

5. KSEB Ltd further submitted that though they had approached the Government of India for approval of deviations from the guidelines, the Central Government has not approved the deviations.

Central Government, vide its letter dated 18.11.2016 clarified that,

“the deviations as pointed out by the KSERC would have been got vetted and approved by the before the issuance of RFQ, RFP and PSA and not at this stage. As per the Guidelines deviations on the provisions of the bidding documents are approved if necessary and not the action taken by the utility as per practice or precedent.”

Further, the Central Government vide the letter dated 11th December 2019, stated that

“The views of Ministry of Power as communicated earlier vide letter dated 18.11.2016 are reiterated. The deviations as pointed out by KSERC would have been got vetted and approved by the Central Government before issuance of RFQ, RFP and PSA and not at this stage. Government of Kerala/ KSEB Ltd may take actions as appropriate in consultation with KSERC.”

The Commission also noted that while the Central Government had refused to approve the unauthorized deviations by KSEB Ltd in the tender process. The State Government has also neither approved the deviations pointed out by KSERC nor accorded final approval to the purchase of the unapproved DBFOO contracts.

6. *As above, the Central Government has affirmatively communicated that, it shall not grant approval for the deviations made by KSEB Ltd for accepting the L2 bidder of Bid-1 also. Hence it is clear that the tenders floated by KSEB Ltd and its further processes did not comply with the requirements of Section 63 of the Electricity Act, 2003, which is reproduced below.*

“63. Determination of tariff by bidding process,- Notwithstanding anything contained in Section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government’.

7. *Subsequently, as per the request of KSEB Ltd and in view of the Government Order G.O.(Ms) No.22/2017/PD dated 21-10-2017, the Commission as per the letter dated 22-12-2017, allowed KSEB Ltd to schedule the contracted power of 350MW from 1-10-2017 from three projects of bid 2, ie., 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. The State Government vide the GO (Ms) No.22/2017/PD dated 21.10.2017 ordered as follows*

“KSEB Ltd has concluded long term agreements for 25 years for 550MW of power on the basis of e-tenders on DBFOO terms with effect from 01.01.2017. These contracts were concluded on the basis of an analysis of the demand- supply gap in Kerala and the projected availability of transmission corridors from the States in which the generating plants are located, to Kerala. Pending detailed consideration of the matter, Government are pleased to hereby permit KSEB Ltd to draw the contracted power with effect from 01.10.2017. Final orders in the matter shall be issued in due course.”

The letter of the Commission dated 22. 12.2017 is extracted below for ready reference.

“ The Commission has examined the order of State Government vide order No G.O.(Ms)No.22/2017/PD dated 21.10.2017 permitting K S E B Ltd. to draw the power contracted power and the request of K S E B Ltd., to grant approval to draw the power contracted power under DBFOO from 01/10/2017 on wards.

In view of the State Government order dated 21.10.2017, K S E B Ltd. may draw the contracted power on DBFOO from 01/10/2017 onwards. It may please be noted that the Power Department G.O dated 21.10.2017 is only an interim measure and final orders are yet to be issued. Since the Government is yet to give its final decision, it is informed that, the Commission may approve the power purchase proposal including the rate for the pending approvals under DBFOO only after the State Government accords the final approval for the entire power purchase under DBFOO.”

As seen from the Commission's letter, the Commission has made it clear that since the 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.

8. KSEB Ltd in the MYT petition OP No. 15/2018 dated 31.10.2018 for the period from 2018-19 to 2021-22 had included the schedule of power from the three unapproved DFBOO contracts also as the sources of power purchase.
9. The Commission after detailed examination of the projected power requirement vis-à-vis the availability, permitted scheduling of power from the unapproved DBFOO contracts vide the MYT Order dated 08.07.2019 strictly at the rate to be paid to BALCO generator, which is the L1 in Bid-2. It is here important to note that the Commission had used the word "rate" which is singular and not "rates" which means more than one. Further, as per the tender this "rate" is for delivery at Kerala Periphery. The Commission further clarifies that, though the price of electricity may have a fixed and variable cost, usage of the term "rate" is clearly indicated that it is the total of both these costs and is a unitary price at Kerala Periphery.
10. Hence KSEB Ltd is not at liberty to separately calculate the fixed and variable cost component for these 3 unapproved contracts, but instead must pay the final 'rate' i.e., the fixed cost plus variable cost paid to M/s BALCO at the Kerala periphery on each and every bill. No deviation from this rate is allowed and any amount paid over and above the rate paid to L1 of Bid-2 BALCO is irregular and not allowable.
11. In addition, the Commission also clearly stated in the order that, the consideration of schedule strictly as per the request of KSEB Ltd shall not be **construed as an approval of the power purchase, rate or of the PPA itself as per Section 63 of the Act 2003.**

The relevant portion of the MYT Order is extracted below.

"5.104 Hence the Commission has considered scheduling power from the three projects of Bid-2, ie., 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 Gol 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 emphasises 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. It is relevant here to note that the Commission in their Order on suo motu determination of Tariff dated 17-4-2017 had approved Rs.4.00 per unit for the purchase of additional quantity of power for meeting the deficit from traders and exchanges."

5.72. The Commission also clarify the difference between "approval of PPA" and "allowing to schedule power" from the DBFOO unapproved generators. It is to be noted 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”.

5.73. The Commission had allowed the scheduling of power considering the request of KSEB Ltd on regarding the anticipated shortage of power vide letter dated 22-12-2017. Hence, the Commission had allowed KSEB Ltd to schedule power of 350MW from 01-10-2017 from the 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 5.33
Details of power scheduling

Source	Contracted Capacity (MW)	Date of Commission’s Letter
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

5.74. The Commission further notes that in the MYT tariff Order for 2018-19 to 2021-dated 08-07-2019, the Commission has stated specifically that the scheduled power from the three unapproved PSAs in Bid II shall be at the rate equivalent to the cost of power of BALCO, which is L1 of Bid-II.

5.75. The Commission further clarify that, in the in the MYT Tariff Order dated 08-07-2019, 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.,

5.76. The Commission notes that KSEB Ltd’s bid was for delivery of power at Kerala periphery and while finalizing the bids, the aggregate of fixed and variable costs were taken as the criteria to arrive at the ‘rate’ 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.

5.77. Under such circumstances, till date, the Commission has not approved the PSA of the above three DBFOO contracts. Hence, KSEB Ltd shall not be permitted to make payments to these generators as per the unapproved PSA rates and conditions entered into. It is very clearly and emphatically directed in the MYT Order that, the rate considered for the purpose of ARR is at the BALCO rate, i.e, the rate at Kerala periphery for the purchase of power from BALCO generator, the L1 bidder in Bid-2.

In the meantime, MoP, Gol, vide letter dated 11.12.2019 addressed to the Principal Secretary, Power Department, Government of Kerala has stated as follows:

“.....The deviations as pointed out by KSERC would have been got vetted and approved by the Central Government before issuance of RFQ, RFP and PSA and not at this stage. Government of Kerala/ KSEB Ltd may take action as appropriate / consultation with KSERC.”

*5.78. Thus, as mentioned in the Commission’s Order dated 08-07-2019, the Commission cannot consider the cost of purchase of power from these projects as part of truing up for 2020-21 as per the unapproved PSA terms and conditions. Further, such purchases shall not under any circumstances be construed as an approval of PPA or adoption of tariff under Section 86 or Section 63 respectively of the Electricity Act. The consideration was purely for estimating the power purchase cost for the year 2018-19. The Commission is of the view that since the scheduled power was drawn by KSEB Ltd, it cannot deny payment to the generator. Hence, as mentioned in the MYT Order dated 08-07-2019, the Commission is constrained to **use the rate equivalent to cost of power from BALCO** i.e., the rate/kWh paid to BALCO for delivery at Kerala Periphery. Based on this Order, and considering the fact that a PSU cannot deny payment for the power drawn, the Commission for the purpose of truing up has considered the rate, i.e., price /kwh of power purchased from these PPAs at the actual rate paid to BALCO (kwh rate) under Bid -II for the year 2020-21.*

5.79. The Commission further notes that, vide Order dated 14.02.2020 in OA No.29/2019 in the matter of fuel surcharge the period April 2019 to June 2019 of KSEB Ltd, the Commission had orders as follows.

“25. KSEB Ltd has claimed fuel surcharge for the following DBFOO contracts of Bid-2 invited by KSEB Ltd, for which the Commission neither granted approval of the PPA nor adopted the tariff as per Section 63 of the Electricity Act, 2003.

- (i) 100 MW power from M/s Jindal India Thermal Power Ltd, New Delhi.*
- (ii) 100 MW from M/s Jhabua Power Limited.*
- (iii) 150 MW from M/s Jindal Power Limited.*

The Commission, vide the letter dated 22.12.2017 allowed KSEB Ltd to schedule the above contracted power, in view of the order of the State Government GO (Ms) No. 22/2017/PD dated 21.10.2017,. The Commission had in the said letter clearly mentioned that, the approval of the power purchase mentioned above including the rate of the DBFOO contracts shall be given, only after getting approvals from Government of India for the deviations from the standard bidding documents issued by Ministry of Power, Government of India and after getting the approval of the Government of Kerala on the entire power purchase under DBFOO.

While approving the ARR, ERC and Tariff for the MYT period 2018-19 to 2021-22, the Commission stated as follows.

“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 Gol 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 emphasises 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”.

The Commission noticed from the invoices and other documents submitted by KSEB Ltd that, the actual tariff paid by KSEB Ltd for procuring power from these three sources were much higher and amounted to Rs.22.38 crore more when compared to the L1 rate of Rs.4.15 per unit paid to BALCO which is the L1 of Bid-2. As mentioned above, the Commission vide its order dated 22.12.2017 had allowed KSEB Ltd, to schedule the contracted power from these three generators subject to conditions and while approving the ARR & ERC and tariff for the MYT period 2018-19 to 2021-22, the Commission had considered the rate equivalent to the cost of power from BALCO for estimating the cost of power provisionally from these three generators. The Commission reiterates that, during the trueing up of accounts for the respective financial years, such excess amount incurred for procuring power from these three generators shall not be considered, unless KSEB Ltd gets the approval of power purchase from Government of India for the deviations from the guidelines and on getting the approval of the Government of Kerala on the entire power purchase under DBFOO.”

Similar Order was issued in OA 02/2020 vide Order dated 27.04.2020 in the matter of fuel surcharge the period July 2019 to September 2019 of KSEB Ltd.

In response to the above orders, KSEB Ltd filed a review petitions No RP 02/2020 and RP 04/2020. The Commission after due process including conduct of public hearing on through video conference on 15.07.2020 had dismissed the review petition and ordered vide Common Order dated 14.08.2020 as follows.

“ Commission, after detailed examination of the Review Petitions RP No.02/2020 and RP No.04/2020 as per the provisions of the Electricity Act, 2003 and Regulations in force as detailed in the preceding paragraphs, here by order the following.

(1) The first prayer of the petition RP No. 02/2020 ‘to review the order dated 14.02.2020 in Petition OA No. 29/2019 and allow passing on the additional fuel cost incurred against PSAs with Jindal India Thermal Power Ltd, Jindal Power Ltd and Jhabua Power Ltd under Bid 2 of DBFOO’ is hereby rejected.

(2) The first prayer of the petition RP No. 04/2020 ‘to review the order dated 27.04.2020 in Petition OA No. 02/2020 and allow passing on the additional fuel cost incurred against PSAs with Jindal India Thermal Power Ltd, Jindal Power Ltd and Jhabua Power Ltd under Bid 2 of DBFOO’ is hereby rejected.

(3) Second prayer of both the Review Petitions RP No. 02/2020 and RP No. 04/2020 is ‘to “(2) To issue appropriate directions on the drawal of power contracted against these PSAs if Hon’ble Commission is not inclined to pass on the liabilities of 350MW PSAs executed on DBFOO basis under Bid 2.” This is a new issue raised by KSEB Ltd, which was neither included nor deliberated in the original petitions OA 29/2019 and OA No. 02/2020. Hence this prayer cannot be decided through Review Petitions filed by KSEB Ltd and the prayer is rejected.”

5.80. The above orders make it very clear that the Commission has strictly prohibited KSEB Ltd from paying any unit energy charge to unapproved DBFOO

contracts at rate higher than that paid to BALCO i.e., the L1 of Bid-2 at Kerala periphery.

5.81. The Commission has also noted that KSEB Ltd vide letter 09-09-2020 informed to Jindal India Thermal Power Limited as follows.

“You are aware that, KSEBL, after entering into long-term Power Sale Agreement (PSA) vide reference 1 above , had filed petition before Hon'ble KSERC for the adoption of tariff as envisaged under clause 4.1.2 of the PSA . This petition had been disposed by the Hon'ble KSERC on 30-08-2016 wherein the adoption of tariff as per this PSA was kept pending for want of approval of Govt. of India and for obtaining the views of Govt of Kerala (GoK). KSEBL had apprised GoK on the matter and requested to convey the decision on this matter to KSERC.

Based on the clarification requested by GoK, Ministry of Power (MoP) had communicated that Govt of Kerala may take action as appropriate in consultation with KSERC. This clarification obtained from MoP had also been intimated to GoK and KSERC on time

Meanwhile, as you are aware, Govt of Kerala vide order dated 21-10-2017 had permitted KSEBL to draw power from the entire DBFOO contracts contracted by KSEBL, pending detailed consideration of the matter. It was also stated that final orders in this matter shall be issued in due course. Based on this order of GoK, KSERC vide letter dated 22-12-2017 had also permitted KSEBL to draw the entire power , stating that the Commission may approve the power purchase proposal including the rate for the pending approvals under DBFOO only after GoK accords the final approval for the entire power purchase under DBFOO . The final decision of the Government on this matter is awaited.

Meanwhile, KSERC while issuing orders on 14-02-2020 and 27-04-2020, in respect of the fuel surcharge petitions filed by KSEBL for the approval of the additional cost incurred due to the increase in fuel charges by various generators for the period from April 2019 to June 2019 (Quarter 1) and July to September 2019 (Quarter 2) respectively, had limited the amount payable against 350 MW non approved PSAs executed under Bid 2, to the amount paid to L1 bidder, M/s Balco under Bid 2. KSERC has also ordered that same principle would be applicable during the truing up stage also. Accordingly, the excess amount paid against 350 MW PSAs under Bid 2 had already been disallowed by KSERC for the first quarter and second quarter of 2019-20.

In this regard KSEBL filed review petitions RP-2/2020 on 30-03-2020 and RP-4/2020 on 04-06-2020 before the Hon'ble KSERC. The matter was intimated to you vide reference 4 above wherein it was mentioned that the outcome in the review petition is likely to impact the administration of the related PSAs. Now, KSERC had rejected these review petitions in the Common Order issued on 14-08-2020.

In this order, KSERC has reiterated that the contracts do not have approval of KSERC and any amount paid above the rate applicable to L1 bidder will not be passed on. Apparently, with this order of KSERC, the conditions precedents mandated under the PSA remains unfulfilled. In this circumstances, KSEBL is filing a separate petition before KSERC seeking specific order on the approval or otherwise, of the respective PSAs. Meanwhile, KSEBL is constrained to limit the payment against the monthly bills with respect of the power scheduled from your Station to that of the tariff rate of BALCO in the respective monthly bills, in compliance with the orders of Hon'ble Commission. The difference in amounts, if any, is sought to be settled in accordance with specific orders of KSERC in the petition.”

5.82. Thereafter, one of the unapproved PSA Generator, i.e., M/s Jindal India Thermal Power Ltd (JITPL) filed a petition against the Commission's order before the Hon'ble APTEL as DFR No. 369 of 2020. Hon'ble APTEL vide judgment dated 20.11.2020 ordered as follows.

"During the hearing today, we were informed that the second Respondent i.e. Kerala State Electricity Board Ltd. (KSEBL) has approached the State Commission (first Respondent) by a fresh petition seeking approval for procurement of power from the Appellant and the PSA as also adoption of tariff discovered in bid process. The State Commission, we are further informed, has issued notice to the Appellant as well.

All sides through their respective counsel submitted that they would rather await the decision of the State Commission on the fresh petition referred to above. The Appellant, at the same time, seeks protection of its interest in the context of the impugned order dated 14.02.2020 on the fuel surcharge. The learned counsel representing KSEBL also expressed the difficulties that would arise as consequences flowing from the said order. In the facts and circumstances and bearing in mind also the fact that the approval of the State Commission for the PSA and the prayer for tariff adoption is still awaited, we feel it just and proper to direct stay against the operation of the impugned orders dated 14.02.2020 and 27.04.2020 on subject of fuel surcharge and, in the consequence, restoring status quo ante to the dispensation prevailing immediately anterior thereto, as an ad-interim arrangement, such ad-interim order to continue till the application for stay and appeal are adjudicated upon after final hearing. We clarify that the appeal and application filed therewith will be taken up for final hearing after the decision on the fresh petition for approval/adoption has been rendered by the State Commission. Ordered accordingly.

Since the matter is simmered too long before the State Commission, we would expect the State Commission to conclude the proceedings on the fresh petition expeditiously and render its decision as early as possible. Belisted on 15.02.2021. The State Commission will submit its status report well in advance."

5.83. Thereafter, the Commission filed an Appeal Petition, Civil Appeal No.41/2021 before the Hon'ble Supreme Court and the APEX Court was pleased to stay the proceedings vide Order dated 27.01.2021 and issue interim order as follows.

"Until further Orders, there shall be an ad interim stay of the impugned order dated 20.11.2020 passed by the Appellate Tribunal Electricity, New Delhi in DFR no.369 of 2020."

Under such circumstances, the Commission is constrained not to allow the higher rate paid by KSEB Ltd to the three unapproved PSAs. The Commission also note that KSEB Ltd has since August 2020 limited the payment for this three unapproved PSAs to the same rate as paid to BALCO at Kerala periphery.

In view of the foregoing, the Commission has limited the power purchased cost of these three unapproved PSAs as to the same rate as that of BALCO which is approved in the Truing up for the year 2020-21 i.e, Rs 4.21/unit."

- 5.71 The Commission has decided to follow the same principle for the approval of power purchase from the unapproved DBFOO contracts for the year 2021-22 also. As detailed under paragraph 5.63 above, the total cost incurred for the purchase of 487.37 MU from M/s BALCO at Kerala periphery is Rs 184.16 crore. This cost

includes the penalty of Rs 13.46 crore imposed on BALCO for under achievement of the target availability. Thus, excluding the penalty, the total cost of power purchase cost of BALCO for supplying 487.37MU during the year 2021-22 is (184.16+13.46) Rs 197.62 crore and the average cost of power purchase at Kerala periphery is Rs 4.05/unit.

Table-5.34(a)
Average power purchase rate of BALCO at KSEB Ltd periphery for the year 2021-22

Trader/Source	Energy at Kerala periphery	Fixed charges	Variable charges	Other charges	Total	Avg rate
	MU	Rs Cr.	Rs Cr.	(Rs.Cr)	(Rs.Cr)	(Rs/ kWh)
Balco	487.37	169.67	59.18	-31.24	197.61	4.05

5.72 The energy scheduled at KSEB Ltd periphery from unapproved DBFOO contracts and the amount claimed for Truing up for the year 2021-22 is given below.

Table-5.34(b)
Amount claimed for Truing Up of unapproved DBFOO contracts for the Year 2021-22

Source	Accounts			KSEB True up petition		
	Energy at KSEB periphery (MU)	Cost (Rs Cr) (excluding penalty)	Avg. Tariff (Rs/ kWh)	Energy at KSEB periphery (MU)	Truing up claim (Rs. Cr) (excluding penalty)	Avg. Tariff (Rs/ kWh)
Jindal Power Ltd-Bid II	1052.75	441.58	4.19	1052.75	404.78	3.84
Jhabua Power Ltd-Bid-II	615.09	297.13	4.83	615.09	239.68	3.90
JITPL	665.17	290.18	4.36	665.17	263.47	3.96
Sub total	2333.01	1028.89	4.41	2333.01	907.93	3.89

As detailed above, the actual claim for True up of cost of power purchase from the unapproved DBFOO contracts is less than the BALCO rate, the Commission admit the cost of power purchase claimed by KSEB Ltd from the unapproved DBFOO contracts. The details are given below.

Table 5.34 (c)
Summary of the power purchase of unapproved DBFOO contracts

Source	Accounts			KSEB True up petition			KSERC approval		
	Energy at KSEB periphery (MU)	Cost (Rs Cr) (excluding penalty)	Avg. Tariff (Rs/ kWh)	Energy at KSEB periphery (MU)	Truing up claim (Rs. Cr) (excluding penalty)	Truing up claim (Rs. Cr) (excluding penalty)	Energy at KSEB periphery (MU)	Cost (Rs Cr)	Avg. Tariff (Rs/ kWh)
Jindal Power Ltd-Bid II	1052.75	441.58	4.19	1052.75	404.78	3.84	1052.75	404.78	3.84
Jhabua Power Ltd-Bid-II	615.09	297.13	4.83	615.09	239.68	3.90	615.09	239.68	3.90
JITPL	665.17	290.18	4.36	665.17	263.47	3.96	665.17	263.47	3.96
Sub total	2333.01	1028.89	4.41	2333.01	907.93	3.89	2333.01	907.93	3.89

The Commission hereby approves Rs. 907.93 crore for the purchase of 2333.01 MU from the three unapproved DBFOO PSAs at an average rate of Rs 3.89/unit at Kerala periphery for the year 2021-22.

G. Power purchase considered under short term contracts

5.73 KSEB Ltd submitted that, in the MYT petition, KSEB Ltd has proposed to procure 219 MU of power from short term market to meet the peak deficit anticipated in the summer months. The Commission vide order dated 08.07.2019 observed as follows:

“In the control period there will be overall energy surplus though there may be deficit in some months due to increase in peak demand or changes in climatic conditions or reasons such as general elections as mentioned by KSEB Ltd. Since such situations are difficult to predict and KSEB Ltd has proposed the same rate for the purchase and sale, the Commission for the purpose of approving the ARR & ERC has considered the net surplus energy sale only in all the years of the control period.”

5.74 KSEB Ltd further submitted that, in order to meet the deficit during summer months, KSEB Ltd had entered into short term power procurement with GMR Energy Trading Ltd (GMRETL), Adani Enterprises Ltd (AEL) and PTC India Ltd. The Commission granted approval for these short term power purchases vide the Order dated 23.03.2021. The details of the power purchases through short term contracts is detailed below.

Table 5.35
Details of the short-term power purchase contracts for the year 2021-22

Period	Duration (Hrs)	Quantum (MW)	Rate at Kerala periphery	Source of Power
Adani Enterprises Ltd				
01.04.2021 to 30.04.2021	RTC	50	Rs 3.04/unit	Raipur Energen Ltd, Chattisgarh
01.05.2021 to 31.05.2021	RTC	50	Rs 3.04/unit	
GMRETL (GMR Energy Trading Ltd)				
01.04.2021 to 30.04.2021	RTC	50	Rs 3.04/unit	DB Power Ltd. Chattisgarh
01.05.2021 to 31.05.2021	RTC	50	Rs 3.04/unit	
01.04.2021 to 15.04.2021	14.00 to 24.00	50	Rs 3.40/unit	
16.04.2021 to 30.04.2021	14.00 to 24.00	50	Rs 3.42/unit	
01.05.2021 to 31.05.2021	14.00 to 24.00	50	Rs 3.47/unit	
PTC India Ltd				
01.04.2021 to 15.04.2021	14.00 to 24.00	50	Rs 3.41/unit	JINDAL Power Ltd Madhya Pradesh
16.04.2021 to 30.04.2021	14.00 to 24.00	50	Rs 3.43/unit	
01.05.2021 to 31.05.2021	14.00 to 24.00	50	Rs 3.48/unit	

5.75 KSEB Ltd further submitted that, it had entered PSA for procuring 270MW RTC power on medium term basis, through PTC, the Aggregator appointed by MoP under Pilot Scheme II, for the period from January to June in a year for three years with the date of commencement of supply from 01-01-2022 onwards. The Commission vide order dated 07.10.2021 has given approval for the above contract.

5.76 The details of the power purchased through short term contracts is detailed below.

Table 5.36
Summary of the power purchase through short term and medium-term contracts

Particulars	Energy scheduled at SR periphery MU	Energy schedule at KSEB Ltd periphery MU	PGCIL loss MU	Cost of power purchase Rs Cr	Avg. Tariff at KSEB Ltd periphery (Rs/ kWh)
Purchase from JITPL through PTC	522.74	503.51	19.23	171.98	3.42
Purchase from RPREL through AEL	66.50	64.24	2.26	19.48	3.03
Purchase from JPL-2 Through PTCIL	25.57	24.70	0.87	8.77	3.55
DEEP purchase from DB power through GMRETL(RTC)	69.04	66.69	2.35	20.27	3.04
DEEP purchase from DB power through GMRETL	29.05	28.06	0.99	9.65	3.44
Sub Total	712.89	687.21	25.68	230.15	3.35

Analysis and Decision of the Commission

5.77 Based on the petition filed by KSEB Ltd, the Commission vide the order dated 23.03.2021 had granted approval for procuring power through DEEP portal for meeting the anticipated power shortages in the months of April and May 2021.

Further the Commission vide the Order dated 07.10.2021 had given approval for procuring 270MW RTC power through PTC, the Aggregator appointed by Ministry of Power, Government of India, under Pilot Scheme II of Central Government, for the period from January to June in a year for three years with the date of commencement of supply from 01-01-2022. Since the purchase of power is from the approved contracts, ***the Commission here by approve the purchase of 687.21 MU at Kerala periphery at the totalcost of Rs 230.15 crore in the year 2021-22.***

H. Power purchase from Energy exchanges

5.78 KSEB Ltd in the Truing up petition submitted that, during the year 2021-22, the licensee had purchased 64.24 MU at Kerala periphery at a cost of Rs 18.93 crore. The details are as follows:

Table 5.37
Details of power purchase through exchanges

Source	Energy at SR periphery (MU)	Energy at Kerala periphery (MU)	Cost (Rs Cr)	Avg Tariff at Kerala Periphery (Rs/ kWh)
IEX	66.66	64.24	18.77	2.95
Other charges associated with power exchange			0.16	
Sub total	66.66	64.24	18.93	

Analysis and Decision of the Commission

5.79 Since the establishment of the Power Exchanges, the Commission has been permitting the licensee to purchase electricity from the exchanges through day ahead market and real time market and term ahead market for meeting contingency, and also for optimizing the cost of power purchase.

During the year 2021-22, KSEB Ltd had purchased 64.24 MU at an average rate of Rs 2.95/unit. The Power Exchanges are competitive bidding platform regulated by CERC. Further the average tariff at Rs 2.95/kWh is very competitive.

After examining the purchase of power from 'Power exchanges' in detail, the Commission hereby approves Rs.18.93crore as power purchase cost for 64.24 MU units at the average rate @Rs 2.95/unit.

I. Deviation settlement mechanism (DSM)

5.80 KSEB Ltd in the Truing up petition submitted that, it had exported a net energy of 95.68 MU to the grid through deviation settlement mechanism (DSM) in the year 2021-22. The month wise details of the energy transaction through DSM in the year 2021-22 is given below.

Table 5.38
Energy transaction through DSM in the year 2021-22

Month	Import in MU	Export in MU	Net Deviation in MU
Apr-21	30.98	-21.03	9.95
May-21	26.53	-28	-1.47
Jun-21	31.54	-22.1	9.44
Jul-21	22.38	-36.83	-14.46
Aug-21	17.85	-38.19	-20.34
Sep-21	21.92	-26.56	-4.64
Oct-21	14.49	-36.26	-21.76
Nov-21	12.44	-38.93	-26.49
Dec-21	17.91	-27.84	-9.93
Jan-22	20.98	-24.23	-3.25
Feb-22	19.05	-18.51	0.55
Mar-22	15.87	-29.15	-13.28
Total	251.95	-347.64	-95.68

KSEB Ltd further submitted that, an amount of 0.23 crore was accounted for import of power purchase and an amount of Rs 86.47 crore was accounted in interstate trading in energy. **Since the DSM is a grid balancing mechanism to enforce the grid discipline, the Commission hereby approve the energy availed through DSM as above and also accounted the expense of Rs 0.23 crore under this head.**

J. Power availed through swap arrangements

5.81 KSEB Ltd in the Truing up petition submitted that, it had entered into the following banking transactions during the year 2021-22 with the approval of the Commission to meet the summer demand.

Table 5.39
Details of contracts of power procurement through banking arrangement for FY 2021-22

Supply (to KSEB Ltd) Period			Return to TPDDL through PTC (Period)			Return Quantum	Trading margin	
Month	Duration/MW		Month/ period	Duration/MW				MU
	RTC	14.00 to 24.00 hr		0.00 to 5.00 hr	22.00 to 24.00 hr			
Mar-21	50	100	16 to 30 June 2021	126	100	102%		12.45
Apr-21	50		Jul-21	180	140			36.58
			Aug-21	177.9	140			36.2545
			Sep-21	100	100			21.00
Supply to KSEB Ltd			Return to BRPL through APPCPL					
Month	Duration/MW		Month	Duration MW				
	18:00 to 24:00			23.00 to 01.00	01.00 to 04.00			
Mar-22	100		15.06.22 to 30.06.22	123.48	123.48	103%	2.75	
			01.07.22 to 15.07.22	123.48	123.48	103%	2.75	

5.82 KSEB Ltd has also submitted the summary of the power availed through banking in the year 2021-22. Its details are given below.

Table 5.40
Power received through banking arrangement for 201-22

Utility	Trader	Energy received at exbus (MU)	Energy at Kerala periphery (MU)	Loss (MU)
TPDDL	PTCIL	36.00	34.81	1.19
BRPL	APPCPL	18.60	17.96	0.64
Total		54.60	52.76	1.84

- 5.83 KSEB Ltd submitted that, it had returned 106.284 MU during the year 2021-22 as part of banking transactions. The details of the power returned through banking arrangement during the year 2021-22, is given below.

**Table 5.41
Swap return during the year**

Supply (to KSEBL) Period			Return to TPDDL through PTC (Period)					
Month	Duration/MW		Quantity (MU)	Month/period	Duration/MW		Return Quantum	
	RTC	14.00 to 24.00 hr			0.00 to 5.00 hr	22.00 to 24.00 hr	(%) of supply	in (MU)
Mar-21	50	100	68.20	16 to 30 June 2021	126	100	102% of the supply	12.45
Apr-21	50		36.00	Jul-21	180	140		36.58
Total			104.20	Aug-21	177.9	140		36.25
				Sep-21	100	100		21.00
				Total				106.28

KSEB Ltd submitted that, it had incurred a total expenditure of Rs 0.58 crore towards banking arrangements as above. However, the KSEB Ltd has claimed only Rs.0.06 Cr for the year 2021-22.

Analysis and Decision of the Commission

- 5.84 The Commission has examined the banking arrangements made in the year 2021-22 with the approval of the Commission as detailed in the Tables above.
- 5.85 ***The Commission after examining the details submitted by KSEB Ltd hereby approve the purchase of 52.76MU during the year 2021-22. The Commission has also noted the SWAP return of Rs 106.284 MU during the year 2021-22, which was availed in the previous year. The Commission also approve the expense of Rs 0.06 crore incurred for banking transactions during the year 2021-22.***

K. Energy sale outside the State

- 5.86 KSEB Ltd submitted that, it had sold 2094.41 MU for a total amount of Rs 1023.93 crore @Rs 4.89/unit against the approved quantum of 811.21 MU for Rs 405.61 crore. The details of the revenue through surplus sale is detailed separately under 'Revenue from surplus sale out side the State'.

KSEB Ltd submitted that it had incurred an amount of Rs 5.271 crore as expenditure for the sale arranged through power exchanges.

Analysis and Decision of the Commission

- 5.87 The Commission has examined the energy sale through traders and exchanges as discussed above. Commission hereby approve the expenditure of Rs 5.271 crore incurred for the sale of surplus power outside the State.

L. Interstate Transmission charges

- 5.88 KSEB Ltd submitted that, the Commission vide the MYT Order dated 08.07.2019 had approved Rs 557.24 crore towards interstate transmission charges for the year

2021-22. The actual interstate transmission charges incurred in the year 2021-22 is Rs 1023.62 crore as per the audited accounts.

KSEB Ltd submitted that, CERC has issued the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 on 04.05.2020 with effect from November 2020. As per the new regulations the transmission charges for Kerala increases considerably by about 80 %. This has resulted in substantial increase of inter-state transmission charges paid during the year 2021-22. KSEB Ltd requested before the Commission to approve the same.

Analysis and decision of the Commission

- 5.89 The interstate transmission charges are governed by the Regulations and Orders of CERC. After examining the details, ***the Commission hereby approves the actual amount of Rs. 1023.62 crore towards the interstate transmission charges incurred by KSEB Ltd as per audited accounts for the purpose of Truing up for the year 2021-22.***

Summary of the cost of power purchase approved for the year 2021-22

- 5.90 The summary of the cost of power purchase approved for the year 2021-22 as detailed in the preceding paragraphs is given below.

Table 5.42
Summary of the Power Purchase & Cost approved for the Year 2021-22

Sl No	Particulars	Energy scheduled at Ex bus (MU)	Energy at Kerala periphery (MU)	Cost			Dis allowance
				KSEB L claim		KSERC Approval (Rs. Cr)	
				Audited accounts (Rs. Cr)	Truing Up (Rs. Cr)		
1	Central Generating Stations (CGS)	9845.13	9505.47	3753.31	3753.31	3753.31	0.00
2	Small IPPs within the State	453.90	453.90	166.10	166.10	165.01	1.09
3	Energy banked & settlement of CPPs and solar prosumers	299.84	299.84	3.03	3.03	2.93	0.10
4	RGCCPP Kayamkulam			104.23	104.23	104.23	0.00
5	SECI wind	198.63	198.63	56.37	56.37	56.37	0.00
6	LTA- Maithon & DVC stations	2889.00	2790.09	1183.65	1183.65	1183.65	0.00
7	LTA - Approved DBFOO contracts	1958.43	1890.83	682.49	682.49	682.49	0.00
8	LTA -provisionally approved contracts	732.66	707.36	297.21	297.21	251.11	46.10
9	LTA- unapproved DBFOO contracts	2416.66	2333.01	1028.89	907.93	907.93	0.00
10	Power purchase through short term contracts	712.89	687.21	230.15	230.15	230.15	0.00
11	Power purchase through Exchanges	66.66	64.24	18.93	18.93	18.93	0.00
12	Deviation settlement	-95.68	-95.68	0.23	0.23	0.23	0.00
13	Power purchase through banking/swap during the year	54.60	52.76				0.00
14	Less Power returned through banking	106.28	106.28	0.06	0.06	0.06	0.00
15	Provision for energy availed through banking which is to be returned during 2022-23			-21.41	0	0	0.00
16	Less Sale outside the State	2094.41	2094.41	5.27	5.27	5.27	0.00
17	Interstate Transmission charges			1023.62	1023.62	1023.62	0.00
18	Net Power Purchase for KSEB Ltd use for the year 2019-20 (excluding ext. sale and energy banked/ returned)	19532.72	18887.66	8532.13	8432.58	8385.29	47.29

Average Power Purchase Cost

5.91 Based on the approvals given, the average power purchase cost approved for the year 2021-22 is as shown below:

Table 5.43
Approved Power Purchase Cost for 2021-22

Sl No	Particulars	Quantity	Amount
		(MU)	(Rs. Cr)
1	Net Power purchase and cost	18887.66	8385.29
2	Less		
	(i) Energy sale outside the State	2094.41	1023.93
	(ii) Energy banked/return	106.28	
3	Net Power purchase and cost	16686.97	7361.36
4	Average power purchase cost (Rs/unit)	4.41	

As above, the average cost of power purchase for the year 2021-22 is Rs4.41/unit.

5.92 The average cost of power purchase including the self-generation for the year 2021-22 is given below.

Table-5.44
Average cost of power purchase (including self-generation) for the year 2021-22

Sl No	Particulars	Quantity	Amount
		(MU)	(Rs. Cr)
1	Internal generation	9763.05	520.02
2	Net Power purchase and cost	18887.66	8385.29
	Sub total	28650.71	8905.31
3	Less		
	(i) Energy sale outside the State	2094.41	1023.93
	(ii) Energy banked/return	106.28	
4	Net Power purchase and cost	26450.02	7881.38
5	Average power purchase cost (Rs/unit)	2.98	

O&M Expenses

5.93 KSEB Ltd submitted in their petition that, O&M Expenses of SBU-D comprises of Employee Expenses, R&M expenses and A&G expenses. According to KSEB Ltd, the total O&M expenses for the year 2021-22 of SBU-D of KSEB Ltd is Rs 3912.53 crore. However, KSEB Ltd in the petition had claimed Rs. 2838.68 crore as O&M expenses based on the approved norms as per the Tariff Regulations, 2018. In addition to the above, KSEB Ltd had also claimed Rs.437.36 crore towards pay revision of SBU-D. The details are given below:

Table 5.45
O&M expenses for SBU-D for 2021-22 as per Truing up petition

No	Particulars	Approved in	As per audited	As per True-
		MYT Order	accounts	up petition
		Rs. crore	Rs. crore	Rs. crore
1	Employee Expenses	2490.00	3236.5	2435.68
2	A&G Expenses		445.32	
3	R&M Expenses	358.95	230.71	403.00
4	Sub Total (O&M Expenses)	2848.95	3912.53	2838.68
5	Provision for pay revision			437.36
6	Total	2848.95	3912.53	3276.04

- 5.94 KSEB Ltd further submitted that, the Commission vide the Tariff Regulations 2018, has specified that the O&M expenses shall be allowed only as per the norms specified in the Tariff Regulations 2018. The normative employee cost and A&G expenses of SBU-D is specified in terms of number of consumers, number of distribution transformers, length of HT lines and energy sales. The R&M expenses of SBU-D is specified in terms of the Gross Fixed Asset of KSEB Ltd.
- 5.95 The distribution parameters adopted by KSEB Ltd for arriving the 'employee expenses and A&G expenses' for the year 2021-22 and the computation of the normative values of employee expenses and A&G expenses is given in table below:

Table 5.46
KSEB petition- Normative O& M expenses for 2021-22

No	Parameters	Quantity
1	No. of consumers (Rs. Lakh/1000)	5.53
2	Dist Transformers (Rs. Lakh/DTr)	0.73
3	Length of HT line (Rs. Lakh/km)	0.91
4	Energy sales (Rs/unit)	0.22
5	No. of consumers	13142910
6	No. of Dist Transformers (Nos)	83465
7	HT Line (Ckt-Km)	66648
8	Energy sales in MU	22413
9	Employee, A&G Cost (Rs Cr)	2435.68

- 5.96 KSEB Ltd further submitted that, as per the provision 79 and Annexure IX of Tariff regulations 2018, R&M expenses of Distribution licensees is:
- (i) *3% of Opening GFA (excluding value of land and land under lease) of distribution business of each year of the control period.*
- (ii) *Repair and Maintenance expenses for assets added during the year of the control period shall be allowed after prudence check by the Commission on a pro-rata basis subject to production of details of the assets.*

Based on the above KSEB Ltd estimated the normative R&M expense as follows:

Table 5.47
KSEB petition- Normative R&M expenses for the year 2021-22 (Rs Cr.)

Particulars	Amount (Rs Cr)		
Opening GFA as on 01.04.2021 (Rs Cr.)	12876.06		
Less land	20.44		
R&M @ 3% on opening GFA (A)	385.67		
Addition of assets during the year	1647.20		
Less Decommissioning value	1.57		
Less land	1.98		
R&M at pro rata basis for assets added during the year	17.33		
	Pro rata GFA addition	Pro rata % based on works	Pro rata R&M expenses
April	60.82	3.70	1.67
May	128.20	7.80	3.21
June	139.71	8.50	3.14
July	92.04	5.60	1.84
August	108.32	6.59	1.90

September	92.04	5.60	1.38
October	54.90	3.34	0.69
November	68.70	4.18	0.69
December	136.26	8.29	1.02
January	195.59	11.90	0.98
February	328.40	19.98	0.82
March	238.66	14.52	0.00
Total	1643.65		
R&M expenses for assets added during FY-22 (B)			17.33
Total R&M expenses (A+B)			403.00

5.97 KSEB Ltd requested before the Commission to approve the O&M expenses including the pay revision as claimed in the Truing up petition.

Comments of the Stakeholders

5.98 The HT-EHT Association submitted that, O&M expenses of SBU-D may be allowed as per the norms specified in the Tariff Regulations, 2018. The Commission may verify the parameters for computing the normative O&M expenses while appraising the petition.

The Association further submitted that, they had considered Rs 437.36 crore towards the pay revision of SBU-D as claimed by KSEB Ltd. The Association requested before the Commission to verify the actual liability for the approved level of employee strength and allow only the eligible amount as per the Tariff Regulations, 2018 after prudent check.

Analysis and Decision of the Commission

5.99 The Commission had examined in detail the O&M expenses of SBU-D as per the audited accounts and the KSEB Ltd claim in the Truing up as per the provisions of the Tariff Regulations, 2018. The details are discussed in the following paragraphs.

5.100 O&M expenses of SBU-D includes the following expenses, namely,

- (i) Employee expenses,
- (ii) Administration and General expenses (A&G expenses), and
- (iii) Repair and Maintenance Expenses (R&M expenses).

5.101 The Commission vide the Tariff Regulations, 2018, has specified the norms for O&M expenses for each SBUs of KSEB Ltd separately. The norms are arrived based on the O&M expenses including 'employee expenses, A&G expenses and R&M expenses' approved for True up of the year 2016-17.

5.102 The various provisions in the Tariff Regulations 2018 with respect to the O&M expenses is discussed in the following paragraphs.

Provisions in the Regulations

5.103 Regulation 79 of the Tariff Regulations, 2018, deals with the Operation and Maintenance expenses of SBU – D of KSEB Ltd. The relevant Regulation is extracted below:

“79. Operation and maintenance expenses. – (1) The distribution business of KSEB Limited shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period:

Provided that the distribution business of KSEB Limited shall be allowed to recover the annual pension, contribution paid to the Master Trust, based on actuarial valuation, in respect of the personnel allocated to the distribution business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses.”

5.104 Further, Annexure IX of the Tariff Regulations 2018, specifies the O&M expenses of SBU-D for the Control Period as follows.

“

Annexure-IX
O&M norms for the distribution business/licensees

Table 1 (a) : O&M norms (Employee expenses and Administration & General expenses) for distribution business of KSEB Limited

	Control period			
	2018-19	2019-20	2020-21	2021-22
No. of consumers (Rs. Lakh/'000 consumers)	4.80	5.03	5.27	5.53
No. of Distribution transformers (Rs.lakh/Distribution transformer)	0.64	0.67	0.70	0.73
Length of HT line (Rs.lakh/km of HT line)	0.79	0.83	0.87	0.91
Energy sales(Rs.per unit)	0.19	0.20	0.21	0.22

Explanation: The O&M expenses (Employee expenses and Administration & General expenses) for any year of the Control Period shall be allowed by multiplying the 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 (excluding R&M expenses) for FY 2018-19 shall be allowed by multiplying the norms for FY 2018-19 with the actual number of consumers, distribution transformers, km of HT line and sales for FY 2017-18.

(b) Repair and Maintenance expenses of distribution business of KSEB Ltd:

- (i) 3% of Opening GFA (excluding value of land and land under lease) of distribution business of each year of the control period.
- (ii) Repair and Maintenance expenses for assets added during the year of the control period shall be allowed after prudence check by the Commission on a pro-rata basis subject to production of details of the assets.”

5.105 The Commission has examined the O&M expenses allowable as per the norms specified in the Tariff Regulations, 2018, and also the prudence of the O&M expenses as per the audited accounts in detail in the subsequent paragraphs.

O&M expenses

Employee Expenses & A&G expenses as per Norms

5.106 The Commission has examined in detail the ‘employee expenses & A&G expenses’ of SBU-D claimed by KSEB Ltd for Truing up of accounts for the year 2021-22. The Commission notes that KSEB Ltd has claimed the O&M expenses of SBU-D as per the Regulation 79 of the Tariff Regulations, 2018.

5.107 As per Regulation 79, SBU-D is entitled for recovery of employee expenses and A&G expenses, in a composite manner benchmarking against the following parameters.

- (a) Number of consumers,
- (b) Number of Distribution transformers,
- (c) Length of HT lines and
- (d) Energy sales.

5.108 The parameters adopted for 'employee expenses and A&G expenses' adopted in the MYT Order dated 08.07.2019 and the actuals is given below.

Table 5.48
Distribution parameters for estimating the O&M expenses

S.No	Particulars	Previous Year of 2021-22	
		MYT order dated 08.07.2019	Actual
1	Number of Consumers	13314526	13142910
2	Distribution Transformers	82502	83465
3	HT line (km)	68613	66648
4	Sales (kWh)	23957	22413

5.109 As specified under Annexure-IX of the Tariff Regulations 2018, the norms for allowing the 'employee expenses and A&G expenses' is extracted below.

Table- 5.49

Norms specified in the Tariff Regulations for computing allowable employee expenses and A&G expenses

Particulars	2016-17	2017-18	Control period			
			2018-19	2019-20	2020-21	2021-22
No. of consumers (Rs. Lakh/'000consumers)	4.36	4.58	4.80	5.03	5.27	5.53
No. of Distribution transformers (Rs.lakh/Distribution transformer)	0.58	0.61	0.64	0.67	0.7	0.73
Length of HT line (Rs.lakh/km of HT line)	0.71	0.75	0.79	0.83	0.87	0.91
Energy sales (Rs.per unit)	0.18	0.18	0.19	0.2	0.21	0.22

5.110 Based on the parameters and norms given in the Table 5.49 above, the consolidated 'employee expenses and A&G expenses' allowable as per the Tariff Regulations, 2018 is given below.

Table 5.50

Normative 'employee expenses and A&G expenses' allowable for the year 2021-22

Particulars	Allowable expenses (Rs. Cr)
(i) Linked to number of consumers	726.80
(ii) Liked to Distribution transformers	609.29
(iii) Linked to HT lines	606.50
(iv) Linked to energy sales	493.09
Total	2435.68

5.111 The allowable 'employee expenses and A&G expenses' as specified in the Regulation is based on the approved 'employee expenses and A&G expenses' for the year 2016-17. The Commission noted that, each of the components of O&M

expenses such as 'employee expenses, A&G expenses and R&M expenses' are separate cost elements and controllable parameter. Further, KSEB Ltd is also accounting each item separately in their audited accounts.

Hence, the Commission has decided to examine the prudence of each of these items of the O&M expenses separately so that, each component of the O&M expenses is carefully considered and approved with reference to the audited accounts. Such an effort will also facilitates the identification of areas for possible cost reduction, inefficiency, lack of prudent cost control etc which will enable the utility to effect appropriate corrective action.

Accordingly, the Commission decided to apportion the O&M expenses admissible among the three O&M expenses components viz-a-viz Employee Expenses, A&G expense and R&M expenses in the ratio of these expenses in approved True up O&M expenses of SBU-D for the year 2016-17, since 2016-17 is considered as the base year arriving at the norms specified in the Tariff Regulations, 2018.

Table- 5.51
Ratio of the approved employee expenses and A&G expenses

Particulars	SBU-D for 2016-17	Ratio of the components of employee expenses and A&G expenses
	(Rs. crore)	(%)
Employee expense	1606.72	94.65%
A&G expenses	90.82	5.35%
Total	1697.54	100.00%

5.112 Based on the above, the 'employee expenses and A&G expenses' allowable for each component of SBU-D is apportioned, as detailed below.

Table 5.52
Employee expenses and A&G expenses allowable for the year 2021-22

Particulars	Amount allowable as per norms for 2021-22	Ratio of the components of 'employee expenses and A&G expenses
	(Rs. crore)	(%)
Employee expense	2305.37	94.65%
A&G expenses	130.31	5.35%
Total	2435.68	100.00%

Normative Repair and Maintenance (R&M) expenses allowable as per norms

5.113 As per the Annexure-IX to Tariff Regulations, 2018, the normative R&M expenses allowable is as follows.

- (i) 3% of Opening GFA (excluding value of land and land under lease) of distribution business of each year of the control period.
- (ii) Repair and Maintenance expenses for assets added during the year of the control period shall be allowed after prudence check by the Commission on a pro-rata basis subject to production of details of the assets.

5.114 The Commission vide Order dated 21.06.2022 in petition OP No.22/2022 had approved the Gross Fixed Asset of the SBUs as on 31.03.2021 as follows.

Table 5.53
Summary of GFA of SBU-D as on 31.03.2021

SI No	Particulars	Amount (Rs. Cr)
1	Opening level of GFA approved as on 01.04.2020	11074.64
2	Asset addition approved for 2020-21	1801.42
3	Closing balance of GFA as on 31.03.2021	12876.06

5.115 Since the exact details of the cost of land is not specified in the audited accounts, the Commission has been consistently adopting the cost of land as 2.8% of the GFA. After excluding cost of land, the opening GFA as on 01.04.2021 eligible for R&M expenses is arrived as below.

Table 5.54
GFA of SBU-D as on 01.04.2021 and Normative R&M expenses allowable

SI No	Particulars	Amount (Rs.Cr)
1	GFA as on 01.04.2021	12876.06
2	Value of land (2.8% of the GFA)	360.53
3	GFA as on 01.04.2021 excluding land	12515.53
4	R&M expenses for the GFA as on 01.04.2021 (3% of the GFA excluding land)	375.47

5.116 The Annexure-IX of the Tariff Regulations, 2018 also allows R&M expenses for the GFA added during the year 2021-22. KSEB Ltd had submitted the month wise details of the GFA of SBU-D added during the year 2021-22. The R&M expenses allowable for the GFA added during the year 2021-22 is estimated asbelow

Table 5.55
R&M expenses of newly added assets for the year 2021-22

Month	GFA addition during the month (Rs. Cr)	O&M cost for the newly added assets (Rs.Cr)
Apr-20	60.82	1.67
May-20	128.20	3.21
Jun-20	139.71	3.14
Jul-20	92.04	1.84
Aug-20	108.32	1.90
Sep-20	92.04	1.38
Oct-20	54.90	0.69
Nov-20	68.70	0.69
Dec-20	136.26	1.02
Jan-21	195.59	0.98
Feb-21	328.40	0.82
Mar-21	238.66	0.00
Total	1643.64	17.33

5.117 Based on the above details and taking into consideration of the Tariff Regulations 2018, the Commission has calculated the total normative R&M expenses allowable to the SBU-D for the year 2021-22 as given below.

Table 5.56
Normative R&M expenses allowable for the year 2021-22

Particulars	Amount (Rs. Cr)
R&M expenses allowable for the GFA as on 01.04.2021	375.47
R&M expense for GFA added during the year 2021-22	17.33
Total	392.80

The Commission noted that though the R&M Expenses as per audited accounts is only Rs.230.71 Crore. Since the O&M expenses are being allowed as per norms, the normative R&M Expenses as per Regulation is being approved. Therefore Rs.392.80 crore is hereby approved as R&M Expenses for 2021-22.

5.118 As discussed under Table 5.52 and Table 5.56 above, the total normative O&M expenses allowable as per Tariff Regulations 2021-22 is given below.

Table 5.57
Normative O&M expenses of SBU-D allowable as per Tariff Regulations 2018 for 2021-22

SI No	Particulars	Amount (Rs. Cr)
1	Employee expense	2305.37
2	A&G expenses	130.31
3	R&M expenses	392.80
4	Total	2828.48

Pay revision and Related expenses

5.119 The details of the pay revision and related expenses of KSEB Ltd approved for the year 2021-22 and its apportioning among the SBU-D is detailed in the paragraphs 6.47 to 6.60 and Table 6.30 under Chapter-6 of this Order. The apportionment of arrears of pay revision of SBU-D approved for the year 2021-22 is Rs 371.60 crore as against Rs 437.36 crore claimed by KSEB Ltd.

Total O&M expenses approved for SBU-D of KSEB Ltd

5.120 As discussed in the preceding paragraphs, the total O&M expenses approved for SBU-D in the Truing up of accounts for the year 2021-22 is detailed below.

Table 5.58
Total O&M expenses of SBU-D of KSEB Ltd approved for the year 2021-22

No	Particulars	Approved in MYT order	As per Accounts	As per True-up petition	KSERC Approval as per norms
		Rs.crore	Rs.crore	Rs.crore	Rs.crore
1	Employee expenses	2490.00	3236.50	2435.68	2305.37
2	A&G Expenses		445.32		130.31
3	R&M Expenses	358.95	230.71	403.00	392.80
4	Sub Total (O&M Expenses)	2848.95	3912.53	2838.68	2828.48
5	Provision for pay revision			437.36	371.60
6	Total	2848.95	3912.53	3276.04	3200.08

Depreciation claimed and approved for SBU-D of KSEB Ltd

5.121 The depreciation approved for SBU-D of KSEB Ltd is detailed in paragraphs 6.25 to 6.35 and Table 6.19 of this order. As against the claim of Rs 252.98 crore, the depreciation of SBU-D approved for the year 2021-22 is Rs 237.05 crore.

Interest and financing charges of SBU-D for the year 2021-22

5.122 KSEB Ltd, in the Truing up petition has claimed Rs 1724.03 crore towards the interest and finance charges as against Rs.1322.63 crore approved vide the MYT Order dated 08.07.2019 in Petition OA No. 15/2018. Interest charges include interest on secured loans, master trust interest, interest on working capital, interest

on PF balance etc. The claim of KSEB Ltd on interest and financing charges of SBU-D for the year 2021-22 is given below:

Table 5.59
KSEB petition- Interest and financing charges claimed for the year 2021-22

No	Particulars	MYT Order dated 08.07.2019	As per Accounts	KSEB Ltd Truing up petition
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on outstanding Loans	329.80	439.53	423.14
2	Interest on Security Deposit	238.74	136.20	142.18
3	Interest on GPF	182.63	152.86	152.86
4	Other Interest		8.63	8.63
5	Interest on Master Trust Bond	544.38	559.33	559.33
6	Carrying cost on revenue gap till 2020-21	27.08		437.88
7	Interest on working capital	0.00	105.59	0.00
8	Less: Interest capitalized		18.41	
9	Grand Total	1322.63	1383.73	1724.03

5.123 Detailed appraisal of each item claimed under the head 'interest and finance charges' for the year 2021-22 is discussed in subsequent paragraphs.

Interest on long term loans on normative basis

5.124 The interest on normative long term loans approved for SBU-D of KSEB Ltd is detailed in paragraphs 6.36 to 6.46 and Table 6.24 of this order. As against the claim of Rs 423.148 crore, the interest on long term loan on normative basis of SBU-D approved for the year 2021-22 is Rs 404.44 crore.

Interest on security deposit

5.125 KSEB Ltd in the petition submitted that, the Commission vide the MYT Order dated 08.07.2019 had approved interest on SD for the year 2021-22 at Rs.238.74 crore. The actual disbursement made during the year was Rs.142.18 crore.

KSEB Ltd submitted that, the reason for the wide variation is due to the difference in the actual security deposit as per the accounts and the provisional estimate of the security deposit vide the MYT Order dated 08.07.2019. The actual security deposit as on 01.04.2021 was Rs 3207.98 crore as against the provisional estimate of security deposit as per the MYT order is Rs 3686.96 crore. Similarly, the actual security deposit at the end of the financial year 2021-22, i.e, as on 31.03.2022 was Rs 3235.94 crore as against the estimate of Rs 3986.96 crore. Further, vide the MYT Order, the Commission has determined the interest on security deposit @ 6.75%, whereas the actual disbursement was made @4.65%. KSEB Ltd requested to approve the same.

Provisions in the Tariff Regulations 2018

5.126 Regulation 29(8) of the Tariff Regulation 2018 provides that, interest on security deposit is allowable only to the extent of actual disbursement of interest to the consumers. The relevant provisions are quoted below

“ 29(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 respect of in which the petition 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 only be considered at the time of truing up for the financial year.”

Analysis and decision of the Commission

5.127 Since an amount of Rs. 142.18 crore has been disbursed to consumers as interest on security deposit in the year 2021-22, the Commission approves same for the purpose of truing up.

Interest on working capital

5.128 KSEB Ltd submitted that, as per the Regulation 32(2) (e) of the Tariff Regulations 2018, interest on working capital for SBU-D is allowed on normative basis at a rate equal to two per cent higher than the base rate as on the first day of the financial year in which petition is filed.

The working capital of SBU-D includes O&M cost for one month, cost of maintenance of spares as 1/12th of average of the book value of stores for that financial year, receivables for two months excluding security deposit.

5.129 The computation of working capital requirement as per the Tariff Regulations, 2018 submitted by KSEB Ltd is given below.

Table 5.60

KSEB petition- Parameters for the estimation of the working capital

Normative O&M cost	2838.68	
Pay revision expenses	437.36	
Additional contribution to Master Trust	257.55	
Exceptional items-O&M due to natural calamities	17.58	3551.17
Revenue for the year 2021-22		14602
Opening stock of inventory (Note 11 of accounts)	684.96	
Closing stock of inventory (Note 11 of accounts)	723.11	
Average inventory		704.04
Opening Security deposit (Note 20)	3207.98	
Closing Security deposit (Note 20)	3235.94	
Average SD		3221.96

Based on the above, KSEB Ltd had estimated the working capital requirement of SBU-D for the year 2021-22 as detailed below.

Table 5.61

As per petition - estimation of working capital requirement for the year 2021-22

O&M Exp for 1 month	295.93
Maintenance spares @ One twelfth of average of opening and closing balance of Inventory	58.67
Revenue (2 months)	2433.67
Total	2788.27
Less: Security deposit (Average for FY 2021-22)	3221.96
Net Working Capital	-433.69

Since the working capital requirements is negative, KSEB Ltd had not claimed interest on working capital for the purpose of Truing up for the year 2021-22.

Provisions in the Regulations

5.130 Regulation 32(1)(e) of the Tariff Regulations, 2018 provides for computation of working capital requirements of the distribution business/ licensee. The relevant Regulations is extracted below.

“ 32 (1)(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 equivalent to one-twelfth of the average of the book value of stores, materials and supplies at the beginning and end of the financial year; plus*
- (iii) receivables equivalent to the expected revenue from sale of electricity for two months at the prevailing tariff:*

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 distribution system and consumers shall be reduced while computing the working capital requirement;

Provided further 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

5.131 As per the Regulation 32 of the Tariff Regulations, 2018, 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.

5.132 As per Regulation 32(1)(e) of the Tariff Regulations, 2018, the working capital requirement of SBU-D of KSEB Ltd includes the following.

- (1) O&M cost for one month; plus
- (2) Cost of maintenance of spares equivalent to one-twelfth of the average of the book value of stores, materials and supplies at the beginning and end of the financial year; plus,
- (3) receivables equivalent to the expected revenue from sale of electricity for two months at the prevailing tariff:

5.133 Accordingly, the parameters required for estimating the working capital and the same estimated is given below.

Table 5.62
Working capital requirement of SBU-D for the year 2021-22

Sl No	Particulars	Amount (Rs. Cr)
1	O&M cost approved for 2021-22	3200.09
2	O&M cost for one month	266.67
3	Avg Inventories (as per accounts)	704.04
4	Inventories for one month	58.67
5	Total revenue from sale of power (as per	14640.61
6	Two months receivable	2440.10
7	Total working capital requirement= (2)+(4)+ (6)	2765.45
8	Less Security Deposit	3235.94
9	Net working capital requirement = (7)-(8)	-470.49

Since the working capital requirement as per the Tariff Regulations 2018 is negative, KSEB Ltd is not eligible for interest on working capital for SBU-D.

Interest charges on GPF

5.134 KSEB Ltd submitted that, vide the MYT Order dated 08.07.2019, the Commission has approved Rs 182.63 crore towards interest on GPF of SBU-D. But as per the accounts, the actual interest paid on GPF was Rs 152.86 crore only. Following are the reasons submitted by KSEB Ltd for the variation in the interest on GPF.

- (1) The average GPF considered by the Commission in the MYT Order dated 08.07.2019 was Rs 2732.33 crore. However, the actual average GPF balance for 2021-22 is Rs 2607.17 crore.
- (2) The Commission had considered 8% as the interest on GPF, however the actual was 7.10% for the year 2021-22. The actual interest on GPF as per the audited accounts is given below.

Table 5.63
Interest on GPF (Rs Cr)

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Interest on GPF	8.97	16.22	152.86	178.06

Comments of the stakeholders

5.135 The HT -EHT Association requests to approve the Interest on the General Provident Fund as per the audited accounts for FY 2021-22 at Rs. 152.86 Crore for SBU-D, as claimed by KSEB Ltd.

Analysis and decision of the Commission

5.136 ***As per the Accounts, the interest charges booked for GPF is Rs.178.06 crore. Out of this, the share of SBU-D is Rs. 152.86 crore, which is allowed for True up in the year 2021-22.***

Interest on Master Trust Bonds

5.137 The interest on Master Trust Bonds approved to KSEB Ltd is detailed in paragraphs 6.61 to 6.78 and Table 6.34 of this Order. The Commission has approved Rs.559.33 crore towards contribution of SBU-D towards interest on Master Trust Bonds.

Carrying cost for past revenue gaps

5.138 KSEB Ltd submitted that, the trued-up revenue gap as on 31.03.2021 was Rs 7123.65 crore. Further, the Commission was pleased to review the orders on True up for the year 2017-18 and vide the Order dated 16.07.2022 in Petition RP 04/2021 had approved an additional revenue gap of Rs 7.08 crore. Thus the Trued up revenue gap as on 31.03.2021 amounts to Rs 7130.73 crore.

For computing the carrying cost for approved revenue gap, the GPF balance of Rs 2607.16 crore is deducted from the approved revenue gap to determine the revenue gap eligible for carrying cost. The average interest on loans during 2021-22 was 9.68%. Accordingly, KSEB Ltd had estimated the carrying cost for the approved revenue gap upto 31.03.2021 as follows.

Table 5.64

KSEB petition - Computation of carrying cost on approved revenue gap (Rs Cr)

1	Trued up revenue gap till 31.03.2021 as per True up order for 2020-21 (OA 23/2022 dated 24.06.2022)	7123.65
2	Revenue gap as per RP 04/2021-TU 2017-18 dated 16.07.2022	7.08
3	Total trued up revenue gap (1+2)	7130.73
4	Less: Average PF balance for 2021-22 (2430.72+2783.61)/2	2607.16
5	Net revenue gap	4523.57
6	Carrying cost at average interest rate of 9.68 % on above	437.88

5.139 KSEB Ltd has requested that, the balance security deposit after accounting the working capital requirements shall not be considered for approving the carrying cost.

Analysis and Decision of the Commission

5.140 The Commission had examined in detail the claim for allowing carrying cost for the accumulated revenue gap. The actual revenue gap approved as on 01.04.2021 is given below.

Table 5.65

Details of the unbridged approved revenue gap as on 01.04.2021

Sl No	Particulars	Amount (Rs.Cr)
1	Total provisional revenue gap as on 31.03.2020	7205.52
2	Provisional revenue surplus approved for the year 2020-21	-81.86
3	Addl. Revenue gap approved vide the Order dated 16.07.2022 in petition RP 04/2021 in Truing up 2017-18	7.08
4	Total approved revenue gap as on 01.04.2021	7130.74
5	Less Avg GPF balance during the year 2021-22	2607.16
6	Less Balance Security Deposit Available as on 01.04.2020(after working capital requirements)	470.49
7	Balance revenue gap as on 01.04.2021	4053.09

5.141 The Commission is allowing interest on the entire 'provident fund amount' retained by the licensee as part of interest and finance charges. The average PF balance available during the year is $[(2430.72+2783.61)/2] = \text{Rs } 2607.17$ crore. This amount is available with the licensee for their cash requirements. Hence as per procedure the Commission has deducted the PF balance of Rs.2607.17 crore for estimating the revenue gap and carrying cost to the licensee.

5.142 The Commission has also allowed interest on security deposit as per accounts retained by KSEB Ltd on cash basis. After estimating the working capital requirements as per norms, the excess security deposit retained by the licensee is Rs 470.49 crore as detailed in the Table 5.65 above. The Commission has already allowed interest on the entire amount held as Security Deposit, the Commission is required to deduct the excess security deposit held after meeting the working capital requirement also while allowing carrying cost for the approved revenue gap.

5.143 Hence, the Commission while calculating the carrying cost on the outstanding unbridged revenue gap as on 01.04.2021, is required to consider the availability of funds from GPF and excess security deposit held by KSEB Ltd after meeting their working capital requirements. Thus, the unbridged revenue gap eligible for carrying cost as per Table 5.65 above is Rs 4053.09 crore.

5.144 Carrying cost is to be allowed to the licensee considering the cost of funds actually incurred for funding the revenue gap. The average interest for the loan by the SBU-D for the year 2021-22 is 9.68%. The carrying cost eligible for the year 2021-22 for the net unbridged revenue gap as on 01.04.2021 is Rs.392.34 crore. The details are given below.

Table 5.66
Carrying cost approved for the revenue gap as on 01.04.2021

Sl No	Particulars	Amount (Rs. Cr)
1	Net revenue gap as on 01.04.2021 (after deducting PF balance and balance security deposit after meeting working capital requirement)	4053.09
2	Average interest rate of SBU-D for the year 2021-22	9.68%
3	Carrying cost allowable for the year 2021-22	392.34

5.145 ***Thus, the Commission hereby approve the carrying cost of Rs.392.34 crore for the outstanding unbridged revenue gap as on 01.04.2021 for the purpose of Truing up accounts for the year 2021-22.***

Other interest

5.146 KSEB Ltd submitted that, the Commission has not approved any amount towards other interest. Actual interest on other liabilities as per accounts amounts to Rs.11.24 crore as detailed below:

Table 5.67
Details of Other interest and charges

No	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest Expenses-others	0.99	1.42	2.27	4.68
2	Interest on Employers Contribution Under Tier I of NPS	0	0	0.01	0.01
3	Other Bank Charges	0.07	0.13	0.22	0.42
4	Guarantee Charges			0.01	0.01
5	Interest on Power purchase			6.13	6.13
	Total	1.06	1.55	8.64	11.24

Analysis and Decision of the Commission

5.147 The Commission has examined the other interest claimed by KSEB Ltd. A major portion of the expense under this head is towards the interest on power purchase. This is due to the difference between the cost of power purchase claimed on provisional tariff and the final tariff approved by the CERC during the MYT period from 2019-20 to 2023-24. As per the CERC Regulations, the difference between the provisional tariff and final tariff attracts interests. Here, the final tariff approved by CERC was higher than the provisional tariff claimed by CGS, KSEB Ltd has to pay the interest for the

difference. KSEB Ltd has submitted that, a total amount of Rs 10.79 crore was incurred as interest on cost of power purchase. However, in the petition KSEB Ltd has claimed only Rs 6.13 crore under this head. The Commission decided to approve the amount of Rs 6.13 crore towards interest on power purchase for the year 2021-22.

5.148 ***In the petition, KSEB Ltd has claimed Rs 2.27 crore towards ‘other interest expenses’. However, the licensee has not submitted the details of such claim. Hence the Commission is constrained to reject such claim.***

5.149 The Commission hereby approves the other bank charges amounts to Rs 0.22 crore, guarantee charges amount to Rs 0.01 crore etc as part of other interest charges. The amount approved under other interest charges of SBU-D for the year 2021-22 is given below.

Table 5.68
Other interest approved for the year 2021-22

No	Particulars	Truing up petition	KSERC Approval
		(Rs. Cr)	(Rs. Cr)
1	Interest Expenses-others	2.27	0.00
2	Interest on Employers Contribution Under Tier I of NPS	0.01	0.01
3	Other Bank Charges	0.22	0.22
4	Guarantee Charges	0.01	0.01
5	Interest on Power purchase	6.13	6.13
	Total	8.64	6.37

Summary of the interest and finance charges of SBU-D

5.150 As detailed in the preceding paragraphs, the summary of the interest and finance charges of SBU-D approved for the year 2021-22 is given below.

Table 5.69
Summary of the interest and finance charges of SBU-D for the year 2021-22

No	Particulars	Truing up	KSERC Approval
		(Rs. Cr)	(Rs. Cr)
1	Interest on outstanding Loans	423.14	404.44
2	Interest on Security Deposit	142.18	142.18
3	Interest on GPF	152.86	152.86
4	Other Interest	8.63	6.37
5	Interest on Master Trust Bond	559.33	559.33
6	Carrying cost on revenue gap till 2020-21	437.88	392.34
7	Interest on working capital	0.00	0.00
8	Grand Total	1724.02	1657.52

As detailed above, the interest and finance charges approved for the year 2021-22 for SBU-D is Rs 1657.52 Crore against Rs 1724.02 crore claimed by KSEB Ltd.

Additional funds to the Master Trust

5.151 The approval of additional fund to Master Trust is detailed under paragraphs 6.79 to 6.88 and Table 6.36 of Chapter-6 this Order. The **Commission provisionally approves Rs.257.55 crore as additional fund to the Master Trust towards unfunded actuarial liability for the year 2021-22.**

Return on equity

5.152 The approval of Return on Equity for the year 2021-22 is detailed under para 6.89 to 6.96 and Tables 6.38 of Chapter-6 of this Order. **The Commission approves Rs 253.50 crore towards Return on Equity of SBU-D for the year 2021-22.**

Other expenses

5.153 KSEB Ltd in their petition had claimed Rs.164.20 crore as other expenses as per the accounts for the year 2021-22. The details of other expenses claimed by KSEB Ltd is given below.

Table 5.70
Other expenses claimed by KSEB Ltd

No	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Rebate on fixed charges	-	-	25.79	25.79
2	Discount to Consumers	-	-	2.90	2.90
3	Material Cost Variance	0.00	0.31	13.39	13.70
4	Research and Development Expenses	0.01	-	-	0.01
5	Cost Of Trading/Manufacturing Activity	0.00	-6.16	-1.66	-7.83
6	Bad and Doubtful Debts Written off / Provided/demand withdrawal of consumers	-	-	125.56	125.56
7	Miscellaneous Losses and Write Offs	0.00	0.15	3.91	4.06
	TOTAL (Note No. 36 of audited accounts)	0.01	-5.70	169.89	164.20

The other expenses of SBU-D for the year 2021-22 is Rs 169.89 crore.

The Commission has examined each item of other expenses claimed and its details are given below.

(i) Rebate on fixed/ demand charges to alleviate Covid-19 pandemic

5.154 KSEB Ltd submitted that, the State Government vide **G.O. (RT) No.84 /2021/P.D. dated 28.06.2021.**, in order to redress the hardship faced by general public in the State during the second wave of covid-19 pandemic, has accorded sanction to KSEB Ltd. to allow following reliefs to Industrial / Commercial consumers and Cinema theatres in the State:

- a) *to provide relief to the tune of 25% on fixed charge/demand charge applicable to Industrial/Commercial consumers for the month of May-2021.*
- b) *to provide relief to tune of 50% on fixed charge/demand charge applicable to cinema theatres for the month of May- 2021.*
- c) *to allow three equal installments to remit the balance dues after allowing reliefs as above, up to 30.09.2021.*
- d) *In cases, where the bill amounts are already paid in full or part, the eligible relief in demand charge /fixed charge may be adjusted in subsequent bills.*

5.155 The Commission vide the Order dated 02.09.2021 in petition OP No. 34/2021 had approved the relief announced by the Government of Kerala vide the GO dated 84/2021 dated 28.06.2021.

5.156 KSEB Ltd also submitted the ARU wise details of the rebate on fixed charges allowed to the industrial and commercial consumers including cinema theatres in the year 2021-22. Its summary is given below.

Table 5.71
Details of the rebate on fixed charges allowed during the year 2021-22

Particulars	Amount (Rs. Cr)
Electrical Divisions	12.40
O/o the Special Officer Revenue	13.39
Total	25.79

Analysis and Decision of the Commission

5.157 The Commission has examined in detail the relief allowed by KSEB Ltd to alleviate the Covid-19 pandemic to the industrial and commercial consumers including cinema theatres during the year 2021-22.

5.158 The Commission vide the Order dated 02.09.2021 in petition OP No. 34/2021 had granted approval for the various reliefs announced by the Government of Kerala vide GO No. (Rt) 14/2021 dated 28.01.2021 and GO No. (Rt) 84/2021 dated 28.06.2021. The relevant portion of the Order is extracted below.

“ 33. Based on the discussions above and taking note of the fact that the matters are as of substantial public interest, the following orders are issued on the prayers of KSEB Ltd

(1) The reliefs mentioned below are approved to the industrial/commercial consumers of KSEB Ltd.

(i) to enhance the rebate in fixed charges/demand charges to 50% from 25% for the period from 24.03.2020 to 30.06.2020 in the case of cinema theatres.

(ii) to extend the applicability of rebate of 50% on fixed/demand charges from 01-07-2020 to 31-12-2020 in the case of cinema theatres.

(iii) to permit the Cinema theatres to pay the balance amount after rebate without interest in six equal monthly instalments.

(iv) The amount, if any, already paid by Cinema theatres against the reliefs allowed for the period mentioned in (i) and (ii) above is to adjusted/regularised in subsequent bills.

(v) to allow 25% rebate in fixed charges/demand charges for the month of May 2021 in the case of industrial/commercial consumers.

(vi) to allow 50% rebate in fixed charges/demand charges for the month of May 2021 in the case of Cinema theatres.

(vii) to allow three equal instalments without interest up to 30.09.2021 for the payment of balance dues after the reliefs/rebates.

(viii) the amount if any already paid for the month of May-2021 by the consumers against the relief allowed at (v) and (vi) above to adjusted/regularised in subsequent bills.

(2) Enhancement of subsidy to domestic consumers offered by Government of Kerala as per G.O. dated 28.06.2021 is also allowed subject to the provisions of Section 65 of the Electricity Act 2003.

(3) KSEB Ltd is hereby directed to submit its estimates for this subsidy to the State Government immediately.

(4) The State Government may provide the subsidy as per the provisions of Section 65 of the Act to KSEB Ltd as per the figures furnished by KSEB Ltd either as a lump sum or in phased manner in advance

(5) The petition disposed of. Ordered accordingly.”

5.159 KSEB Ltd has submitted the ARU wise details of the rebate on fixed charges allowed to industrial and commercial consumers including cinema theatres during the year 2021-22, the details are given in the Table under para 5.159 above. It is submitted that, the total rebate on fixed charges allowed is Rs 25.79 crore. However, KSEB Ltd has not submitted the details of the rebate allowed on domestic consumers as per the GO dated 28.06.2023.

5.160 ***The Commission after examining the entire aspects in detail, hereby approve Rs.25.79 crore towards relief allowed to industrial and commercial consumers including cinema theatres during the year 2021-22 to alleviate the impact on restrictions and lockdowns imposed in the State due to Covid-19 pandemic.***

(ii) Discount and rebate allowed to the consumers

5.161 KSEB Ltd submitted that, KSEB Ltd had allowed a discount of Rs 2.74 crore for advance payments and Rs 0.16 crore towards generation based incentives for solar prosumers during the year 2021-22. The ARU wise details of the discounts and incentives allowed to the consumers are submitted by KSEB Ltd along with the petition.

Analysis and Decisions

5.162 ***After examining the details, the Commission hereby approves Rs 2.90 crore as per the audited accounts towards discounts to the consumers during the year 2021-22.***

(iii) Material cost variance

5.163 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 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.

KSEB Ltd has submitted the circle wise details of the material cost variance claimed during the year 2021-22. The details are given as Annexure-16 of this Order.

Analysis and Decision

5.164 ***The Commission, after examining the details, hereby approves Rs.13.70 crore as per the audited accounts towards material cost variance during the year 2021-22.***

(iv) Cost of trading and manufacturing activity

5.165 Cost of trading and manufacturing activity includes sale proceeds of fixed assets and insurance claims received. KSEB Ltd has submitted the circle wise details of the cost of trading and manufacturing activities of the year 2021-22. The details are given as Annexure-17 of this Order. As detailed above, there is a net gain of Rs 1.67 crore under this head during the year 2021-22.

The Commission after examining the details, decided to approve the gain of Rs 1.67 crore under 'sale proceeds and insurance claims' for the purpose of Truing up of the year 2021-22.

(v) Bad and Doubtful debts written off/ withdrawal of credits of consumers

5.166 KSEB Ltd in the Truing up petition has claimed Rs 125.56 crore under the prior period demand during the year 2021-22. This denotes the withdrawal of revenue booked in earlier years. The summary of the details of the withdrawal of the prior period demand during the year 2021-22 is given as Annexure-18 of this Order.

5.167 Detailed explanation on the circumstances necessitated for the withdrawal of the prior period demand in the year 2021-22 is given below.

(a) M/s. Essen Oxidisers(P) Ltd (HTB-12/1211) Amt.Rs.5,44,336.

The service connection to the consumer was dismantled in 2/2004 on request. As per the OTS scheme, the consumer had remitted the entire arrears with interest on 30.4.2013. However, an amount of Rs.5,44,336/- was seen in the System as outstanding demand. Since the consumer had remitted entire dues to KSEB Ltd, the demand has been withdrawn from the accounts.

(b) M/s. Malabar Cements (LCN.13/1335) Amt.12,81,085/-

The consumer had supplied cement to various pole casting units of KSEB Ltd. The cost of cement was to be adjusted against the current charges payable by the consumer by the concerned office. The IUTN pertaining to Angamaly store for the months of 10/98, 11/98 and 1/2000 amounting to Rs.12,81,085/- were not adjusted. Thus, an amount of Rs.12,81,085/- was seen as arrear. Since the said amount of arrear were adjusted against the cost of cement, the same was withdrawn from the accounts.

(c) M/s Hotel Geo (HTB.16/4840) Amt. Rs.506168/-

The consumer was permitted to clear the pending arrear under OTS Scheme in 2021. Accordingly, the arrear amount of Rs.3,75,317/- including interest was remitted by the consumer on 16.11.2021. But in the System, an amount of Rs.5,06,168/- had still existed as arrear after adjusted the collection amt of Rs.3,83,827/-. Hence, the same was withdrawn from the System.

(d) M/s. Cannanore Spinning & Weaving Mills (LCN.18/1032) Amt.Rs.2,49,84,703/-

On verification of the Multiplication factor of the meter installed at the premises of the consumer on 30.5.2020, it was found faulty and the same was replaced with a good one on the same day itself. A short assessment bill amounting to Rs.2,49,84,703/- for the period from 27.3.2020 to

30.5.2020 was issued to the consumer. The consumer complaints that there was no operations from 23.3.2020 due to Covid-19 Pandemic restrictions. They have also produced documentary evidences to substantiate their claims. After detailed examination, the full-time directors (FTD) in its meeting held on 31.5.2021 resolved to accord sanction to withdraw the short assessment bill for Rs.24984703/- from the accounts.

- (e) M/s. Gopika Dairy Farm (LCN.19/3577) Amt.Rs.8,24,569/-
The Service Connection to the consumer was disconnected on 17.10.2019 for default and finally dismantled on 15.9.2021. But minimum demands were raised up to 7/2021 beyond the stipulated time period of 180 days from the date of DC. On verification of records, it was found that excess demand generated from 15.4.2020 to 7/2021 amounted to Rs.8,24,569/- in the System. As the excess demand was against the Regulation 141 of Ele. Supply Code,2014 the same has been withdrawn from the System.
- (f) M/s Artech Power Products (HTB.23/2369) Amt.Rs.11,75,779/-
The Service connection to the consumer was dismantled on 10.5.2002 and the consumer had cleared the pending arrears of Rs.18,11,151/- on 20.1.2010 under OTS scheme 2009-10. The collection was not entered in the Energize System, which was implemented in April 2010, and hence an amt of 11,75,779/ was seen as arrear against the consumer. Since the consumer had cleared all the arrears, the arrear seen in the System has been withdrawn.
- (g) M/s. J & T Crusher Works (LCN 23/6923) Amt Rs.6,84,983/-
The Service connection to the consumer was disconnected on 15.2.2020 for default and minimum bills were issued up to 31.10.2021. As per 143(3) of Supply Code 2014, the agreement may be terminated after 180 days from the date of DC and hence minimum demand be restricted to a period of 180 days from DC. Hence, the demand notices issued from 10/2020 to 11/2021 for Rs.6,84,983/- has been withdrawn.
- (h) M/s. Rubber Wood Processing Unit (LCN.24/8490) Amt.Rs.241740/-
The Service connection to the consumer was disconnected on 30.11.2019 for default and minimum bills were issued up to 30.9.2020. As per 143(3) of Supply Code 2014, the connection has to be terminated after 180 days from the date of DC and hence minimum demand be restricted to a period of 180 days from DC. Hence, the demand notices issued from 7/2020 to 9/2020 @Rs.80,580/month amounting to Rs.2,41,740/- has been withdrawn.
- (i) M/s. Kallada Irrigation Project (LCN.25/4739) Amt Rs.3,30,774/-
The Service connection was dismantled on 1.6.2010 and demands were raised up to 5/2010. On verification of accounts, it was seen that an amt. of Rs.330774/- was seen in the System as arrears. On reworking of arrears based on CPL Register of the consumer, it was seen that no arrear was pending against the consumer and hence the amt found in the System was removed.
- (j) M/s. Malabar Wires & Allied Products (LCN 26/2623) Amt.Rs.137643/-
The arrear amount of Rs.137643/- was pending for more than 26 years. As the amount could not be recovered through RR action, the matter was placed before the FTD. The FTD decided to write off the amt as bad debt and hence the arrear was withdrawn.

- (k) M/s. Little Flower Hospital (LCN.27/2765) Amt. Rs.2,19,808/-
The consumer was remitting duty @10ps.per unit of consumption instead of 10 percent of energy charges on the strength of an interim order of the Hon'ble High Court of Kerala. The differential amount was marked in the System as dispute. Though the consumer has been remitting the charges (without the disputed portion) in time, the system had generated interest for the disputed portion wrongly from 7/2020 to 1/2022 amounting to Rs.2,19,808/- As the interest is wrongly generated, the same was withdrawn.
- (l) M/s. Plant Lipids (LCN 28/2866) Rs.37,75,981/-
On detection of UAL by the inspection of the APTS at the premises of the consumer, a penal bill for Rs.21,03,121/- was issued on 26.5.2003. Later, the bill was revised to Rs.19,53,514/-on 12.5.2008 in compliance with the Judgment of the Hon'ble High Court of Kerala.. This revised penal bill was also set aside by the Court and directed KSEB Ltd to adjust the amt already remitted by the consumer in future bills. Accordingly, the amount was adjusted against the CC bill for Dec.2021. But in the System, an amount of Rs.37,75,981/ was seen as disputed amount on account of OP No.20664/99 and WP(C)No.35647/2008 and cases were disposed. In the circumstances, sanction was issued to withdraw the disputed amount of Rs.3775981/-.
- (m) M/s. Milma (HTB 29/14/1946) Amt. Rs.14,43,526/-
The consumer was billed in HT-IV tariff from 12/2007 to 6/2012 but remittances were made based on HT-I(A) tariff thereby an arrear of Rs.14,43,526/-was generated in the System. Later, tariff was reassigned to the consumer under HTI (A) tariff as per order of the Hon'ble High Court of Kerala. The revision of invoices was approved by the Board and hence the demand generated in the System has withdrawn.
- (n) M/s. Guruvayoor Dewasom Rest House (HTB 29/14/6023) Amt. Rs.90,000/-
The Service connection to the consumer was dismantled on 30.10.2014. However, an amount of Rs.90000/- was recovered as FC for 3 months. As the demand was against the 145(3) of Supply code, 2014 the recovery of Rs. 90,000/- was reviewed and decided to refund the same to the consumer after withdrawing the demand from books.
- (o) M/s Thannikudam Bhagavathy mills Ltd. (HTB 3/360) Amt. Rs.14,62,500/-
The Service connection to the premises was disconnected on 30.10.2014 and the company was declared as a SICK unit by the BIFR. The Minimum Demand charges were charged up to 5/2016 ie. for 19 months after the date of DC. Later, the MD was revised limiting to six months period after the date of DC as per 141 of the Supply code,2014. When the demand was restricted to six months, an amount of Rs.14,62,500/-was found to be in excess over the actual figure of Rs.11,43,043/- as on 31.3.2021. Hence, the excess demand of Rs.14,62,500/ has been withdrawn from the System.
- (p) M/s Delta Aggregates & Sand(P) Ltd. (LCN 3/4438) Amt.Rs.8,36,318/-
The Service connection to the premises was dismantled on 17.10.2020 as per the request of the consumer. On verification of the records, it was found that the consumer was billed up to 2/2021 instead of limiting to the date of

dismantling ie. upto 17.10.20. The demand charges raised from 11/2020 to 2/2021 amounted to Rs.7,67,221/-. Also, excess demand charge was raised for Rs.69,097/- for the month of 11/2020. As the demands raised after the dismantling is in violation of the Supply Code, the demands so generated amounting to Rs.8,36,318/- has been withdrawn.

- (q) M/s. General Hospital, EKM(LCN 30/3989) Amt.Rs.4,67,99,438/-
_An amt of Rs.4,67,99,438/- was generated as belated payment interest for the period from 04/2014 to 03/2019 in 8/2021. Later, the consumer was allowed OTS facility to clear the arrears up to 3.6.2021. Accordingly, the arrear up to 30.6.2021 with interest had been recalculated on 9.7.2021 and hence the belated payment interest already generated for Rs.4,67,99,468/ had to be withdrawn from the System.
- (r) M/s. General Hospital, EKM(LCN 30/3989) Amt.Rs.2,68,84,340/-
The consumer had paid an amt. of Rs.8,72,82,703/ in OTS 2021 on 25.3.2021. While recalculating the arrears as part of OTS facility, interest on belated payment generated in the System was found in excess till 30.6.2021. As per the reassessment, arrear of the consumer as on 30.6.2021 comes to Rs.3,78,49,964/- but in the system arrear amount found to be Rs.6,47,34,304/. Hence, the excess demand in the System of Rs.2,68,84,340/ (6,47,34,304-3,78,49,964-) was withdrawn.
- (s) M/s A-One Milk products (LCN 30/5775) Amt.Rs.3,63,811/.
_Consequent to the detention of UAL at the premise of the consumer, a penal bill for Rs.11,06,713/ was issued. Against the bill, the consumer filed appeal before the Appellate authority. Later, as per the order of the Appellate authority the bill was revised to Rs.7,42,902/. Hence the balance amt. of Rs.3,63,811/ had withdrawn from the accounts.
- (t) M/s. Delsa Exports Pvt.Ltd (LCN 30/7399) Amt.Rs.3,85,802/.
KSEB Ltd raised a claim of Rs.4,65,247/ against the consumer before the National Company Law Tribunal (NCLT). Against the demand for Rs.4,65,247/, the NCLT awarded an amt of Rs.79,445/ only in favour of KSEB Ltd and the consumer remitted the amount on 4.1.2021. The Board decided to comply with the order of the NCLT and has withdrawn the balance demand of Rs.3,85,802/- from the System.
- (u) M/s Grove Snacks(P) Ltd (LCN 31/3414) Amt.Rs.1,51,603/
Though the consumer had remitted the current charges regularly, an amount of Rs.1,51,603/ was seen as undisputed arrear in the System. On complaint from the consumer, records of the consumer were verified and it was confirmed that no real arrear was pending against the consumer. In the circumstances, sanction was accorded to withdraw the arrear from the System.
- (v) Beta Granite(P) Ltd. (HTB 31/3430) Amt. Rs.12,00,680/.
Consequent to the detection of UAL by the APTS unit, a penal bill for Rs.7,85,734/ was issued to the consumer on 23.3.2018. Aggrieved by the penal bill, the consumer filed appeal before the Appellate authority and the Authority ordered to set aside the penal bill. Meanwhile, the consumer deposited the entire amount in two spells. The board decided to comply with the said order and hence refunded the amount deposited with interest amounting to Rs.12,00,680/- to the consumer.

- (w) M/s Meenachil rubber Marketing & Processing Co-op society Ltd (LCN 32/3542) Amt.Rs.1,27,911/-
The Service connection to the Premises of the consumer was disconnected on 1.6.2016 owing to default and dismantled on 8.8.2018. The Arrear amount against the consumer was Rs.7,31,361/. Later, the consumer availed OTS in 2021 and under the Scheme arrear was recalculated to Rs.6,03,288/. The consumer has remitted the revised amt on 30.3.2021 and the same was adjusted against the original arrear of Rs.7,31,361/ in the System leaving a balance of Rs.1,27,911/-. As the consumer has settled the arrear in the OTS, the excess demand of Rs.1,27,911/- in the System has been withdrawn.
- (x) M/s. Rub Tech crumb rubber Factory (LCN 32/4488) Amt.Rs.1,80,000/.
The Service connection to the premises was disconnected on 31.12.2015 for default and dismantled on 19.4.2017. The arrear amount of Rs.3,72,972/ pending against the consumer was cleared on 29.11.2021. But in the System an amount of Rs.1,80,000/- was seen as pending demand. As the consumer has cleared all the arrears, Rs.1,80,000/- has been withdrawn.
- (y) M/s. Balaji Modern Spinners Ltd (LCN 4/1734) Amt.Rs.5,56,288/ .
The Service connection of the consumer was disconnected on 1.9.2004 and RR action was initiated against the consumer for realising the arrear of Rs.5,61,306/. As per the decision of the Revenue Adalat, the arrear amt settled by the consumer on 3.10.2010. However, an amt of Rs.5,56,288/ was seen pending in the System. Since the consumer has settled all the arrears the amount reflected in the System has been withdrawn from the System.
- (z) M/s. Travancore Plywood Industries (HTB 6/608 & 6/609) Amt.Rs1,19,86,533+ 4860000.
The Service connection was dismantled on 17.11.2005 for default and RR action was initiated for realisation of arrears. As part of settlement, OTS was allowed to the defaulter and the arrear amount revised to Rs.1,21,34,948/- in OTS which was cleared on 30.3.2010. But in the System an amount. of Rs.1,19,86,533 for LCN6/608 and Rs.48,60,000 for LCN6/609 remains pending as outstanding demand. As the consumer had cleared all the arrears through OTS, the demand reflected in the System has been withdrawn.
- (aa) M/s. Excel Glass Ltd. (HTB 6/627) Amt.Rs.7,11,92,922/-
The Service connection of the consumer was dismantled on 26.7.2013 for default. The arrear amount reflected in the System was Rs.22,47,76,790/- which includes pre-92 disputed amount. But on verification of accounts, the actual principal arrear of the consumer was only Rs.15,35,83,868/- instead of Rs.22,47,76,790/-. Hence, the excess amt of Rs.7,11,92,922/- has been withdrawn from the System.
- (bb) M/s. Binani Zinc Ltd (LCN 7/701) Amt.Rs.105,14,28,681/-
The dismantled consumer had various disputes over demands which were challenged before various judicial fora. As part of updating old arrears against the consumers, the arrear against M/s. Binani Zinc Ltd was arrived at Rs 1,31,68,45,612/- as on 30.9.2009. The disputes over arrear amt have been settled but corresponding entries had not been done in the System

and hence huge arrear accumulated in the System. The arrears accumulated in the System comes to Rs. 105,14,28,681/- under the heads of UAL, Tariff dispute, Pre-92 issue and interest. As the arrears were already settled, the arrear has been withdrawn from the accounts.

Analysis and Decision of the Commission

5.168 The Commission has examined in detail the withdrawal of prior period demand amounts to Rs 125.96 crore during the year 2021-22, as detailed above. The Commission hereby approve the withdrawal of prior period demand as above in the process of Truing up of accounts for the year 2021-22.

(vi) Miscellaneous losses & write off (Rs. 4.06 Cr)

5.169 KSEB Ltd submitted that, the compensation paid for death/ injuries to staff and outsiders are accounted under this head. KSEB Ltd has submitted the ARU wise details of the compensation paid to its staff and outsiders in the year 2021-22. As per the details submitted, KSEB Ltd has paid Rs 0.27 crore towards the compensation for injuries to its staff and Rs 4.20 crore towards the compensation for injuries for outsiders. The details are given below.

Table 5.72
Miscellaneous losses and write-offs

Sl No	Particulars	Amount (Rs. Cr)
1	Staff- compensation for injuries	0.27
2	Outsider- Compensation for injuries	4.20
	Sub total	4.47
3	Less opening provisions reversed	0.41
4	Net amount charged to P&L	4.06

The Commission after examining the details, hereby approve the compensation paid for death/ injuries to staff and outsiders under the head miscellaneous losses and write-offs in the year 2021-22.

5.170 The summary of the other expenses approved for the year 2021-22 is given below.

Table 5.73
Summary of the other expenses approved for the year 2021-22

Sl No	Particulars	True Up petition	KSERC Approval
		(Rs. Cr)	(Rs. Cr)
1	Rebate on fixed charges	25.79	25.79
2	Discount to Consumers	2.90	2.90
3	Material Cost Variance	13.39	13.39
4	Cost Of Trading/Manufacturing Activity	-1.66	-1.66
5	Bad and Doubtful Debts Written off / Provided/demand withdrawal of consumers	125.56	125.56
6	Miscellaneous Losses and Write Offs	3.91	3.91
7	Total	169.89	169.89

Exceptional items

5.171 Expenses incurred for the restoration of assets damaged due to natural calamities are accounted under this head. SBU wise break up of other expenses and exceptional items claimed by KSEB Ltd is given below.

Table 5.74
Exceptional items

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Exceptional items	0.33	0.00	17.58	17.91

KSEB Ltd has submitted the circle wise details of the R&M works due to natural calamity booked under 'exceptional items' in the year 2021-22.

Analysis and Decision of the Commission

5.172 The Commission noted that, during the monsoon the State of Kerala has faced a huge deluge resulting in massive loss of life and property. KSEB Ltd claimed that they had incurred Rs 17.58 Crore for SBU-D towards one-time urgent steps taken to overcome the situation and to restore supply and to ensure safety of the general public. In view of the unexpected circumstances, **the Commission hereby approve Rs 17.91 crore towards exceptional items, with Rs 17.58 crore being the allocation to SBU-D.**

Non-Tariff Income

5.173 KSEB Ltd, in the Truing petition submitted that as per the audited accounts, the Non tariff income booked is Rs 1320.70 crore. The details are given below.

Table- 5.75
Non-Tariff Income & Other income as per accounts for 2021-22

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
A	Revenue booked under Note No. 27				
1	Miscellaneous receipts / charges from interstate trading of energy			101.42	101.42
2	Meter rent / service line rental			102.31	102.31
3	Recovery of theft / malpractices			1.52	1.52
4	Wheeling charges recoveries			2.17	2.17
5	Miscellaneous charges from consumers			89.70	89.70
	Revenue booked under Note No. 27 considered as Non-Tariff Income- Sub Total A			297.12	297.12
B	Revenue booked under Note No 27 A				
6	Rebate received	0.02	0.04	123.65	123.71
7	Interest-Advance to suppliers / contractors	3.70	6.39	9.94	20.03
8	Income from sale of bulb, scrap, tender forms etc	7.84	19.94	114.22	142.00
9	Miscellaneous receipts	15.52	16.99	86.64	119.15
	Sub Total B	27.08	43.36	334.45	404.89
C	Other income as per Note 28 of Annual accounts				
1	Interest on belated payment charges			227.57	227.57
2	Interest-Staff loans and advances	0.00	0.01	0.04	0.05
3	Interest from loans & others			0.69	0.69
4	Interest from banks	2.06	2.09	3.35	7.50
5	Claw back of grants	6.67	37.58	265.62	309.88
6	Reversal of provision on doubtful debts			56.30	56.30
7	Other receipts	2.27	2.26	12.17	16.70
	Sub Total C	11.00	41.94	565.75	618.69
D= (A+B+C)	Non-tariff income as per Accounts	38.08	85.30	1197.32	1320.70

As above, out of the Non-tariff income of Rs 1320.70 crore, Rs 1197.32 crore pertains to SBU-D of KSEB Ltd.

5.174 The details of the 'miscellaneous charges from consumers' is given as Annexure-19 of this Order. The income booked under 'miscellaneous receipts from consumers' is given as Annexure-20 of this Order. The details of the income from sale of scrap,tender form etc is detailed under Annexure-21 of this Order. KSEB Ltd has claimed Rs 101.42 crore towards miscellaneous receipts/ charges from inter -state trading of energy. The details are given as Annexure-22 of this Order.

5.175 KSEB Ltd has claimed following adjustments from the total Non tariff Income of Rs 1320.70 crore claimed in the year 2021-22, out of which the Non tariff pertains to SBU-D is Rs 1197.32 crore,.

- (a) Claw back of grant and consumer contribution: Out of the total non tariff income of Rs 1320.70 crore, Rs 309.88 crore pertains to claw back of grant. The share of SBU-D is Rs 265.62 crore.
- (b) Cost of LED bulbs- Rs 10.81 crore: KSEB Ltd submitted that, income from sale of scrap/tender form amounting to Rs 142 crore includes Rs.15.06 crore towards sale proceeds of LED bulbs. This include the cost of LED bulbs amounting to Rs. 10.81 crore which is booked under A&G expenses. KSEB Ltd submitted that, the net income of Rs 4.25 crore after excluding the cost of LED bulbs from the sale proceeds only be Trued up for the year 2021-22. Details of income to be trued up on account of LED transaction in the year 2021-22 is submitted below:

Table- 5.76
Details of income to be trued up in 2021-22

Particulars	Rs Cr
Sale proceeds of LED bulbs	15.06
Cost of LED bulbs	10.81
Income sought for trued up	4.25

- (c) Reversal provision of doubtful debts amounts to Rs 56.30 crore. As per the audited accounts, the provision for doubtful debts under sundry debtors is Rs 439.19 crore as on 31.03.2021.

However, upon examination of adequacy of provision for doubtful debts, it is observed that there is an excess provision of Rs 56.30 crore under the provision created, hence it had been withdrawn by booking the same under other income for the year 2021-22. Accordingly, the provision for sundry debtors as on 31.03.2022 is Rs 382.89 crore only. The details are given as Annexure-23 of this Order.

KSEB Ltd submitted that, the reversal of provision on doubtful debts amounting to Rs. 56.30 Cr has been accounted under other income (Note 28 of audited accounts) may not be trued up since such provisions are not approved by the Commission in the year in which they were created in books. The provision created in the books in earlier years in line with the accounting standards were not approved while true up in the respective years as the Commission ordered that expenses on this count can be allowed only upon actual write off and subject to prudence check.

Interest income of KWA arrears

5.176 KSEB Ltd submitted that, Government of Kerala, as per order No. G.O. (Rt) No. 10/2019/Power dated 14.01.2019 has accorded sanction to settle the electricity dues of KWA of an amount of Rs.1326.69 Cr (including interest @ 6% of Rs 263.71 crore) till 30.09.2018 in four annual instalments @Rs.331.67 Cr from 2019-20 onwards. As requested by the KSEB Ltd, the Commission has taken the stand that, the interest income on this account may be recognized on actual receipt basis. KSEB Ltd further submitted that, two installments of arrears with interest @Rs 331.67 crore was received in the year 2020-21. Interest income of Rs 131.85 crore (Rs 65.93 crore for each installment) was trued up under non tariff income for the year 2020-21.

KSEB Ltd has also submitted that, during the year 2021-22, KSEB Ltd received the one installment @Rs 331.67 crore. The interest pertains to the installment is Rs 65.93.crore. KSEB Ltd requested to true up the same as part of Non-tariff income.

5.177 Accordingly, the SBU wise details of the Non-tariff income claimed by KSEB Ltd for the year 2021-22 is given below.

Table 5.77
Non-tariff income for 2021-22 (Rs. Cr)

Sl. No	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Income as per Accounts considered as non-tariff income as per Table 5.41	38.08	85.3	1197.32	1320.7
2	Less: Items sought to be excluded in TU				
i	Claw back of grant-Considered separately	6.67	37.58	265.62	309.88
ii	Cost of LED Bulbs booked under A&G expenses			10.81	10.81
iii	Reversal of provision on doubtful debts			56.3	56.3
iv	Total exclusions (I to iii)	6.67	37.58	332.74	376.99
3	Add: Items sought to be considered in True up				
i	Interest on KWA arrears taken over by GoK			65.93	65.93
4	NT Income sought for TU 2021-22 (1-2+3)	31.41	47.71	930.51	1009.64

Provisions in the Tariff Regulations, 2018

5.178 The Regulation 82(1) of the Tariff Regulations, 2018 deals with 'non tariff income', which is extracted below.

“82.Other income.–(1) The receipts of Other 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.

(2) The indicative list of items to be considered as Other Income includes:-

- (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; and*
- (xviii) *Any other receipts*

(3) The distribution business/licensee shall submit full details of its forecast of non-tariff income and Other Income to the Commission along with its petition for approval of Aggregate Revenue Requirements.

(4) The interest earned from investments made out of return on investment by the distribution business/licensee shall not be included in other Income."

Analysis and Decision of the Commission

- 5.179 The Commission has examined the Non tariff income claimed by KSEB Ltd and the same as per the audited accounts. The Commission noted that it has been allowing depreciation on the capitalised assets excluding the assets created out of consumer contribution and grants for the purpose of Truing Up. Hence, the Commission agrees with the proposal of the KSEB Ltd to exclude the consumer contribution and grants from the Non tariff Income as per accounts.
- 5.180 KSEB Ltd submitted that the cost of LED bulbs has to be deducted from the sale proceeds of LED bulbs booked under Non tariff Income. The Commission noted that, the sale proceeds of LED bulbs is Rs 15.06 crore. The sale proceeds of LED bulbs included under the head 'sale of scrap etc' includes the total amount collected through sale, which include the cost of bulbs also. Hence, the Commission decided to deduct cost of LED bulbs amounting to Rs 10.81 crore from the Non tariff Income as per accounts.
- 5.181 The Commission also examined the request of KSEB Ltd that, Rs 56.30 crore booked as non-tariff income by reversal of the provisions created in the earlier years for bad and doubtful debts, since such provisions are not approved by the Commission in the year of creation. It is the consistent stand of the Commission that such expenses can be allowed only upon actual write-off subject to prudence check. The Commission after examining the details approve the claim of KSEB Ltd.
- 5.182 The Commission also recognise the interest income of Rs 65.93 crore received in the year 2021-22 along with the one instalment of KWA arrears @Rs 65.93 crore received in the year 2021-22.
- 5.183 As discussed above, the SBU wise details of the Non-Tariff Income approved for the purpose of Truing up for the year 2021-22 is detailed below.

Table 5.78
Non-tariff income for 2021-22 (Rs. Cr)

Sl. No	Particulars	KSEB Claim				KSERC Approval			
		SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total
1	Income as per Accounts considered as non-tariff income as per Table 5.41	38.08	85.3	1197.3	1320.7	38.08	85.3	1197.3	1320.7
2	Less: Items sought to be excluded in TU								
i	Claw back of grant-Considered separately	6.67	37.58	265.62	309.88	6.67	37.58	265.62	309.88
ii	Cost of LED Bulbs booked under A&G expenses			10.81	10.81			10.81	10.81
iii	Reversal of provision on doubtful debts			56.3	56.3			56.3	56.3
iv	Total exclusions (I to iii)	6.67	37.58	332.74	376.99	6.67	37.58	332.74	376.99
3	Add: Items sought to be considered in True up								
i	Interest on KWA arrears taken over by GoK			65.93	65.93			65.93	65.93
4	NT Income sought for TU 2021-22 (1-2+3)	31.41	47.71	930.51	1009.64	31.41	47.71	930.51	1009.6

5.184 As detailed above, the Commission approves Rs 1009.60 crore as Non-tariff income of SBU-D for 2021-22 with Rs. 930.51 crore as share of SBU-D.

Summary of the ARR Trued Up for SBU-D for the year 2021-22

5.185 As discussed in the preceding paragraphs, the summary of the ARR approved in the process of Truing Up for the year 2021-22 is given in the Table below.

Table 5.79
Aggregate Revenue Requirement for the purpose of Truing up of SBU-D

Particulars	MYT Order dated 08.07.2019	KSEB Ltd claims		KSERC Approval in Truing up
		Actual	KSEB Ltd petition for Truing up	
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Cost of Generation (SBU-G)	639.86	647.21	540.22	520.02
Cost of Power Purchase	8967.44	8532.16	8432.58	8385.29
Cost of Intra-State Transmission (SBU-T)	1283.52	1210.14	1152.24	1105.18
Interest & Finance Charges	1322.63	1383.73	1724.03	1657.52
Depreciation	154.91	682.85	252.98	237.05
O&M Expenses	2848.95	3912.53	2847.27	2828.48
Pay revision arrears			437.36	371.61
Return on equity (14%)	253.50	376.58	253.50	253.50
Other Expenses		169.88	169.88	169.88
Exceptional items		17.58	17.58	17.58
Sharing of gains on T&D loss reduction			125.25	0.0*
Recovery of past gap	850.00		346.39	
Additional contribution to Master Trust	167.10		257.55	257.55
Total ARR	16487.92	16932.67	16556.83	15803.65
Less Non tariff Income	594.36	565.75	930.51	930.51
Net ARR	15893.56	16366.92	15626.32	14873.14

* Deferred

5.186 As detailed above, the Net ARR of SBU-D of KSEB Ltd in the process of Truing up of accounts for the year 2021-22 is Rs. 14873.14 crore as against Rs.15626.32 crore claimed by KSEB Ltd.

Revenue from Sale of Power

5.187 KSEB Ltd in the petition submitted that, vide the MYT Order dated 08.07.2019, the Commission had approved the revenue from sale of power as Rs.14523.36 crore and net revenue as Rs 14489.41 crore e after deducting Rs 33.95 crore as power factor incentive. Further, the MYT Order had approved Rs 405.61 crore towards revenue from surplus energy sales outside the State. Hon'ble Commission vide tariff Order dated 08.07.2019 (w.e.f. 08.07.2019) approved to recover an additional amount of Rs. 902.90 Cr annually through revision

5.188 As against the approval, the actual revenue from tariff during the year 2021-22 was Rs 14640.61 crore. Further during the year 2021-22, KSEB Ltd has sold 2094.41 MU and earned an additional revenue amounting to Rs 1024.31 crore. The summary of the revenue from sale of power in the year 2021-22 is give below.

Table – 5.80
Revenue from Sale of Power within the State

No	Category	Energy sales		Revenue	
		MU	%	Rs Cr	%
1	Domestic incl colonies	12679.39	53.96	5999.00	40.98
2	Commercial	3309.96	14.09	3316.84	22.66
3	Public lighting	362.83	1.54	175.27	1.20
4	Irrigation & Dewatering	374.09	1.59	109.52	0.75
5	Industrial LT	1165.21	4.96	878.89	6.00
6	Railway Traction	329.66	1.40	200.52	1.37
7	Bulk Supply /CESCK	506.91	2.16	336.76	2.30
9	HT	3693.96	15.72	2910.88	19.88
10	EHT	1077.57	4.59	712.93	4.87
11	Total sales (within state)	23499.58	100.00	14640.61	100.00
12	Interstate sale	2094.41		1024.31	
13	Total	25593.99		15664.92	

5.189 KSEB Ltd further submitted that, the Commission while approving the revenue from sale of power had deducted Rs 33.95 crore as power factor incentive. The actual disbursement of power factor incentive as per the audited accounts is Rs. 38.61 crore. The comparison of the revenue from sale of power as per the MYT Order dated 08.07.2019 and actuals are given below.

Table 5.81
Revenue comparison- approved and actuals

No	Category	Energy sales (MU)			Revenue (Rs. Cr)		
		MYT Order dated 08.07.2019	Actual	Deviation	MYT Order dated 08.07.2019	Actual	Deviation
1	Domestic	12386.48	12679.39	292.91	5163.65	5999.00	835.35
2	Industrial	1157.49	1165.21	7.72	820.93	878.89	57.96
3	Agriculture	387.18	374.09	-13.09	92.60	109.52	16.92
4	Commercial	3885.50	3309.96	-575.54	3579.36	3316.84	-262.52
5	Public Lighting	440.06	362.83	-77.23	203.38	175.27	-28.01
6	HT & EHT Total	5718.56	4771.54	-947.02	4034.25	3623.81	-225.49
7	Railway Traction	323.09	329.66	6.57	197.65	200.52	12.28
8	Bulk Supply	693.10	506.91	-186.19	431.52	336.76	-75.84

9	Total sales (within state)	24991.46	23499.59	-1491.87	14523.34	14640.61	330.65
10	Interstate sale	811.21	2094.41	1283.20	405.61	1024.31	408.25
11	Total	25802.67	25594.00	-208.67	14925.64	15664.92	738.90
12	Less Power Factor incentive				32.50	38.61	6.11
13	Revenue from Sale of power	25802.67	25594.00	-208.67	14893.14	15626.31	732.79

Analysis and Decision of the Commission

5.190 The Commission has examined in detail the revenue from sale of power submitted by KSEB Ltd during the year 2021-22. KSEB Ltd has also submitted the tariff category wise sale and revenue from sale of power during the year 2021-22. The total sale within the State was 23499.51 MU as against 24991.46 MU approved vide the MYT Order dated 08.07.2019. The total revenue from sale of power within the State is Rs 14640.61 crore. The Commission had, vide Tariff Order dated 08.07.2019 has revised the tariff of all categories of consumers with effect from 08.07.2019.

5.191 In addition to the above, KSEB Ltd had sold 2094.41 MU outside the State and earned an additional revenue of Rs 1024.31 crore. The month wise details of the surplus energy sale during the year 2021-22 is given below.

Table 5.82
Details of external sale during the year 2021-22

Month	IEXDAM			IEXTAM			IEXRTM			PXILTAM			PXILDAM			Total		
	MU	Rs. Cr	Rs/ kWh	MU	Rs. Cr	Rs/ kWh	MU	Rs. Cr	Rs/ kWh	MU	Rs. Cr	Rs/ kWh	MU	Rs. Cr	Rs/ kWh	MU	Rs. Cr	Rs/ kWh
Apr-21	18.56	7.64	4.12	0.0	0.0		5.95	2.91	4.89	0.00	0.00		0.17	0.10	5.96	24.68	10.65	4.32
May-21	131.64	40.73	3.09	1.1	0.5	4.5	44.58	13.12	2.94	11.58	3.46	2.99	1.98	0.73	3.70	190.90	58.54	3.07
Jun-21	126.92	47.52	3.74	1.2	0.4	3.2	30.99	11.52	3.72	4.31	1.49	3.46	10.64	3.94	3.70	174.01	64.83	3.73
Jul-21	135.11	46.11	3.41	0.0	0.0		58.78	16.58	2.82	5.21	1.54	2.96	1.30	0.43	3.32	200.40	64.67	3.23
Aug-21	239.90	136.67	5.70	0.0	0.0		62.65	40.97	6.54	0.00	0.00		4.98	2.10	4.21	307.53	179.73	5.84
Sep-21	79.95	39.63	4.96	0.0	0.0		26.14	11.95	4.57	0.59	0.18	3.14	0.32	0.19	5.81	107.01	51.96	4.86
Oct-21	149.02	106.27	7.13	0.8	0.3		57.06	55.82	9.78	18.86	6.76	3.59	0.26	0.20	7.62	225.99	169.40	7.50
Nov-21	240.62	76.42	3.18	0.0	0.0		71.31	20.97	2.94	55.18	18.13	3.29	0.74	0.29	3.99	367.85	115.91	3.15
Dec-21	104.80	42.78	4.08	0.0	0.0		41.92	16.51	3.94	4.42	1.96	4.43	0.27	0.11	4.19	151.41	61.36	4.05
Jan-22	99.84	45.45	4.55	0.0	0.0		37.15	16.73	4.50	0.00	0.00		0.56	0.24	4.36	137.55	62.43	4.54
Feb-22	45.83	29.55	6.45	0.0	0.0		34.95	20.00	5.72	0.00	0.00		0.76	0.40	5.27	81.54	49.95	6.13
Mar-22	70.25	68.72	9.78	0.0	0.0		55.09	65.92	11.96	0.00	0.00		0.20	0.05	2.54	125.54	134.87	10.74
Sub Total	1442.44	687.49	4.77	3.08	1.13	3.7	526.58	292.99	5.56	100.15	33.53	3.35	22.17	8.78	3.96	2094.41	1024.31	4.89

5.192 KSEB Ltd has to pay power factor incentive to the consumers along with the invoice for electricity consumption as per the tariff orders issued by the Commission from time to time.

5.193 ***The Commission, after carefully examining the details furnished by KSEBLtd, approves the revenue from sale of power as Rs. 15626.31 crore as per the audited accounts for the year 2021-22.***

Revenue gap approved for the year 2021-22

5.194 As discussed in the preceding paragraphs, the revenue gap approved for the year 2021-22 for SBU-D is given below.

Table 5.83
Revenue gap approved for SBU-D for the year 2021-22

Particulars	MYT Order dated 08.07.2019	KSEB Ltd petition for Truing up	KSERC Approval in Truing up
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Cost of Generation (SBU-G)	639.86	540.22	520.02
Cost of Power Purchase	8967.44	8432.58	8385.29
Cost of Intra-State Transmission (SBU-T)	1283.52	1152.24	1105.18
Interest & Finance Charges	1322.63	1724.03	1657.52
Depreciation	154.91	252.98	237.05
O&M Expenses	2848.95	2847.27	2828.48
Pay revision arrears		437.36	371.61
Return on equity (14%)	253.50	253.50	253.50
Other Expenses		169.88	169.88
Exceptional items		17.58	17.58
Sharing of gains on T&D loss reduction		125.25	0.00*
Recovery of past gap	850.00	346.39	
Additional contribution to Master Trust	167.10	257.55	257.55
Total ARR	16487.92	16556.83	15803.65
Less Non-tariff Income	594.36	930.51	930.51
Net ARR	15893.56	15626.32	14873.14
Revenue from sale of power	14895.02	15626.31	15626.31
Net Revenue Gap (-)/ Surplus (+)	-998.54	-0.01	753.17

*Deferred

5.195 ***As above, the Commission hereby approve a provisional revenue surplus of Rs.753.17 crore for SBU D for the year 2021-22 against nil revenue surplus claimed by KSEB Ltd for the year 2021-22.***

CHAPTER-6
APPROVAL COMMON EXPENSES AND APPORTIONING THE SAME
AMONG SBU-G, SBU-T AND SBU-D OF KSEB Ltd

GROSS FIXED ASSET ADDITION (GFA)

6.1 The summary of the GFA addition of KSEB Ltd during the year 2021-22 is given below.

Table 6.1
Summary of capitalization during the year 2021-22 as per petition

Sl. No	SBU	CWIP as on 01/04/2021	Works executed during the year	GFA Addition	CWIP as on 31/03/2022
		(Rs. Cr)	(Rs.Cr)	(Rs. Cr)	(Rs.Cr)
1	Generation	1,722.31	483.28	361.63	1,843.96
2	Transmission	1,696.42	1024.19	1762.84	957.77
3	Distribution	744	1631.28	1647.2	728.08
4	GRAND TOTAL	4,162.73	3,138.75	3,771.67	3,529.81

6.2 The asset class wise details of fixed assets addition under the Strategic Business Units of SBU G, SBU T and SBU D during the year 2021-22 is given below:

Table 6.2
SBU wise -Asset class wise GFA addition for the year 2021-22

Sl.No	Description	SBU G	SBU T	SBU D	Total
1	Land	8.00	3.09	1.98	13.08
2	Building	53.98	28.20	29.32	111.50
3	Hydraulic works	187.84	0.13		187.97
4	Other Civil works		19.96	1.56	21.52
5	Plant & Machinery	95.04	493.49	35.31	623.84
6	Lines, cable networks etc.	1.68	1208.53	1533.50	2743.71
7	Vehicle	5.53	3.26	3.11	11.90
8	Furniture & Fixtures	6.80	2.50	3.33	12.64
9	Office equipment	2.41	2.85	37.55	42.81
10	Decommissioning liability	0.36	0.82	1.57	2.75
11	Total	361.63	1762.84	1647.20	3771.67

As detailed above, the total GFA addition of SBU-G in the year 2021-22 is Rs 361.63 crore, SBU-T for the year 2021-22 is Rs 1762.84 crore and SBU-D for the year 2021-22 is Rs 1647.20 crore.

6.3 As per the provisions of the Tariff Regulations, 2018, the assets created out of consumer contribution and grants has to be excluded for arriving the assets eligible for the estimation of interest on loan and depreciation on normative basis. The SBU wise details of the capital subsidies and grants received during the year 2021-22 as per the truing up petition is detailed below.

Table 6.3
SBU wise break up of Contribution & grants received during 2021-22

SL No.	PARTICULARS	GEN	TRANS	DIST	TOTAL
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Consumer contribution	0.05	6.66	393.41	400.13
2	Subsidies	20.91	0.00	0.00	20.91
3	Grants Recd. Towards Cost of Fixed Assets	0.00	3.95	506.24	510.20
4	Others	0.00	5.20	154.79	159.99
5	Gross Total	20.96	15.81	1054.44	1091.22

6.4 The GFA addition claimed for as per Tariff Regulation, 2018 for claiming interest on loan and depreciation for the year 2021-22 is given below.

Table 6.4
Summary of the GFA addition of KSEB Ltd in the year 2021-22

Sl.No	Particulars	SBU G	SBU T	SBU D	TOTAL
1	GFA Addition as per Accounts	361.63	1762.84	1647.20	3771.67
2	Less: Decommissioning liability	0.36	0.82	1.57	2.75
3	Less: Part capitalization	16.87	40.41	0.00	57.28
4	Add: Part capitalization in 2016-17 but commissioned during 2021-22	0.08	0.01	0.00	0.09
5	Add: Part capitalization in 2017-18 but commissioned during 2021-22	0.85	1.10	0.00	1.95
6	Add: Part capitalization in 2018-19 but commissioned during 2021-22		7.38	0.00	7.38
7	Add: Part capitalization in 2019-20 but commissioned during 2021-22		19.33	0.00	19.33
8	Add: Part capitalization in 2020-21 but commissioned during 2021-22	45.72	83.07	0.00	128.79
9	GFA addition eligible as per Regulation	391.05	1832.50	1645.63	3869.18
10	Less: Consumer contribution & grants	20.96	15.81	1054.44	1091.22
11	GFA addition eligible for normative loan as per Regulation	370.09	1816.69	591.19	2777.96
12	Less: Land value addition (excluding the portion under part capitalization)	0.23	4.06	1.98	6.27
13	GFA addition eligible for depreciation	369.86	1812.63	589.21	2771.69

6.5 Subsequently, vide the email dated 15.06.2023 KSEB Ltd submitted the following for the considerations of the Commission.

- (i) KSEB Ltd had executed two solar projects, 3 MW capacity at Kanjikode and 1 MW at Agali, through the Transmission circle of KSEB Ltd. The solar plants (total 4MW) was established with a total capital cost of Rs.21.49 crore. But the capital cost of these project was wrongly accounted under asset addition of SBU-T instead of SBU-G. Hence KSEB Ltd requested to account the same under SBU-G. KSEB Ltd further submitted that, there is no change in the total GFA addition of KSEB Ltd, however there is an increase in GFA addition of SBU-G by Rs 21.49 crore and corresponding decrease in GFA addition of SBU-T.
- (ii) KSEB Ltd further submitted that, vide the Truing up of accounts for the year 2018-19, the Commission had not considered the PSDF grants amounting to Rs 232.78 crore because of the non-capitalization of the relevant capital projects. The relevant portion of the Order of the Commission dated 14.07.2022 in petition OA No. 13/2020.

“3.49 The Commission also noted that, KSEB Ltd has received the grants and contributions amounting to Rs.289.69 crore. KSEB Ltd in the petition has made a significant adjustment in the assets addition eligible for the year by deducting the grants amounting to Rs.232.78 crore received and taken in the books, but the assets were not commissioned during the year. The Commission has examined the adjustments made by KSEB Ltd and found the accounting treatment to conform to the Commission’s consistent policy. Accordingly, net grants of Rs.56.16 crore only is accounted against the assets capitalized, compared to the grants of Rs.289.69 crore received during the year.”

After incorporating the corrections, KSEB Ltd submitted the revised GFA addition, the details are given below.

Table 6.5
Summary of the GFA addition of KSEB Ltd in the year 2021-22 (revised)

Sl. No	Particulars	SBU G	SBU T	SBU D	TOTAL
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	GFA Addition as per Accounts	361.63	1762.84	1647.20	3771.67
2	Less: Decommissioning liability	0.36	0.82	1.57	2.75
3	Less: Part capitalization	16.87	40.41	0.00	57.28
4	Add: Part capitalization in 2016-17 but commissioned during 2021-22	0.08	0.01	0.00	0.09
5	Add: Part capitalization in 2017-18 but commissioned during 2021-22	0.85	1.10	0.00	1.95
6	Add: Part capitalization in 2018-19 but commissioned during 2021-22		7.38	0.00	7.38
7	Add: Part capitalization in 2019-20 but commissioned during 2021-22		19.33	0.00	19.33
8	Add: Part capitalization in 2020-21 but commissioned during 2021-22	45.72	83.07	0.00	128.79
8a	Transfer of solar GFA from SBU T to SBU G	21.49	-21.49		0.00
9	GFA addition eligible as per Regulation	412.54	1811.01	1645.63	3869.18
10	Less: Consumer contribution & grants for 2021-22	20.96	15.81	1054.44	1091.22
10a	Less: PSDF grant received during 2018-19 but not considered in TU 2018-19. (the project achieved COD in 2021-22)		232.78		232.78
11	GFA addition eligible for normative loan as per Regulation	391.58	1562.42	591.19	2545.18
12	Less: Land value addition (excluding the portion under part capitalization)	0.23	4.06	1.98	6.27
13	GFA addition eligible for depreciation	391.35	1558.36	589.21	2538.92

Approval of GFA addition of SBU-G for the year 2021-22

6.6 KSEB Ltd has submitted the project wise analysis of the capital expenditure of SBU-G for the year 2021-22 and the details of the part capitalization of projects for the year 2021-22. GFA worth Rs.16.87 crore represent part capitalization in the year 2021-22, within the meaning of the Tariff Regulations 2018. The details are provided along with the petition.

KSEB Ltd further submitted that, part capitalized assets amounting to Rs.46.54 crore during the previous years are also considered in the GFA addition for the year 2021-22. Further, decommissioning liability amounting to Rs 0.36 crore is also not considered.

6.7 KSEB Ltd has also submitted that, after excluding part capitalized assets during 2021-22 and decommissioning liability from the GFA addition, the asset addition eligible as per Tariff Regulation amounted to Rs.391.05 Crore as detailed in Table below.

Table 6.6
GFA addition for 2021-22 eligible as per Tariff Regulation for SBU G (Rs. Cr)

No.	Particulars	Gross fixed assets for 2021-22 as per Accounts			Part capitalisation during 2021-22	Part capitalized in earlier years but considered in 2021-22			Decommissioning liability	Net addition
		Year beginning	Additions	Year End		2016-17	2017-18	2020-21		
		(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)	(Rs.Cr)
1	Land & land rights	1553.41	8	1561.41	7.77					0.23
2	Hydraulic works	1404.32	187.84	1592.16	1.62					186.22
3	Building & Civil works of Power plant	623	53.98	676.98	1.73	0.03		1.52		53.8
4	Plant & machinery including sub-station	13591.85	95.04	13686.89	5.7	0.01	0.68	44.12		134.15
5	Line, cable network etc	8.64	1.68	10.32				0.06		1.74
6	Vehicles	10.27	5.53	15.8						5.53
7	Furniture & fixtures	6.36	6.8	13.16	0.02	0.03		0.01		6.82
8	Office Equipment	12.51	2.41	14.92	0.03	0.01	0.17	0.01		2.57
9	Decommissioning liability	0.08	0.36	0.44					0.36	0
	Total (1) to (9)	17210.44	361.63	17572.07	16.87	0.08	0.85	45.72	0.36	391.05
	True up claim for 2021-22									
	Enhancement in value due to revaluation	11988.98		11988.98						
	Net of enhancement in value	5221.46	361.63	5583.09						

Provisions in the Regulations regarding addition of assets

6.8 As per the provisions of Tariff Regulation, 2018, 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 22(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 23(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 28, 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 29(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

6.9 The Commission had examined in detail the GFA addition of SBU-G claimed by KSEB Ltd in the truing up petition. The total capital cost of each of the SBUs of KSEB Ltd forms the basis for tariff determination.

In the MYT Order dated 08-07-2019, the Commission provisionally had approved the asset addition of Rs.153.76 crore for the SBU-G of KSEB Ltd for the year 2021-22.

The Commission has also noted the necessary correction proposed regarding the accounting of the capital cost of two solar projects, 3MW plant at Kanjikode and 1 MW plant at Agali, with a total cost of Rs 21.49 crore. In the original proposal, KSEB Ltd had accounted the capital cost of solar installation as part of GFA addition of SBU-T instead of SBU-G. However, KSEB Ltd vide the email dated 15.06.2023 has made necessary corrections and revised the GFA addition of KSEB Ltd for the year 2021-22.

- 6.10 Based on the above, ***the Commission hereby approves the GFA addition of SBU-G of KSEB Ltd for the year 2021-22 as given below.***

Table 6.7
GFA addition approved for SBU-G for the year 2021-22

Sl. No	Particulars	Amount (Rs. Cr)
1	Addition as per Truing up petition	361.63
2	Transfer of Solar GFA from SBU-T to SBU-G	21.49
2	Less: Decommissioning liability	0.36
3	Less: Part capitalization	16.87
4	Add: Part capitalization in 2016-17 but commissioned during 2021-22	0.08
5	Add: Part capitalization in 2017-18 but commissioned during 2021-22	0.85
6	Add: Part capitalization in 2020-21 but commissioned during 2021-22	45.72
7	GFA addition eligible as per Regulation	412.54
8	Less: Consumer contribution & grants	20.96
9	GFA addition eligible for normative loan as per Regulation	391.58
10	Less: Land value addition excluding the portion under part capitalization	0.23
11	GFA addition eligible for depreciation	391.35

Summary of the GFA of SBU-G as on 31.03.2022

- 6.11 As per the Order of the Commission dated 24.06.2022 in petition OP No.23/2022 had approved the GFA of SBU-G as on 31.03.2021 at Rs.5028.07 crore. The GFA addition of SBU-G approved for the year 2021-22 is Rs.412.54 crore. Thus, the closing balance of GFA as on 31.03.2022 is Rs 5440.61 crore. The details are given in the Table below.

Table 6.8
Summary of GFA of SBU-G of KSEB Ltd as on 31.03.2022

Sl No	Particulars	Amount (Rs. Cr)
1	Opening level of GFA approved as on 01.04.2021 (approved vide True up Order for 2020-21 dated 24.06.2022)	5028.07
2	Asset addition approved for 2021-22	412.54
3	Closing balance of GFA as on 31.03.2022	5440.61

Approval of GFA addition of SBU-T for the year 2021-22

- 6.12 KSEB Ltd has also submitted the details of GFA addition eligible as per the Tariff Regulations for Truing Up purposes for the year 2021-22. The details are given below.

Table 6.9
KSEB Ltd claim- GFA addition of SBU-T for the year 2021-22 as per Regulations (Rs. Cr)

No	Assets Group	Gross fixed assets			Adjustments		Add. part capitalized in earlier years but commissioned during '21-22					Addition as per Regulation
		01.04.21	Additions	31.03.22	Part capitalized	DC liability	16-17	17-18	18-19	19-20	20-21	
1	Land & land rights	502.87	3.09	505.96	0.12				0.49	0.00	0.60	4.06
2	Buildings	407.97	28.20	436.17	0.62				0.08	0.00	2.80	30.46
3	Hydraulic Works	11.29	0.13	11.42	0.00					0.00	0.10	0.24
4	Other Civil works	497.89	19.96	517.85	1.70			0.79	0.18	0.18	4.73	24.15
5	Plant & Machinery	2767.30	493.49	3260.79	25.88			0.18	1.85	0.28	49.92	519.84
6	Lines, cable networks etc.	2381.99	1208.53	3590.52	12.06		0.01	0.13	4.77	18.87	24.88	1245.13
7	Vehicle	8.14	3.26	11.40	0.00					0.00	0.00	3.26
8	Furniture and Fixtures	7.65	2.50	10.15	0.00					0.00	0.03	2.53
9	Office Equipment	16.13	2.85	18.98	0.02					0.00	0.00	2.82
10	Decommissioning liability	1.12	0.82	1.94		0.82						0.00
11	Gross Asset (Total (1) to (10))	6602.35	1762.84	8365.19	40.41	0.82	0.01	1.10	7.38	19.33	83.07	1832.49

Analysis and Decision of the Commission regarding the GFA addition of SBU-T

6.13 The Commission has examined the details furnished by KSEB Ltd on asset addition for SBU-T, as per the provisions of the Tariff Regulations, 2018.

6.14 As per the details submitted by KSEB Ltd, the total GFA addition of SBU-T during the year 2021-22 was Rs 1762.84 crore. KSEB Ltd further submitted that, out of it, Rs 40.41 crore represent the part capitalization during the year 2021-22 within the meaning of Tariff Regulation. Further Rs 0.82 crore represent the de-commissioning liability during the year 2021-22. KSEB Ltd has also submitted that, in the Truing Up of accounts of KSEB Ltd for the years 2016-17 to 2020-21, the transmission projects part capitalised in the years 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21, amounts to Rs 0.01 crore in 2016-17, 1.10 crore in 2017-18, Rs 7.38 crore in 2018-19, Rs 19.33 crore in 2019-20 and Rs 83.07 crore in 2020-21 (aggregating to Rs 110.89 crore). KSEB Ltd, in their petition has submitted the project wise details of the part capitalised projects in earlier years and commissioned during the year 2021-22.

6.15 The Commission has also noted that, Rs 15.81 crore was claimed as received towards the consumer contribution and grants at SBU-T in the year 2021-22.

6.16 The details of the GFA addition of SBU-T as per the audited accounts is given below.

Table 6.10
Details of the GFA addition during the year 2021-22 (Rs. Cr)

SI No	Particulars	GFA addition claimed for 2021-22
1	Electrical Transmission systems	417.88
2	Solar power project	21.49
3	Power System Development Fund	642.39
4	Load Despatch & Communication schemes	4.46
5	Expenditure due to Natural calamity	0.27
6	CWIP- general	26.01
7	TRANSGRID 2.00 project	650.33
	Total	1762.83

KSEB Ltd has submitted the circle wise details of the capitalization of the electrical transmission system amounts to Rs 417.88 crore in the year 2021-22.

KSEB Ltd has executed two solar projects, 3 MW capacity at Kanjikode and 1 MW capacity at Agali, through Transmission circle, Palakkad. These projects with total capacity of 4 MW was commissioned during the year 2021-22. KSEB Ltd accounted the capital cost of these projects under SBU-T instead of SBU-G. However, during the deliberations of the Truing up petition, KSEB Ltd vide the e-mail dated 15.06.2023 had proposed to rectify the error in the regulatory accounts by accounting the capital addition of solar projects of Rs 21.49 crore under SBU-G instead of SBU-T. Commission has also noted that, while Truing up the accounts for the year 2018-19, the Commission had not considered the PSDF grants amounting to Rs 232.78 crore because of the non capitalization of the relevant capital projects.

6.17 Based on the above, the GFA addition of SBU-T approved for Truing up of accounts for the year 2021-22 is given below.

Table 6.11
GFA addition approved for the Year 2021-22 of SBU-T

Sl. No	Particulars	As per	KSERC
		Truing up petition (Rs. Cr)	Approval (Rs. Cr)
1	GFA Addition as per Accounts	1762.84	1762.84
2	Less Solar projects executed by Transmission circle Palakkad		21.49
3	Less: Decommissioning liability	0.82	0.82
4	Less: Part capitalization	40.41	40.41
5	Add: Part capitalization in 2016-17 but commissioned during 2021-22	0.01	0.01
6	Add: Part capitalization in 2017-18 but commissioned during 2021-22	1.10	1.10
7	Add: Part capitalization in 2018-19 but commissioned during 2021-22	7.38	7.38
8	Add: Part capitalization in 2019-20 but commissioned during 2021-22	19.33	19.33
9	Add: Part capitalization in 2020-21 but commissioned during 2021-22	83.07	83.07
10	GFA addition eligible as per Regulation	1832.50	1811.01
11	Less: Consumer contribution & grants		
	(a) As per accounts	15.81	15.81
	(b) PSDF grants received during 2018-19 but not considered in TU 2018-19		232.78
12	GFA addition eligible for normative loan as per Regulation	1816.69	1562.42
13	Less: Land value addition (excluding the portion under part capitalization)	4.06	4.06
14	GFA addition eligible for depreciation	1812.63	1558.36

6.18 As above the asset addition of SBU-T approved for the year 2021-22 is Rs.1811.01 crore. After deducting the grants and contribution, the net asset addition for SBU-T eligible for claiming normative loan in the year 2021-22 is Rs.1562.42 crore. After deducting the land value amounts to Rs.4.06 crore, the GFA addition eligible for depreciation is Rs 1558.36 crore.

Summary of the GFA of SBU-T as on 31.03.2022

6.19 As per the Order of the Commission dated 24.06.2022 in petition OP No. 23/2022, the GFA of SBU-T as on 31.03.2021 is Rs.6335.02 crore. The GFA addition of SBU-T approved for the year 2021-22 is Rs.1811.01 crore. Thus, the closing balance of GFA of SBU-T as on 31.03.2022 is Rs.8146.03 crore. The details are given in the Table below.

Table 6.12
Summary of GFA of SBU-T of KSEB Ltd as on 31.03.2022

SI No	Particulars	Amount (Rs. Cr)
1	Opening level of GFA approved as on 01.04.2021 (approved vide True up Order for 2020-21 dated 24.06.2022)	6335.02
2	Asset addition approved for 2021-22	1811.01
3	Closing balance of GFA as on 31.03.2022	8146.03

As above, the Commission hereby approve the GFA of SBU-T as on 31.03.2022 at Rs 8146.03 crore for regulatory purposes.

Approval of GFA addition of SBU-D for the year 2021-22

6.20 The scheme wise details of the GFA addition of SBU-D for the year 2021-22 is given below.

Table 6.13
KSEB Petition- Scheme wise capital expenditure and GFA addition under SBU D for 2021-22 (Rs. Cr)

Project	Description	Opening CWIP	Cost incurred	Capitalized	Closing CWIP
14.05	Deen Dayal Upadhyay Gram Jyothi Yojana (DDU GJY)	1.92	8.41	8.08	2.24
14.1	E mobility Promotion Fund FAMEIndia Scheme Phase II		0.80	0.58	0.22
14.13	Integrated Power Development Scheme (IPDS)	21.42	68.50	87.05	2.87
14.47	Saubhagya Scheme		2.25	2.25	-
14.5	Rural Electrification Scheme	0.04	0.69	0.71	0.02
14.51	Distribution Line Extension	2.86	172.01	174.22	0.64
14.52	Distribution Service Connection	3.16	176.08	176.62	2.62
14.53	Distribution System Improvement	16.14	864.52	868.44	12.22
14.54	Electrification of Harijan Colonies	-	0.08	0.08	-
14.55	Electrification of Tribal Colonies	-	0.13	0.13	-
14.57	Punja Package	-	0.01	0.01	-
14.58	System Improvement in other areas	-	6.00	5.99	0.01
14.59	Distbn. Capacitor Installation Scheme	2.11	1.91	0.09	3.93
14.6	Street Lights	0.34	26.68	26.56	0.46
14.61	Expenditure due to Natural Calamity	0.08	3.47	3.48	0.07
14.62	RGVY-Village electrification Infrastructure	-	0.13	0.13	-
14.63	RGVY-For effecting BPL Service Connection	-	0.01	0.01	-
14.67	Part B Projects of R-APDRP	13.68	19.23	19.74	13.17
14.82	R- APDRP Scheme	257.94	14.90	70.18	202.66
14.9	CWIP – General	423.23	264.81	202.17	485.87
14.91	Innovation fund	-	0.70	0.68	0.02
14.99	Projects not Identified	1.06	-		1.06
	SUB TOTAL ©	744.00	1631.28	1647.20	728.08

Analysis and Decision regarding the GFA addition of SBU-D

6.21 The Commission has examined the details furnished by KSEB Ltd on asset addition for SBU-D, as per the provisions of the Tariff Regulations, 2018. The Commission has examined the details furnished by KSEB Ltd on asset addition for SBU-D. As per the details furnished by KSEB Ltd, GFA addition for SBU-D as per accounts is Rs 1647.20 crore. After removing the decommissioning liability of Rs 1.57 crore, the GFA addition of SBU-D as per Tariff Regulations is Rs 1645.63 crore.

Further, as per the details submitted, KSEB Ltd has received the grants and contributions amounting to Rs 1054.40 crore. ***This amount is to be deducted for arriving at the net asset addition during the year.***

6.22 Accordingly, the breakup details of the GFA addition of SBU-D approved for the year 2021-22 is given below.

Table 6.14
GFA addition approved for the Year 2021-22 of SBU-D

Sl.No	Particulars	Amount (Rs.Cr)
1	Addition as per Accounts	1647.20
2	Less: Decommissioning liability	1.57
3	GFA addition	1645.63
4	Consumer contribution and grants	1054.40
5	Net Asset addition (for Normative loan)	591.23
6	Less: Land value addition excluding the portion under part capitalization	1.98
7	GFA addition eligible for depreciation as per petition	589.25

6.23 ***As above the asset addition approved for the year 2021-22 for SBU-D is Rs.1645.63 crore. After deducting the grants and contribution amounting to Rs.1054.40 crore, the net asset addition for SBU-D eligible for claiming normative loan for 2021-22 is Rs.591.23 crore. After deducting the land value amounting to Rs 1.98 crore, the GFA addition eligible for depreciation for the year 2021- 22 is Rs.589.25 crore.***

Summary of the GFA of SBU-D as on 31.03.2022

6.24 The Commission vide the Order dated 24.06.2022 in petition OP No. 23/2022 in the matter of Truing Up of accounts for the year 2020-21, had approved the GFA of SBU-D as on 31.03.2021 is Rs 12876.06 crore. The GFA addition approved as per Regulation for the year 2021-22 as per Table 6.14 above is Rs 1645.63 crore. Thus, the closing balance of GFA of SBU-D as on 31.03.2022 is Rs 14521.69 crore. The details are given in the Table below.

Table 6.15
Summary of GFA of SBU-D as on 31.03.2022

Sl No	Particulars	Amount (Rs. Cr)
1	Opening level of GFA approved as on 01.04.2021	12876.06
2	Asset addition approved for 2021-22	1645.63
3	Closing balance of GFA as on 31.03.2022	14521.69

Depreciation

- 6.25 KSEB Ltd submitted that, the depreciation is claimed on normative basis, strictly as per the provisions of the Tariff Regulations, 2018. However, the actual depreciation as per accounts has been worked out in line with IND AS. The claw back depreciation was determined and credited to other Income of Annual accounts.
- 6.26 KSEB Ltd further submitted that, as per the provisions of the Tariff Regulations 2018, allowable depreciation for the year 2021-22 as per the Truing-up petition is worked out in the following lines:
- (i) GFA (net of consumer contribution grants and subsidy) as on 01.04.2017 determined by the Commission vide Order dated 25.06.2021 in petition OA No. 09/2020 in the matter of Truing up of accounts of the year 2017- 18 is taken as the base for determining depreciation. The opening GFA of SBU-G as on 31.03.2018 was Rs 4729.74 crore.
 - (ii) Rate of depreciation as specified by the Hon'ble Commission in the MYT Order dated 08.07.2019 has been adopted for working out depreciation. Paragraph 3.65 of the Order is extracted below for ready reference.

“Based on the mix of assets, for the first 12 years the average rate of depreciation will be 5.14%. Since the weighted average life of the assets is 31 years, the balance 27% of the value of assets (90%-63%) is to be depreciated in balance 19 years (31-12 years) of the useful life. Hence the average rate of depreciation for assets more than 12 years old will be 27%/19 ie., 1.4% per year on a straight-line basis.
 - (iii) Function wise capital contribution and grants till 31.03.2021 has been reduced from GFA value so that depreciation is claimed only on eligible GFA as per Regulations.
 - (iv) Based on the above, KSEB Ltd has claimed the depreciation for the year 2021-22 as follows;

Table 6.16
Normative Depreciation for 2021-22 (Rs Cr)

	Particulars	SBU-G	SBU-T	SBU-D	KSEB Ltd
1	Opening GFA as on 1-4-2017 (As per TU Order 2017-18 (OA 9/2020 Dt 25.06.2021))	4658.32	4628.56	7530.5	16817.38
2	Total asset addition approved for 2017-18	71.42	388.82	699.45	1159.69
3	GFA addition approved for 2018-19	103.86	347.17	1202.5	1653.53
5	Asset addition approved for 2019-20	116.27	384.17	1642.19	2142.63
6	Asset addition approved for 2020-21	78.2	586.3	1801.42	2465.92
7	Approved GFA as on 31.03.2021 (1 to 6)	5028.07	6335.02	12876.06	24239.15
8	Assets >12 years old (GFA as on 1-4-2009)	3132.03	3029.04	3088.04	9249.11
9	Fully depreciated Assets (assets up to 1-4-1991)	269.87	101.87	333.43	705.17
10	Assets having life 12-30 yrs (8-9)	2862.16	2927.17	2754.61	8543.94
11	Value of land on above (10*2.80%)	94.39	171.72	6.98	273.09
12	Grants and contributions (from 01.04.1991 to 31.03.2009)			2395.72	2395.72
13	Assets having life 12-30 yrs eligible for depreciation (9-10-11)	2767.77	2755.45	351.91	5875.13
14	Depreciation for Assets 12-30 years (@1.42%) (12*1.42%)	39.3	39.13	5.00	83.43
15	Assets < 12 years old (1-4-2009 to 31-3-2021) (7-8)	1896.04	3305.98	9788.02	14990.04
16	Value of land (from 01.04.2009 to 31.03.2021)	182.02	331.15	13.45	526.62

17	Grants and contributions (1-4-2009 to 31-3-2021)	90.75	719.96	5244.62	6055.34
18	GFA < 12 years old eligible for depreciation as on 01.04.2021 (15-16-17)	1623.27	2254.87	4529.95	8408.08
19	Asset addition for 2021-22 as per this submission	369.86	1812.62	589.21	2,771.68
20	Closing balance of Assets <12 years Old (1-4-2009 to 31-3-2022) (18+19)	1993.12	4067.49	5119.15	11179.77
21	Average Value of Assets <12 Years old (18+20)/2	1808.19	3161.18	4824.55	9793.93
22	Depreciation for assets <12 years (@5.14%) (21*5.14%)	92.94	162.48	247.98	503.41
23	Total Depreciation for assets for 2021-22 (14+22)	132.24	201.61	252.98	586.83

Comments of the stakeholders

6.27 HT&EHT Association requested before the Commission to allow depreciation strictly as per the provision of the Regulations.

Provisions in the Regulations

6.28 Regulations 27 of the Tariff Regulations, 2018 provides the depreciation for the purposes of Tariff determination. The relevant Regulations is extracted below.

“27. Depreciation. – (1) The value base for the purpose of depreciation shall be the original capital cost of the asset as approved by the Commission:

Provided that no depreciation shall be allowed on increase in the value of assets on account of revaluation of assets,

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

(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 may be required 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 as approved by the Commission excluding cost of assets created out of contributions and grants and depreciation shall be a maximum of ninety per cent of such approved capital cost of the asset.

(3) In the case of existing assets, the balance depreciable value as on the First day of April, 2018, shall be worked out by deducting the cumulative depreciation approved by the Commission upto the Thirty First day of March, 2018, from the gross depreciable value of the assets.

(4) Depreciation shall be chargeable from the first financial year of commercial operation: Provided that in the case of commercial operation of the asset for part of the financial year, depreciation shall be charged on pro-rata basis:

Provided further that depreciation shall be re-calculated for assets capitalised during the financial year at the time of truing up, based on documentary evidence for capitalisation of assets submitted by the applicant, subject to the prudence check of the Commission, in such a way that the depreciation is calculated proportionately from the date of capitalisation.

(5) In case a single tariff needs to be determined for all the units of the generating station, the depreciation shall be computed from the effective date of commercial operation of each of the unit taking into consideration the depreciation of individual generating units thereof.”

Analysis and Decision of the Commission

- 6.29 The Commission has examined in detail the depreciation claimed by KSEB Ltd in their Truing up petition for the year 2021-22. The Commission has been approving the depreciation on normative basis strictly as per the provisions of the Tariff Regulations 2018. The Commission has been following the consistent stand that, the assets created out of consumer contribution and grants shall not qualify for depreciation.
- 6.30 The Tariff Regulation 2018 provides the methodology and rates for determining the depreciation for Tariff determination.
- 6.31 As per the provisions of the Tariff Regulations, 2018, land is a non-depreciable asset. Based on the past practice and to ensure consistency in accounting policy, wherever the value of land is not clearly identifiable, it is taken as 2.80% of the total GFA of KSEB Ltd. The Commission, duly considering the mix of various assets of KSEB Ltd with different useful life, the average rate of depreciation of assets having life less than 12 year is arrived @5.14% and the average depreciation rate of assets having life more than 12 years and upto 30 years is taken as 1.42%. All assets aged more than 30 years old is taken as fully depreciated assets and no further depreciation is provided.
- 6.32 Based on the above, and adopting the same methodology as for the year 2020-21 for approving depreciation, the depreciation of SBU-G, SBU-T and SBU-D of KSEB Ltd for the year 2021-22 is arrived at as below.

Depreciation of SBU-G for the year 2021-22.

- 6.33 The details of the depreciation of SBU-G approved for the year 2021-22 is given below.

Table 6.17
Depreciation approved for SBU-G for the year 2021-22 (Rs. Cr)

	Particulars	SBU-G
1	GFA as on 31.03.2021	5028.07
2	Assets >12 years old (GFA as on 1-4-2008)	3132.03
3	Fully depreciated Assets (assets up to 1-4-1990)	269.87
4=(2)-(3)	Depreciable assets having life 12-30 yrs	2862.16
5=(4*2.80%)	Value of land	94.39
6	Grants and contributions (upto 1-4-2008)	
7=(4-5-6)	Assets having life 12-30 yrs eligible for depreciation	2767.77
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	39.30
9=(7-8)	Assets < 12 years old (1-4-2009 to 31-3-2021)	1896.04
10	Value of land	182.02
11	Grants and contributions (1-4-2009 to 31-3-2021)	90.75
12=(9-10-11)	Opening balance of Assets < 12 years old	1623.27
13	Asset addition for 2021-22 (net after consumer contribution)	391.35
14=(12+13)	Closing balance of Assets <12 years Old (1-4-2007 to 31-3-2021)	2014.62
15=(12+14)/2	Average Value of Assets <12 Years old	1818.95
16=(15*5.14%)	Depreciation for assets <12 years (@5.14%)	93.49
17=(8+16)	Total Depreciation for assets for 2021-22	132.80

Based on the above, the Commission hereby approves the depreciation at Rs.132.80 crore for the SBU-G for the purpose of truing up for the year 2021-22 as against Rs.196.06 crore approved in the MYT Order dated 08.07.2019.

Depreciation of SBU-T for the year 2021-22.

6.34 The details of the depreciation of SBU-T approved for the year 2021-22 is given below.

Table 6.18
Depreciation approved for SBU-T for the year 2021-22 (Rs. Cr)

	Particulars	SBU-T
1	GFA as on 31.03.2021	6335.02
2	Assets >12 years old (GFA as on 1-4-2008)	3029.03
3	Fully depreciated Assets (assets up to 1-4-1990)	101.86
4=(2)-(3)	Depreciable assets having life 12-30 yrs	2927.17
5=(4*2.80%)	Value of land	171.72
6	Grants and contributions (upto 1-4-2008)	0.00
7=(4-5-6)	Assets having life 12-30 yrs eligible for depreciation	2755.45
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	39.13
9=(7-8)	Assets < 12 years old (1-4-2009 to 31-3-2021)	3305.99
10	Value of land	331.15
11	Grants and contributions (1-4-2009 to 31-3-2021)	719.96
12=(9-10-11)	Opening balance of Assets < 12 years old	2254.88
13	Asset addition for 2021-22 (net after consumer contribution)	1558.36
14=(12+13)	Closing balance of Assets <12 years Old (1-4-2007 to 31-3-	3813.24
15=(12+14)/2	Average Value of Assets <12 Years old	3034.06
16=(15*5.14%)	Depreciation for assets <12 years (@5.14%)	155.95
17=(8+16)	Total Depreciation for assets for 2021-22	195.08

Based on the above, the Commission hereby approves the depreciation of Rs.195.08 crore for the SBU-T for the purpose of truing up for the year 2021-22 as against Rs 276.66 crore approved in the MYT Order dated 08.07.2019.

Depreciation of SBU-D for the year 2021-22

6.35 The details of the depreciation of SBU-D approved for the year 2021-22 is given below.

Table 6.19
Depreciation approved for SBU-D for the year 2021-22 (Rs. Cr)

	Particulars	SBU-D
1	GFA as on 31.03.2021	12876.06
2	Assets >12 years old (GFA as on 1-4-2008)	3088.04
3	Fully depreciated Assets (assets up to 1-4-1990)	333.44
4=(2)-(3)	Depreciable assets having life 12-30 yrs	2754.60
5=(4*2.80%)	Value of land (2.8% of the GFA)	77.13
6	Grants and contributions (upto 1-4-2008)	2504.14
7=(4-5-6)	Assets having life 12-30 yrs eligible for depreciation	173.33
8=(7*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	2.46
9=(7-8)	Assets < 12 years old (1-4-2009 to 31-3-2021)	9788.02
10	Value of land (2.8% of the GFA)	274.06
11	Grants and contributions (1-4-2009 to 31-3-2021)	5244.62
12=(9-10-11)	Opening balance of Assets < 12 years old	4269.34
13	Asset addition for 2021-22 (net after consumer contribution)	589.21
14=(12+13)	Closing balance of Assets <12 years Old (1-4-2009 to 31-3-2021)	4858.55
15=(12+14)/2	Average Value of Assets <12 Years old	4563.94
16=(15*5.14%)	Depreciation for assets <12 years (@5.14%)	234.59
17=(8+16)	Total Depreciation for assets for 2021-22	237.05

Based on the above, Commission approves the depreciation of Rs 237.05 crore for the SBU-D for the purpose of truing up for the year 2021-22 as against Rs 252.98 crore claimed by KSEB Ltd.

Interest on Long-term loans on Normative basis

6.36 KSEB Ltd vide the Truing up petition had submitted the details of the loans availed for the year 2021-22 for all the SBUs of KSEB Ltd. Its summary as per the petition is given below.

Table 6.20
Summary of loans, interest and average rate of interest for 2021-22 (Rs. Cr)

SBU	Opening (01/04/'21)	Add: additions during the Year	Less: Repayments during the year	Closing (31/03/' 22)	Average loan	Interest on loan	Average interest rate (%)
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	
SBU G	1352.87	315.7	268.65	1399.91	1376.39	128.22	9.32
SBU T	1859.74	443.12	384.13	1918.72	1889.23	179.77	9.52
SBU D	4571.87	719.18	777.13	4513.92	4542.9	439.53	9.68
Total	7784.48	1477.99	1429.92	7832.55	7808.51	747.52	9.57

KSEB Ltd further submitted that, Regulation 26 of the Tariff Regulations specifies the approval of the loan interest on normative basis.

6.37 Based on the provisions of the Tariff Regulations, 2018, and also as per the methodology followed by KSEB Ltd in the MYT Order dated 08.07.2019, the normative interest on loan till 31.03.2022 arrived by KSEB Ltd is given below.

Table 6.21
Computation of Normative loan as on 01.04.2022

Sl. No	Description	SBU G	SBU T	SBU D	Total
1	Closing balance of Normative loan as per True up order for 2020-21 (OA 23/2022 dated 24.06.2022)	531.97	1452.68	4001.02	5985.67
2	Add: Disputed claim pending before APTEL	135.23	131.21	201.16	467.60
3	Opening normative loan for 2021-22	667.20	1583.89	4202.18	6453.27
3	Additional normative loan for 2021-22	370.09	1816.68	591.19	2777.96
4	Normative repayment 2021-22	132.24	201.61	252.98	586.83
5= (1+2+3)-4	Closing normative loan 31.03.2022	905.04	3198.96	4540.39	8644.39
6= (1+5)/2	Average Normative loan for the year 2021-22	786.12	2391.42	4371.29	7548.83
7	Weighted average interest rate for 2020-21 (%)	9.32	9.52	9.68	9.57
8	Normative interest for 2021-22	73.27	227.66	423.14	724.07

Comments of stakeholders

6.38 HT&EHT Association in their counter submitted that, interest on loan on the claims disputed before the Hon'ble APTEL shall not be allowed.

Provisions in the Regulation

6.39 Regulation 29 of the Tariff Regulation 2018, specifies the procedures for the approval of the interest and finance charges. The relevant Regulation is extracted below.

"29. Interest and finance charges. – (1) (a) The loans arrived at in the manner indicated in Regulation 26 shall be considered as gross normative loan for calculation of interest on the loans.

(b) The interest and finance charges on capital works in progress shall be excluded from such consideration and not be considered in the ARR and truing up processes.

(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, 2018, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission up to

the Thirty First day of March, 2018, 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 allowed 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 of the control period 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, but normative loan is outstanding, then interest shall be allowed at the base rate.

(5) The interest on loan shall be calculated average loan as per the norms approved by the Commission 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 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 respect of in which the petition 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 only be considered at the time of truing up for the financial year.”

Analysis and Decision of the Commission

- 6.40 The Commission has examined in detail the interest on loans on normative basis as per the provisions of the Tariff Regulations, 2018, the objections raised by the HT & EHT Association and other stake holders. The decision of the Commission is detailed in the subsequent paragraphs.
- 6.41 The Commission has been approving the interest on loan to the licensee on normative basis, strictly as per the provisions of the Tariff Regulations, 2018, duly considering the equity, assets created out of consumer contribution and other relevant factors, and its details are given below.
- 6.42 The Commission vide Order dated 24.06.2022 in Petition OP No.23/2022 had issued orders on Truing up of accounts of KSEB Ltd for the year 2020-21. The normative loan approved as on 31.03.2021 as per the Orders on Truing Up for the year 2021-22 is taken as the base for arriving the interest on normative loan for the year 2021-22.
- 6.43 Based on the above, the interest charges on normative loan approved for the SBU-G, SBU-T and SBU-D for the year 2021-22 is given in the Tables below.

SBU-G.

- 6.44 The normative loan as on 31.03.2022 and the interest on normative loan of SBU-G for the year 2021-22 is given in the Table below.

Table 6.22
Interest charges approved for the year 2021-22

Sl. No	Description	Amount (Rs.Cr)
1	Opening normative loan as on 01.04.2021	531.97
2	Normative GFA addition qualifying for loan in the year	391.58
3	Less Depreciation for the year 2021-22	132.24
4=(1+2-3)	Closing normative loan as on 01.04.2022	791.31
5=(1+3)/2	Average Normative loan for the year 2021-22	661.64
6	Weighted average interest rate for 2021-22 (%)	9.32%
7=6*5	Normative interest for 2021-22	61.66

As above, the Commission approves the interest on normative loan for the year 2021-22 of SBU-G of KSEB Ltd at Rs.61.66 crore.

SBU-T.

- 6.45 The normative loan as on 31.03.2022 and the interest on normative loan of SBU-T for the year 2021-22 is given in the Table below.

Table 6.23
SBU-T Interest charges approved for the year 2021-22

Sl. No	Description	Amount (Rs.Cr)
1	Opening normative loan as on 01.04.2021	1452.68
2	Normative GFA addition qualifying for loan in the year 2021-22	1562.42
3	Less Depreciation for the year 2021-22	195.08
4= (1+2-3)	Closing normative loan as on 01.04.2022	2820.02
5= (1+3)/2	Average Normative loan for the year 2021-22	2136.35
6	Weighted average interest rate for 2021-22 (%)	9.52%
7=6*5	Normative interest for 2021-22	203.38

As above, the interest charge approved for SBU-T of KSEB Ltd is Rs.203.38 crore as against Rs.227.66 crore claimed by KSEB Ltd for the year 2021-22.

SBU-D.

- 6.46 The normative loan as on 31.03.2022 and the interest on normative loan of SBU-D for the year 2021-22 is given in the Table below.

Table 6.24
SBU-D Interest charges approved for the year 2021-22

Sl. No	Description	Amount (Rs.Cr)
1	Opening normative loan as on 01.04.2021	4001.02
2	Normative GFA addition qualifying for loan in the year 2021-22	591.19
3	Less Depreciation for the year 2021-22	237.05
4= (1+2-3)	Closing normative loan as on 01.04.2022	4355.16
5= (1+3)/2	Average Normative loan for the year 2021-22	4178.09
6	Weighted average interest rate for 2021-22 (%)	9.68%
7=6*5	Normative interest for 2021-22	404.44

As above, the interest charge approved for SBU-D of KSEB Ltd for 2021-22 is Rs 404.44 crore as against Rs 423.14 crore claimed by KSEB Ltd

Pay revision and related expenses

6.47 KSEB Ltd submitted that the Commission while approving the orders on truing up for the years 2018-19, 2019-20 and 2020-21 had not approved the provisions created for pay revision in the respective years. The Commission clarified that the expense towards pay revision can be approved only on a cash basis after incurring such expenses. The commission directed KSEB Ltd to claim such expenses at the time of truing up of the relevant years in which such expenses incurred with all supporting documents.

KSEB Ltd further submitted that, as per the Regulation 14(3) of the Tariff Regulations 2018, permits KSEB Ltd to claim the pay revision expenses over and above the normative operation and maintenance expenses.

KSEB Ltd had also submitted that its Director Board vide the BO dated 15.02.2021 approved long-term settlement (LTS) with the recognised trade unions. Subsequently, all the relevant documents forwarded to the State Government for formal approval on 20.02.2021 and 02.03.2021 KSEB Ltd has implemented the LTS 2021 from the date of signing of the agreement in anticipation of approval of the State Government, however the same is yet to be obtained.

KSEB Ltd further submitted that the arrears of pay revision of its workmen category from 01.08.2018 to 31.12.2020 and its officers from 01.07.2018 to 31.12.2020 where ordered to be credited GPF in four instalments on 01.06.2021, 01.01.2022, 01.06.2022 and 01.01.2023. Further, the arrears for the months of January 2021 and February 2021 amounts to total Rs 85.10 crore were disbursed in cash. The total arrears paid and credited to GPF is detailed below.

Table 6.25
Details of pay revision arrears credited to GPF in the year 2021-22

No	Particulars	Paid in cash	GPF I Instalment	GPF II Instalment	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Workmen	59.98	159.99	156.59	376.57
2	Officers	24.91	76.73	75.33	176.98
3	PTC	0.20	0.58	0.55	1.34
4	Total	85.10	237.30	232.48	554.88

6.48 KSEB Ltd further submitted that the Commission vide the Order dated 14.07.2022 (OP No.63/2021) has pleased to approve the employee strength of KSEB Ltd at 30321 numbers, as against 27175 number of employees as on 31.03.2009.

KSEB Ltd also claimed that, the number of serving employees for whom pay revision effected is 32359 numbers. i.e, the arrears of pay revision upto February 2021 includes the arrears of pay revision of 2038 number of employees in excess of the 30321 number of staff strength approved by the Commission vide the Order dated 14.07.2022. The details submitted by KSEB Ltd is given below.

Table 6.26
Pay revision arrears disbursed during 2021-22

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Pay revision expenses	34.99	65.67	454.22	554.88
Cost for the increased staff strength	1.30	2.44	16.86	20.60
Allowable expenses	33.69	63.24	437.36	534.28

Provisions in the Regulations

6.49 The Regulation 14(3) of the Tariff Regulations, 2018 deals with the 'pay revision and related issues' which is extracted below.

“(3) Expenses relating to pay revision, if any, during the control period for the same level of employees as admitted in the truing up of accounts for the year 2016-17 of the Generation business/company or Transmission business/licensee or distribution business/licensee may be considered for pass through after due prudence check.”

Analysis and Decision of the Commission

6.50 The Commission has examined the details of the pay revision arrears disbursed during the year 2021-22 by KSEB Ltd.

6.51 The Commission noted that, the Regulation, 14(3) of the Tariff Regulations 2018 provides that, the Commission may allow the expenses related to pay revision during the control period from 2018-19 to 2021-22, for the same level of employees as admitted in the truing up of accounts for the year 2016-17 of the SBU-G, SBU-T and SBU-D of KSEB Ltd.

6.52 The Commission also noted that, Hon'ble APTEL vide the judgment dated 10.11.2014, in Appeal Petition No. 01 of 2013 and 19 of 2013, had issued the following observations and directions regarding the pay revision and related matters of the employees of KSEB Ltd.

“Paragraphs 8.4 to 8.5 of the Judgement of the Hon'ble APTEL dated 10.11.2014 in Appeal Petition No.01 of 2013 and 19 of 2013.

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.”*

6.53 KSEB Ltd submitted before the Hon. High Court in its petition WP(C) 465/2015 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”.

6.54 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 No WP(C) 465/2015, without going into the broad contentions raised in the writ petition as the Regulation under challenge 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.”

As discussed in the preceding paragraphs, and also as per the Tariff Regulations, 2018, the pay revision expenses ***as per the agreements reached between the management and the unions has to be allowed after prudence check for the same level of employees as admitted in the MYT Order dated 08.07.2019.***

6.55 The Director Board of KSEB Ltd vide its Order dated 15.02.2021 had approved the Long Term Settlement with the recognised Trade Unions for revising the pay and allowances of the workmen with effect from 01.08.2018 onwards. Similarly, the revision of the pay and allowances of the officers were implemented from 01.07.2018 onwards. The pay revision arrears of workmen category from 01.08.2018 to 31.12.2020 and officers from 01.07.2018 to 31.12.2020 were credited to the GPF. The arrears for the months of January and February 2021 were paid in cash. As detailed in the paragraph 6.47 above, total arrears paid during the period is Rs 554.88 crore.

6.56 The arrears of pay revision amounts to Rs.554.88 crore, is the amount of arrears pertains to the financial years 2018-19, 2019-20 and 2020-21. The details are given below.

Table 6.27
Year wise details of the arrears of pay revision disbursed during the year 2021-22

Category	Paid in cash	GPF I Instalment	GPF II Instalment	TOTAL
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Workmen	59.98	159.99	156.59	376.57
Officers	24.91	76.73	75.33	176.98
PTC	0.20	0.58	0.55	1.34
TOTAL	85.10	237.30	232.48	554.88

6.57 The working strength of employees in the rolls of KSEB Ltd during the period of pay revision from 2018-19 to 2020-21 is given below.

Table 6.28
Year wise details of the number of employees in the roll of KSEB Ltd

Year	Employee strength in the roll of KSEB Ltd
	(Nos)
2018-19	33145
2019-20	33581
2020-21	32420

6.58 However, as per the Regulation 14(3) of the Tariff Regulations, 2018, the revision of pay and allowances can be allowed only for 27175 number of employees, as against the total number of employees as detailed in the Table above.

6.59 But KSEB Ltd has not submitted the details of the arrears of pay revision pertaining to the 27175 number of employees, i.e, the number of employees to whom the pay revision arrears can be allowed as per the Regulation 14(3) of the Tariff Regulations, 2018. Hence, based on the available information, the Commission has estimated the arrears of pay revision that can be allowed in the process of Truing Up for the year 2021-22. The details are given below.

Table 6.29
Arrears of pay revision allowable in the process of Truing up 2021-22

Year	Arrears of pay revision disbursed	Number of employees in the roll of KSEB Ltd	Arrears allowable for 27175 number of employees as per Reg 14(3) of Tariff Regulations, 2018
	(Rs. Cr)	(Nos)	(Rs. Cr)
2018-19	220.93	33145	181.18
2019-20	248.73	33581	201.33
2020-21	85.21	32420	71.44
Total	554.88		453.96

6.60 The SBU wise details of the arrears of pay revision on the basis of the gross employee cost ratio is given below.

Table 6.30
Function wise details of the arrears of pay revision allowed for the year 2021-22

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Arrears of pay revision	28.63	53.73	371.60	453.96

Interest on Master Trust Bonds

- 6.61 KSEB Ltd submitted 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 series of Bonds.
- 6.62 The Commission has recognized the unfunded pension liabilities as above and approved recovery of interest on KSEB Ltd share of bonds as per Tariff Regulations 2018. The Commission vide the MYT Order dated 08.07.2019, had approved Rs.651.52 crore towards interest on bonds issued to the Master trust.
- 6.63 KSEB Ltd further submitted that, the Actuarial liability as on 31.03.2022 towards the unfunded pension liability, gratuity liability and leave surrender liability stood at Rs.35804.61 Cr i.e., Rs.23385.90 Cr increase in liability for the period from 01.11.2013 to 31.03.2022. KSEB Ltd further submitted that, the increase for the year 2021-22 has been Rs 2003.34 crore and the same was captured in the audited accounts for 2021-22 as follows.
- (i) Liability pertaining to 2021-22 amounting to Rs.1036.68 Cr has been booked under employee cost for the year and
 - (ii) Remaining portion, pertaining to earlier years Rs.966.66 Cr under other comprehensive income in P&L account.
- 6.64 KSEB Ltd further submitted that, Kerala Service Rules as applicable in the Government are applicable to employees of KSEB Ltd. During the year 2021-22, KSEB Ltd had disbursed Rs. 2376.69 crore of terminal benefits to the retired employees. The details are given below.

Table 6.31
Amount paid to pensioners by the trust

Month	Amount
	Rs. Cr
Apr-21	155.59
May-21	138.08
Jun-21	137.93
Jul-21	166.39
Aug-21	225.42
Sep-21	350.11
Oct-21	308.30
Nov-21	168.17
Dec-21	181.41
Jan-22	233.21
Feb-22	150.79
Mar-22	161.30
Total	2376.69

- 6.65 KSEB Ltd further submitted that, the pension and terminal liabilities are not claimed as part of the employee expenses in the audited accounts. As per KSEB Ltd, bond

of Rs.8144.00 crore issued to the Master trust and the total interest liabilities for the year 2021-22 is Rs. 651.52 crore. The total interest liabilities of the bond to the trust is apportioned on the basis of the employee ratio among the SBUs, and its contribution by each SBU is detailed below.

Table 6.32
Interest on Master Trust Bonds (Rs Cr)

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Interest on Bonds	32.84	59.35	559.33	651.52

6.66 KSEB Ltd further submitted that, there is no deviation between interest approved for the year as per the MYT Order dated 08.07.2019 and the actual interest as per audited accounts. However, there has been minor difference between approval and actual under SBU wise segregation of total interest. In the MYT Order, the Commission adopted employee expenses ratio for 2017- 18 as the basis for SBU wise segregation of allowable interest whereas the ratio of working employee strength in SBUs was considered for the purpose in the audited accounts.

Comments of the stakeholders

6.67 The HT-EHT Association submitted that the Commission may approve the interest as per audited annual accounts of FY 2021-22.

Provisions in the Regulation

6.68 Regulation 30 of the Tariff Regulations 2018, provide as follows.

“30. Interest on bonds issued by KSEB Limited to service the terminal liabilities of its employees. – (1) The interest on the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall be allowed for recovery through tariffs, at the rates stipulated in the relevant orders issued by the Government of Kerala.

(2) The bonds shall be amortised at the same rate as prescribed in the Transfer Scheme notified by the Government of Kerala.

(3) The funds required for repayment of the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall not be allowed for recovery through tariffs.”

6.69 Regulation 34 of the Tariff Regulations, 2018 provide as follows.

“34. 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 for return on net fixed assets;

(b) The equity of the Government of Kerala as per the above 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 considered while computing the depreciation or return on net fixed assets;

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

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

Analysis and decision of the Commission

6.70 The Commission has examined the submissions of KSEB Ltd regarding interest on bonds issued to Master Trust. As per the details submitted by KSEB Ltd, the Master Trust is operational only from 2017-18.

6.71 The Commission also noted that as per the Kerala Electricity Second Transfer (Amendment) Scheme (Re-vesting) 2015 dated 28.01.2015, the actuarial liability as on 31-10-2013 was assessed at Rs.12418.72 crore. The paragraphs 6(8) and 6(9) of the Kerala Electricity Second Transfer (Amendment) Scheme (Re-vesting) 2015, provides the following regarding the funding of pension and terminal liabilities of personnel transferred as follows.

(1) Paragraphs 6(8) and 6(9) of the Amendment Notification 2015 is extracted below.

*“6(8) The State Government shall make appropriate arrangements in respect of funding of the terminal liabilities to the extent they are unfunded on the date of transfer of the personnel from the erstwhile Board or KSEB, as mentioned in subclause (9) of clause 6 of this Scheme. **As per the actuarial valuation carried out by the registered valuer, the net present value of unfunded liability is approximately 12419.00 crore as on the date of re-vesting i.e. 31st October 2013.** Till such time arrangements are made, the transferee and State Government shall be jointly and severally responsible to duly make such arrangements to the existing pensioners as well as the personnel who retire after the date of transfer but before the arrangement are put in place. The State Government, Kerala State Electricity Board Limited, and Employee Unions have entered into a tripartite agreement on 1st August 2014, in consideration of the promises and mutual conditions set forth therein. The Tripartite Agreement which forms part of this Scheme is appended as Schedule C.”*

“ 6(9) The State Government will fund Rs 5861 crore (Rupees Five thousand eight hundred and sixty one crores) over a period of next 10 years from the date of transfer to the KSEB Ltd on annual basis for meeting the unfunded liabilities by way of retention of electricity duty.

(a) Kerala State Electricity Board Ltd will issue two series of bonds to a Master Trust:

- 20 year bond with a coupon rate of 10% p.a. for Rs.8144 Cr (Rupees eight thousand one hundred and forty four crores)
- 10 year bond with a coupon rate of 9% p.a. for Rs. 3751 Cr (Rupees three thousand seven hundred and fifty one crores).

(b) Bonds will be issued to the trust shall meet the liability of pension etc. in future from the **interest and principal repayment from KSEB Ltd against the bonds issued in favour of the trust.** With these arrangements the net present value of the fund towards pension etc. shall be Rs 12419.00 crores (approx) as on 31st October 2013 with matching investments in securities issued by the KSEB Ltd for Rs 11895.00 crore on net present value basis.

(c) Another, Rs 524 crore will be funded by the State Government through budgetary provision over a period of 10 years in equal installments as per G.O (Ms) No. 43/2011/PD dated 3rd November 2011. Accordingly an amount of Rs 52.4 crore is being provided in the budget from the FY 2012-13 onwards.

(d) State Government will permit the electricity duty collected by KSEB for the period from 01.04.2008 to 31.03.2012 to be retained by the KSEBL as its contribution for funding the terminal liability.

(e) In addition to the interest on bonds and repayment of principal, KSEB Ltd will be paying the annual pension contribution based on actuarial valuation to the master trust in respect of the personnel transferred to KSEBL.”

6.72 Based on the above KSEB Ltd had issued two sets of bonds to the Master Trust on 01.04.2017.

(1) 20 year bond with a coupon rate of 10% p.a. for Rs.8144 Cr (Rupees eight thousand one hundred and forty four crores)

(2) 10 year bond with a coupon rate of 9% p.a. for Rs. 3751 Cr (Rupees three thousand seven hundred and fifty one crores).

Out of the above, the interest and repayment of the 10 year bond for the amount of Rs 3751.00 crore is being borne by the State Government as envisaged in the Scheme.

6.73 However, as per the re-vesting notifications, the interest and repayment of the bond for Rs 8144.00 crore to the pension has to be borne by KSEB Ltd. The year wise details of the principal and repayment of the 20-year bond of KSEB Ltd is given below.

Table-6.33
Principal and interest to be paid by KSEB Ltd to the Trust
as per the bond certificate issued for Rs 8144.00 crore

Year	Principal (Rs. Cr)	Interest (Rs. Cr)	Total (Rs.Cr)	Year	Principal (Rs. Cr)	Interest (Rs. Cr)	Total (Rs.Cr)
1	407.20	814.40	1221.60	11	407.20	407.20	814.40
2	407.20	773.68	1180.88	12	407.20	366.48	773.68
3	407.20	732.96	1140.16	13	407.20	325.76	732.96
4	407.20	692.24	1099.44	14	407.20	285.04	692.24
5	407.20	651.52	1058.72	15	407.20	244.32	651.52
6	407.20	610.80	1018.00	16	407.20	203.60	610.80
7	407.20	570.08	977.28	17	407.20	162.88	570.08
8	407.20	529.36	936.56	18	407.20	122.16	529.36
9	407.20	488.64	895.84	19	407.20	81.44	488.64
10	407.20	447.92	855.12	20	407.20	40.72	447.92

6.74 Since the year 2021-22 is the 5th year of operation of the Master Trust, the interest liability to be borne by the KSEB Ltd is Rs 651.52 crore for the year 2021-22, as above.

6.75 As per the Regulation 30 of the Tariff Regulations 2018, the interest on bonds issued by KSEB Ltd to service the terminal liabilities of its employees shall be

allowed for recovery through tariffs, at the rates specified in the re-vesting notifications of the State Government. However, the funds required for repayment of the bonds shall not be allowed for recovery through tariff.

6.76 Considering these aspects, ***the Commission hereby allow to pass on the interest liability of the bond issued by KSEB Ltd for the amount of Rs 8144.00 crore at the coupon rate @10%, amounting to Rs 651.52 crore in the true up of accounts of KSEB Ltd for the year 2021-22.***

6.77 However, the Commission has serious observation regarding the laxity from the part of KSEB Ltd for not operationalizing the Master Trust. At present 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.

6.78 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 directs KSEB Ltd to take urgent corrective action to overcome this serious deviation from the Scheme. The Commission warns 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.

With this observation, the Commission hereby approve the interest on bonds to the Master Trust for the 5th year of operation of the trust, i.e., for the year 2021-22 as given in the Table below.

Table 6.34
Interest on Master Trust Bonds approved for 2021-22(Rs Cr)

Item	SBU G	SBU T	SBU D	Total
Interest on Bonds	32.84	59.35	559.33	651.52

Additional funds to the Master Trust

6.79 KSEB Ltd submitted that, the Commission vide the MYT Order dated 08.07.2019 had provisionally approved Rs 200.00 crore towards the unfunded actuarial liability till 31.03.2017 amounts to Rs.3728.98 crore with the observation that it shall hold separate proceedings to determine the funding arrangements of the unfunded actuarial liability. However, the Commission vide the Orders on Truing up for the years 2018-19, 2019-20 and 2020-21 was pleased to approve Rs 100.00 crore in addition to Rs 200.00 crore approved in the MYT Order.

6.80 KSEB Ltd further submitted that, the additional liability as on 31.03.2022 since the date of re-vesting on 31.10.2013 amounts to Rs 17328.00 crore. As per the expert opinion received from tax consultants, proper funding arrangements of the increased actuarial liability is to be finalized only with the approval of the Government of Kerala to overcome the issues on IT exemption of the Master Trust.

KSEB Ltd has taken up the matter of approval before the Government of Kerala for issuing bonds for increased amount of Actuarial terminal liability amounting to Rs. 17,238 Cr as on 31/03/2022 through various letters as detailed below:

- 1) Letter No. FA&CAS/MT- Actuarial Valuation/2018-19 dated 25/07/2018 of Director (Finance)
- 2) Letter No. FA&CAS/Master Trust/Bond/2018-19 dated 25/04/2019 of CMD
- 3) Letter No. FA&CAS/Master Trust/Bond/2019-20 dated 26/12/2019 of CMD
- 4) Letter No. FA&CAS/Master Trust/Bond/2021-22 dated 11/10/2021 of CMD

KSEB Ltd also requested before the State Government to provide financial contribution for the unfunded actuarial liability in the ratio (35.4:64.6) between the State Government and KSEB Ltd as had been done in earlier occasion. The matter is being followed up vigorously and has also been brought to the attention of the Hon'ble Minister of Power. However, the concurrence from Government is not yet received. KSEB Ltd has made every possible effort to make sure that proper funding arrangement is put in place at the earliest. Once the permission of the Government is obtained, KSEB Ltd will initiate steps to issue bonds for the unfunded portion of the terminal liability to ensure source of funds to Master Trust to meet its terminal obligations. KSEB Ltd shall furnish the details of the same before the Hon'ble Commission for approval as stipulated in the Tariff Regulations, 2021.

KSEB Ltd further submitted that, it cannot act on its own in this regard without the permission of the State Government. If the entire unfunded actuarial liability is to be borne by KSEB Ltd and the amounts are transferred to the Master Trust for outside investment, the impact on tariff will be higher at the same time Master Trust investments may be fetching interest lower than the borrowing cost of KSEB Ltd.

KSEB Ltd submitted that, as was approved in the Orders on Truing Up for the years 2018-19, 2019-20 and 2020-21, the Commission may true up an additional fund of Rs.300.00 crore for the year 2021-22, considering the fact that KSEB Ltd has no other source to meet these expenses. SBU wise details of the additional fund to the master trust claimed by KSEB Ltd is given below.

Table 6.35
Additional fund to Master Trust Bonds (Rs. Cr)

Item	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Additional contribution to Master Trust	15.12	27.33	257.55	300.00

KSEB Ltd also submitted that, the additional liability as per actuarial valuation for 2021-22 amounts to Rs.1036.68 Cr and the same has been included in the employee cost for the year as per accounts. The Commission may be pleased to consider the cost for the year over Rs.300 Cr amounting to Rs.736.68 Cr

(Rs. 1036.68 Cr – Rs. 300 Cr) with interest as and when the scheme for unfunded liability is finalized.

Comments of the stakeholders

6.81 The HT-EHT Association submitted that, there is no provision in the Tariff Regulations 2018 to allow additional contribution to Master Trust. Hence the same may be disallowed.

Provisions in the Regulations

6.82 **Regulation 45(1)(b) of the Tariff Regulations, 2018 provides as follows.**

“(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 payable by KSEB Limited to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.”

6.83 **Second proviso to Regulation 58 of the Tariff Regulations, 2018 provide as follows.**

“Provided further 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.”

6.84 **First proviso to Regulation 79 of the Tariff Regulation 2018 provide as follows.**

“Provided that the distribution business of KSEB Limited shall be allowed to recover the annual pension contribution paid to the Master Trust, based on actuarial valuation, in respect of the personnel allocated to the distribution business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses.”

Analysis and Decision of the Commission

6.85 The Commission vide the MYT Order dated 08.07.2019 noted that, as per the actuarial valuation report as on 31.03.2019 the unfunded actuarial liability is assessed at Rs.19327.73 crore instead of the unfunded liability as on 31.10.2013 assessed at Rs.12418.72 crore. KSEB Ltd yet to submit suitable proposal to fund the uncovered liability with the approval of the State Government in this regard. Hence there is an increase of Rs.6909.01 Crore on account of unfunded terminal liabilities as on 31.03.2019. The Commission is of the firm view that KSEB Ltd is required to operationalize the Master Trust account. Payment of pension to retired employees during their twilight years deserve sympathetic consideration. The Commission also places on record that in spite of the Commission's advice to KSEB Ltd in various meetings KSEB Ltd management has displayed a lackadaisical, couldn't care less attitude during 2018-19, 2019-20 and 2020-21. Even the Commission's suggestion to submit a suitable proposal to fund the uncovered liability with the approval of the State Government in this regard has fallen on deaf ears. The Commission also noted

that, as discussed earlier, KSEB Ltd is operating the Master Trust account as a 'Current Account' for discharging the pension liabilities in each month and no surplus fund is accumulated in the Trust till date. Considering all these factors, the Commission vide the MYT Order dated 08.07.2019 had decided to hold a separate proceeding towards the determination of the fund requirements based on actuarial valuation year to year as envisaged under Clause 6(9) (e) of the Revesting Amendment Notification dated 28.01.2015. However, this proceeding is yet to materialize since there is no proposal from KSEB Ltd's side. Till such time the Commission provisionally allowed Rs 200.00 crore as additional funds to the Master Trust.

6.86 KSEB Ltd in the Truing Up Petition for the year 2021-22 submitted that, the increase in actuarial liability as on 31.03.2022 towards the unfunded pension liability, gratuity liability and leave surrender liability is Rs 17328.00 crore. The Commission has appraised the matter in detail and of the view that, unless KSEB Ltd transfer the following fund to the trust promptly, the Master trust established for the pension and terminal liabilities become bankruptcy.

- (i) Interest and principal payment of the KSEB L bond of Rs 8144.00 crore.
- (ii) Interest and principal repayment of the bond issued by KSEB Ltd on behalf of the State Government for the amount of Rs.3751.00 crore.
- (iii) Additional liability based on the actuarial valuation done every year since the first year of operation of the trust.

6.87 However, KSEB Ltd is yet to operate the Trust as envisaged in the Revesting Notification dated 31.10.2013 and its subsequent amendment dated 28.01.2015. Taking into consideration of the serious situation emerging wherein the pension of retired employees would be jeopardized and considering huge unfunded liability as on date, ***the Commission hereby revises the provisional allotment of Rs 200.00 crore to Rs 300.00 crore subject to the condition that the same is to be transferred to the Trust fund. Further, within two months from the date of this Order, KSEB Ltd shall assess the actuarial liability as on 31.03.2023, and submit a suitable proposal to fund the unfunded liability with the approval of the State Government.***

6.88 The SBU wise allocation of the additional fund to the Master Trust approved herewith is as given below

Table 6.36
Additional fund to the Master Trust for the Year 2021-22 (Rs. Cr)

Item	SBU G	SBU T	SBU D	Total
Additional fund	15.12	27.33	257.55	300.00

Return on Equity

6.89 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 for 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 6.37
RoE claimed by KSEB Ltd for 2021-22

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

Comments of the stakeholders

6.90 The HT-EHT Association, invited the attention of the Commission on the suggestions of the consultant engaged by the State Commission on Return on equity, which are quoted below.

"...Further, in the case of new capitalization, RoE is allowed only when actual equity is infused into the Company for incurring capital expenditure, else only interest is allowed on the loan component. According to the consultant even under the Companies Act, 1956 and the relevant Accounting Standards, the Revaluation Reserve is not allowed as a source to increase the equity capital, and only actual paid-up equity capital is considered for all purposes. Hence, they recommended that the Commission may allow RoE either on the equity capital allowed earlier by the Commission or on the reduced equity capital of Rs. 283.91 Cr. (Rs. 1553 Cr. - Rs. 1269 Cr.)."

Based on the suggestions of the Consultant, Hon'ble APTEL in the Order dated 18-11-2015 in Appeal No.247 of 2014, decided as follows.

"We are of the view that since the consultant appointed by the State Commission has studied the whole system and recommended the equity value, hence, we direct the Commission to consider the equity amounts specified by the Consultant and 14% rate of return on this amount has to be considered." According to the Association, any equity base taken more than Rs.1,553 Crores. will be the violation of APTEL judgement. Accordingly, the Association requested to consider 14% on equity capital of Rs.1,553 Cr. for the calculation of return on equity."

Provisions in the Regulation

6.91 **"28. Return on Equity Share capital or Net Fixed Assets.** – (1) Return on equity shall be computed in rupee terms, on the paid up equity share capital determined in accordance with the Regulation 26 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, at the time of approving Aggregate Revenue Requirements return on equity share capital for generating business/ company, transmission business/licensee, distribution business/licensee and State Load Despatch Centre, shall be allowed on the amount of equity share capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity share 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 share shall be allowed on monthly pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year.

Provided also that if the equity or any portion of it, is invested in the generating business/company, transmission business /licensee or distribution

business/licensee is part of the scheme or programme funded by the Central Government or State Government for which no return is payable, such portion of the equity shall not be eligible for any form of return.

(2) If there is no equity invested in the business or equity invested in the regulated business of the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre is not clearly identifiable, return at the rate of three percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business:

Provided that net fixed assets shall be exclusive of the assets created out of consumer contribution, deposit works, capital subsidy or grants.”

Regulation 34 provides as follows:

34. 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 for return on net fixed assets;

(b) The equity of the Government of Kerala as per the above 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 considered while computing the depreciation or return on net fixed assets;

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

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

Analysis and decision of the Commission

6.92 The Commission has carefully considered the issue of equity especially with regard to the amount that is required to be considered for its calculations. KSEB Ltd in their submission has claimed RoE @ of 14% per annum for an equity amount of Rs.3499 crore. KSEB Ltd has submitted that Regulation 34(b) provides that equity of the Government of Kerala as per the transfer scheme published under section 131 of the Act will be considered for computation of return on equity. As per clause 5 of the second transfer scheme “Kerala Electricity Second Transfer Scheme (Revesting) 2013” notified by Government of Kerala vide G.O.(P) No.46/2013/PD dated 13-10-2013, asset and liabilities of the erstwhile KSEB, which was vested into Government of Kerala, has been re-vested into the Company namely Kerala State Electricity Board Limited and opening balance sheet has been notified as part II of Schedule A of the said G.O, with and Equity amount of Rs.3499 crore.

The HT & EHT Association has drawn attention of the Commission to the Order of the Hon’ble APTEL wherein, the Commission was directed to determine the

recommendation of the consultant. In this context, the Commission notes that the Government of Kerala subsequent to the G.O dated 13-10-2013 had issued G.O. (P) NO.3/2015/PD dated 28-1-2015 and G.O. (Ms) No.17/2015/PD dated 13-5-2015. The G.O. dated 28-1-2015 pertains to the amendments to Kerala Electricity Transfer Scheme (Revesting) 2013 and G.O dated 13-5-2015 pertains to the netting off of dues between Government and KSEB as on 13- 10-2013 ie., the date of revesting. In the G.O dated 13-5-2013, it is stated that:

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

- 6.93 The Commission also notes that in compliance to the above GO, KSEB Ltd has issued 349,92,00,000 equity shares of Rs.10 each in favour of Government Kerala for Rs.3499 crore as per the provisions of the Companies Act, 2013, deals with the issue of equity shares and its allotments. In this regard the Commission is satisfied that the allotment of equity shares for Rs.3499.20 crore in compliance to the GO conforms to the requirement for allotment of equity shares as per the provisions of the Companies Act, 2013. It was on this basis that, the Commission while considering the truing up petitions of KSEB Ltd for 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21 had recognized the equity amount as Rs. 3499 Crore and allowed RoE @ of 14% per annum.
- 6.94 Considering the above facts, the Commission is of the considered view that the claim of KSEB Ltd for an RoE @ 14% per annum for an amount of Rs.3499 crore is established and justified.
- 6.95 As per the provisions of the Regulation 34 of the Tariff Regulations 2018, the Commission is allowing the amount of equity as per the provisions of the Transfer Scheme and RoE of 14% is permissible on this amount of equity. The Regulations were finalised by the Commission after following the due process such as previous publication, public hearing etc., Once the Regulation has been finalised and notified after following the due procedure, it is binding on all the parties concerned and there is no scope for any deviation what so ever. Therefore, the arguments of the Association cannot be accepted.
- 6.96 **Accordingly, the Commission hereby allow return at the rate of 14% on the Government equity of Rs 3499.00 crore as part of approval of the Truing up of accounts for the year 2021-22. The details are given below.**

Table 6.38
RoE approved for the year 2021-22

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

CHAPTER - 7
CONSOLIDATED TRUING UP OF KSEB Ltd FOR THE YEAR 2021-22

Introduction

7.1 The consolidated details of the Truing up of accounts of KSEB Ltd for the year 2021-22 is presented in this chapter. A comparison of the ARR&ERC approved in the MYT Order dated 08.07.2019, consolidated audited accounts and the truing up petition is given below.

Table 7.1
Summary of the Audited Accounts and Truing up petition the year 2021-22

Particulars	Approved	Actual	Truing up petition
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Generation of Power	0.00	1.17	1.17
Purchase of power	8967.44	8532.16	8432.58
Interest & Finance Charges	1943.62	1618.25	2169.38
Depreciation	612.26	1139.74	586.83
O&M cost	3512.24	4775.93	3456.86
Other Expenses	0.00	164.19	164.19
Interest on Additional Bond to Trust	200.00	0.00	300.00
Gains out of T&D loss reduction			125.25
Amortization of past gap	850.00		346.39
RoE	489.87		489.87
Incentive, Amortization and interest			11.23
Exceptional item		17.91	17.91
Pay revision expenses			534.28
Total Expenditure (A)	16575.43	16249.35	16635.94
Non-Tariff Income	681.88	618.69	1009.64
Revenue from tariff & external sale	14895.02	16366.93	15626.31
Total Income (B)	15576.90	16985.62	16635.94
Revenue surplus (Gap) (B-A)	-998.53	736.27	0.00

7.2 Detailed appraisal of each expense components is discussed in the following paragraphs.

Generation of Power

7.3 KSEB Ltd has claimed Rs 1.17 crore towards fuel cost of its generating stations. After analyzing the matter in detail, the Commission in Chapter 2 of this Order has allowed the fuel cost of Rs. 1.17 crore as per the accounts.

Cost of Generation of Power or Transfer cost of SBU-G

7.4 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 520.02 crore as against Rs.540.22 crore claimed by KSEB Ltd. Details are given in Chapter 2 of this Order.

Cost of Intra-state Transmission or Transfer cost of SBU-T

7.5 The cost of intra state transmission is the transfer cost of SBU-T to the SBU-D. After examining various expenses, the Commission has determined the transfer cost of Transmission or the net cost of intra State transmission of power of SBU-T at Rs.1105.18 crore as against Rs.1152.24 crore claimed by KSEB Ltd for the year 2021-22. Details in this regard are shown in Chapter 3 of this Order.

Cost of purchase of power

7.6 The cost of power purchase including inter-state transmission charges as per the petition is Rs.8432.58 crore. Of this, the inter-state transmission charges paid to PGCIL is Rs. 1023.62 crore. As detailed in Chapter 5, the Commission after examining the details has approved the cost of power purchase at Rs.8385.29 crore for the year 2021-22. The details are given in Chapter-5 of this Order. This dis-allowance is mainly against the excess payment to the provisionally approved DBFOO contract.

O&M Expenses

7.7 As per the petition, the O&M expenses claimed by KSEB Ltd is Rs. 3728.85 crore, which is inclusive of employee expenses, repair and maintenance expenses, administration and general expenses, and provision for pay revision. KSEB Ltd has claimed the O&M expenses as per the norms specified in the Tariff Regulations. In addition to the normative O&M expenses, KSEB Ltd also requested to approve Rs.534.28 crore provided for pay revision due from July/August 2018 onwards.

7.8 The O&M expenses claimed and approved for KSEB Ltd is given in the Table below.

Table 7.2
Summary of the O&M expenses claimed and approved for the year 2021-22

Particulars	MYR Order dated 08.07.2019 (Rs. Cr)	KSEB Ltd		KSERC approval as per norms (Rs. Cr)
		As per accounts (Rs. Cr)	Claimed for Truing Up (Rs. Cr)	
(i) Employee expense		3867.35	3456.86	3435.22
(ii) A&G expenses	3512.24	613.01		
(iii) R&M expenses		295.57		
(iv) Provision for pay revision		0.00	534.29	453.96
Total O&M expenses	3512.24	4775.93	3991.15	3889.18

Interest and financing charges

7.9 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. The summary of the interest and finance charges claimed and approved is given in the Table below.

Table 7.3

Interest and Finance charges claimed and approved for the year 2021-22

Sl No	Particulars	MYT	KSEB	KSERC
		Approval	petition	Approval
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Interest on Loan	776.82	724.07	669.48
2	Security Deposit Interest	238.74	142.18	142.18
3	Master Trust Bond Interest	651.52	651.52	651.52
4	Working capital/ OD interest	30.88	24.43	23.52
5	PF interest	218.58	178.06	178.06
6	Other interests	0	11.24	6.37
7	Carrying cost on past approved revenue gap	27.08	437.88	392.34
8	Total	1943.62	2169.38	2063.47

Depreciation

- 7.10 Depreciation as per the audited accounts of KSEB Ltd for the year 2021-22 is Rs 1139.74 crore. 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 2018-19 to 202-22, depreciation is allowable as per the provisions contained in the Tariff Regulations, 2018 in which applicable rates as well as methodology to be followed are specified therein.
- 7.11 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 2021-22 is as shown below:
- 7.12 KSEB Ltd in the Truing petition has claimed depreciation as per the provisions of the Tariff Regulations 2018 only. The comparison of the depreciation claimed in the Truing up petition and the actuals are given in the Table below.

Table 7.4

Depreciation claimed and approved in the year 2021-22

SBUs	As per audited	As per the True Up	Approved in the
	accounts	petition	True up Order
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
SBU-G	180.23	132.24	132.80
SBU-T	276.66	201.61	195.08
SBU-D	682.85	252.98	237.05
Total	1139.74	586.83	564.93

Other expenses:

- 7.13 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 SBU wise details of the other expenses claimed and approved is detailed in Chapter 2,3 and 5. Its summary is given below.

Table 7.5
Other expenses approved for the year 2021-22

SBUs	As per truing up Petition	Approved in truing up
	(Rs.crore)	(Rs. crore)
SBU-G	0.01	0.01
SBU-T	-5.70	-5.70
SBU-D	169.88	169.88
KSEB Ltd	164.19	164.19

Return on equity

7.14 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 7.6
Return on equity claimed and approved for 2021-22

SBUs	As per truing up petition		Approved
	Amount of Equity	Return on Equity	Return on Equity
	Rs. Crore	Rs. Crore	Rs. Crore
SBU-G	831.00	116.38	116.38
SBU-T	857.00	119.99	119.99
SBU-D	1811.00	253.50	253.50
Total	3499.00	489.87	489.87

Non-Tariff income

7.15 As per the details furnished in the petition, consolidated non-tariff income for the year is Rs.1009.64 crore as per the petition. After considering the details, the Commission has approved the SBU wise non-Tariff income as shown below:

Table 7.7
Non Tariff income approved for 2021-22

Particulars	SBU-G	SBU-T	SBU-D	Total
	(Rs.crore)	(Rs.crore)	(Rs.crore)	(Rs.crore)
Non Tariff Income as per petition	31.41	47.72	930.51	1009.64
Non-Tariff income approved	31.41	47.72	930.51	1009.64

Revenue from Sale of Power

7.16 The total revenue from sale within the State is Rs 15626.31 crore for the year 2021-22. This includes the revenue from external sale of Rs 1024.31 crore for the sale of 2094.41 MU during the year. The power factor incentive of Rs.38.61 crore is also deducted from the revenue from sale of Power.

Summary of Income, Expenses and Revenue gap after truing up

7.17 The summary of the ARR approved for SBU-G is detailed in Chapter-2 and its summary is given below.

Table 7.8
ARR of the SBU-G Trued up for the year 2021-22

Particulars	KSERC	KSEB Ltd		KSERC - Approved for Truing Up
	ARR Approval	As per accounts	Claimed for Truing Up	
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	
Cost of Generation of Power	0	1.17	1.17	1.17
Interest & Finance Charges	186.12	32.97	122.17	109.32
Depreciation	196.26	180.23	132.24	132.80
O&M Expenses				
(i) Employee expenses		214.78		
(ii) A&G expenses	172.01	43.79	150.52	147.67
(ii) R&M expenses		30.48		
(iv) Provision for pay revision	0.00		33.69	28.63
(v) Total O&M expenses	172.01	289.05	184.21	176.30
RoE (14% of Rs 1454.53 Cr)	116.38	154.45	116.38	116.38
Other Expenses & PP expenses	0.00	0.01	0.01	0.01
Exceptional Items – Flood	0.00	0.33	0.33	0.33
Additional contribution to Master Trust	10.26		15.12	15.12
ARR	681.03	658.21	571.63	551.43
Less Non-Tariff Income	41.17	11.00	31.41	31.41
Net ARR (Transferred to SBU-D)	639.86	647.21	540.22	520.02

7.18 The details of the Truing up of SBU-T of KSEB Ltd is detailed in Chapter-3 of this order. The summary of the Trued up ARR of SBU-T of KSEB Ltd for the year 2021-22 is given in the Table below.

Table 7.9
ARR of the SBU-T Trued up for the year 2021-22

Particulars	Approved	Actual	Claimed for True up	KSERC Approval
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Interest & Finance Charges	434.87	201.54	323.18	296.63
Depreciation	261.09	276.66	201.61	195.08
O&M Expenses	491.28	574.35	459.07	459.07
Return on equity (14%)	119.99	205.24	119.99	119.99
Amortization of intangible assets			6.78	6.76
Other items		-5.70	-5.70	-5.70
Additional contribution to Master Trust	22.64		27.33	27.33
Incentive on Transmission Availability			4.45	0.00*
Pay revision expenses	0.00	0.00	63.24	53.73
ARR	1329.87	1252.08	1199.95	1152.89
Less: Non-tariff Income	46.35	41.94	47.72	47.72
Net ARR (Cost Transferred to SBU-D)	1283.52	1210.14	1152.24	1105.18

*Deferred

7.19 The details of the Truing up of SBU-D of KSEB Ltd is detailed in Chapter-5 of this Order. The summary of the Trued up ARR of SBU-D of KSEB Ltd for the year 2021-22 is given in the Table below.

Table 7.10
ARR of the SBU-D Trued up for the year 2021-22

Particulars	MYT Order	Truing up petition	Approval
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Cost of Generation (SBU-G)	639.86	540.22	520.02
Cost of Power Purchase	8967.44	8432.58	8385.29
Cost of Intra-State Transmission	1283.52	1152.24	1105.18
Interest & Finance Charges	1322.63	1724.03	1657.52
Depreciation	154.91	252.98	237.05
O&M Expenses	2848.95	2847.27	2828.48
Pay revision arrears		437.36	371.61
Return on equity (14%)	253.50	253.50	253.50
Other Expenses		169.88	169.88
Exceptional items		17.58	17.58
Sharing of gain on T&D loss reduction		125.25	0.00*
Recovery of past gap	850.00	346.39	
Additional contribution to Master Trust	167.10	257.55	257.55
Total ARR	16487.92	16556.83	15803.65
Less Non tariff Income	594.36	930.51	930.51
Net ARR	15893.56	15626.32	14873.14
Revenue from sale of power	14895.02	15626.31	15626.31
Net Revenue Gap (-)/ Surplus (+)	-998.54	-0.01	753.17

*Deferred

7.20 The consolidated summary of the ARR, ERC and Revenue gap of KSEB Ltd for the year 2021-22 is given below.

Table 7.11
Consolidate summary of the ARR&ERC Trued up for the year 2021-22

Particulars	MYT	Actual	Truing up	Approval
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Generation of Power	0.00	1.17	1.17	1.17
Purchase of power	8967.44	8532.16	8432.58	8385.29
Interest & Finance Charges	1943.62	1618.25	2169.38	2063.47
Depreciation	612.26	1139.74	586.83	564.92
O&M cost	3512.24	4775.93	3456.86	3435.22
Pay revision expenses			534.28	453.97
Other Expenses	0.00	164.19	164.19	164.19
Additional contribution to Master	200.00	0.00	300.00	300.00
Gains out of T&D loss reduction			125.25	0.00*
Amortization of past gap	850.00		346.39	0.00
RoE	489.87		489.87	489.87
Amortisation of intangible assets			6.78	6.76
Incentive on transmission availability			4.45	0.00
Exceptional item		17.91	17.91	17.91
Total Expenditure (A)	16575.43	16249.35	16635.94	15882.77
Non-Tariff Income	681.88	618.69	1009.64	1009.63
Revenue from tariff & external sale	14895.02	16366.93	15626.31	15626.31
Total Income (B)	15576.90	16985.62	16635.94	16635.94
Revenue surplus (Gap) (B-A)	-998.53	736.27	0.00	753.17

*Deferred

7.21 ***As above, as against the zero-revenue surplus claimed by KSEB Ltd in the Truing up petition for the year 2021-22, the Commission hereby approves the provisional revenue surplus of Rs.753.17 crore for the regulatory accounts in the process of Truing up for the year 2021-22.***

Orders of the Commission

7.22 The Commission after having examined in detail, the petition filed by KSEB Ltd, the objections from stakeholders and other materials placed before it, hereby approve the following for the purpose of Truing up of accounts for the year 2021-22.

- (1) ***Net ARR of SBU-G for the year 2021-22 at Rs.520.02 crore as against Rs.540.22 crore claimed by KSEB Ltd.***
- (2) ***Net ARR of SBU-T for the year 2021-22 at Rs.1105.18 crore as against Rs.1152.24 crore claimed by KSEB Ltd.***
- (3) ***Net ARR of SBU-D for the year 2021-22 at Rs.14873.14 crore as against Rs.15626.32 crore claimed by KSEB Ltd.***
- (4) ***Provisional Revenue surplus of KSEB Ltd for the year 2021-22 is Rs.753.17 crore as against the zero-revenue surplus claimed by KSEB Ltd.***

7.23 Directives

- (1) ***KSEB Ltd shall, within three months from the date of this order, file a proper petition with complete details on the unfunded actuarial liability as on 31.03.2023 and suitable proposal to fund the additional liability over the schemes already approved, with the approval of the Director Board of KSEB Ltd and with the approval of the State Government.***
- (2) ***KSEB Ltd shall deposit the balance unfunded actuarial liability based on the already approved schemes to the Master Trust Account, within three months from the date of this Order.***
- (3) ***KSEB Ltd shall, also deposit Rs.300.00 crore provisionally allowed to meet the unfunded liability of the pension and gratuity to the Master Trust within three months from the date of this order.***
- (4) ***The Commission hereby clarify that, the provisional revenue surplus of Rs.753.17 crore approved as per Regulatory Accounts is only for Regulatory purpose.***

7.24 The petition is disposed off and ordered accordingly.

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B. Pradeep
Member

Approved for Issue
Sd/-
C. R. Satheesh Chandran
Secretary

Annexure-1
Installed capacity of Generating Stations

Sl. No	Name of the Station	Installed Capacity (MW)
I.	Hydel generating stations	
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
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	3.60
37	Perumthenaruvi	6.00
38	Kakkayam SHP	3.00
39	Chathankottunada	6.00
40	Upper Kallar	2.00
	Total Hydel	2066.76
II	KSEB Wind	
1	Kanjikode	2.03
	Total Wind	2.03
III	KSEB Thermal plants	
1	Brahmapuram Diesel Power Plant	63.96
2	Kozhikode Diesel Power Plant	96.00
	Total Thermal	159.96
IV	KSEB solar plants	30.28
	Total	2259.03

Annexure-2
Station wise hydro generation as per the petition for 2021-22

No	Hydro Electric Stations	Generation (MU)	No	Hydro Electric Stations	Generation (MU)
1	Idamalayar	381.21	22	Vellathooval	10.01
2	Idukki	3709.68	23	Sholayar	262.62
3	Kakkad	272.69	24	Chembukadvu - I	5.03
4	Kallada	59.89	25	Chembukadavu- II	7.81
5	Kuttiyadi+KES+KAES	751.36	26	Urumi - I	8.86
6	KuttiyadiTail Race	7.49	27	Urumi - II	5.76
7	Kakkayam SHEP	9.95	28	Poozhithode	13.64
8	Lower Meenmutty	6.94	29	Ranni-Perinadu	10.28
9	Lower Periyar	811.91	30	Peechi	0.00
10	Maduppatty	6.52	31	Vilangadu	19.13
11	Malampuzha	3.88	32	Chimmony	8.34
12	Malankara	28.07	33	Addyanpara	11.95
13	Neriamangalam	275.59	34	Barapole	49.23
14	Neriamangalam Extention	169.85	35	Perunthenaruvi	7.31
15	Pallivasal	144.50	36	Chathankottunada	12.73
16	Panniyar	213.17	37	Upper Kallar	1.14
17	Peppara	10.52	38	Poringal screw generation	0.05
18	Poringalkuthu	194.62		KSEB Hydro (TOTAL)	9836.91
19	PLBE	114.80		Aux Consumption (MU)	94.06
20	Sabarigiri	2047.69		Auxiliary consumption %	0.96%
21	Sengualm	182.72		Net Hydel Generation MU	9742.85

Annexure-3
Details of the inflow received during the year 2021-22 (MU)

Months	Anticipated Inflow (MU)	Actual Gross Inflow (MU)	Actual Spill (MU)	Actual Net Inflow (MU)	Surplus (+) / Deficit (-) (MU)
Apr-21	127.57	127.96	0.00	127.96	0.40
May-21	147.98	661.63	21.50	640.13	492.20
Jun-21	924.21	1124.51	23.00	1101.51	177.30
Jul-21	1434.15	1931.75	208.40	1723.35	289.20
Aug-21	1199.21	1261.78	42.70	1219.08	19.90
Sep-21	860.83	1108.67	33.90	1074.77	213.90
Oct-21	638.62	1869.31	460.90	1408.41	769.80
Nov-21	447.53	1520.68	440.60	1080.08	632.60
Dec-21	243.62	627.89	93.00	534.89	291.30
Jan-22	110.73	207.40	0.00	207.40	96.70
Feb-22	69.18	107.52	0.00	107.52	38.30
Mar-22	95.78	105.92	0.00	105.92	10.10
Total	6299.41	10655.02	1324.00	9331.02	3031.60

Annexure-4
O&M expense of New Generating stations Commissioned

Project	CoD	Capacity- MW	Energy- MU	Addl. O&M cost (Cr)
Perunthenaruvi	23.10.2017	6	12.17	1.57
Kakkayam	16.07.2018	3	10.39	1.09
Chatahankottunada SHEP Stage – II	20.06.2021	6		1.18
Upper Kallar	30.09.2021	2		0.26
Sub total		17.00		4.10
Solar Projects				
Solar Project (Annexure G1)	FY 2018-19	3.32		0.31
Solar Project commissioned FY 2019-20 (Annexure G2)	FY 2019-20	0.65		0.04
Banasurasagar Floating solar	04-12-2017	0.50		0.05
Nelliyampathi & Parambikulam Off Grid Solar Project	04-04-2017	0.08		0.01
Soura Solar	FY 2020-21	2.13		0.14
Soura Solar	FY 2021-22	6.64		0.45
Agali	22.01.2022	1.00		1.12
Kanjikode	19.02.2022	3.00		1.68
Sub total		17.32		3.80
Total		34.32		7.90

Annexure-5
Miscellaneous receipts claimed for SBU-T

No	Particulars	Amount (Rs. Cr)
1	Rental from staff quarters	0.06
2	Rental from contractors	0.03
3	Rent from others	0.08
4	Pole rent Cable TV Operators	0.02
5	Infra dev charges and supervision charges	2.67
6	SD Forfeited	0.01
7	Sale of trees	0.43
8	Usufructs	0.09
9	Penalty/LD from contractors/suppliers	5.47
10	Outside students-project	0.13
11	Optical fiber cable leasing	6.31
12	Testing fee from contractors	0.19
13	Centage from Govt deptt/ agencies	0.02
14	Course fee received from training institution as reimbursement	0.04
15	Other Income- Annual Maintenance Charges	0.74
16	Other Income-Performance Incentive from MNRE	0.71
17	Total	16.99

Annexure-6
KSEB Ltd petition- Comparison of energy sale approved and claimed

Category	MYT Order dated 08.07.2019	Actual	Difference
	(MU)	(MU)	(MU)
LT Category			
Domestic	12381.33	12675.79	294.46
VI & VII Commercial	3885.49	3308.04	-577.45
Industrial	1157.49	1165.21	7.72
Agricultural	387.19	374.09	-13.10
Street Lights	437.81	362.83	-74.98
LT II	5.15	3.60	-1.55
Advertisement & Hoardings	2.25	1.23	-1.02
EV charging stations		0.69	0.69
LT Total	18256.71	17891.48	-365.23
HT Category			
HT I	2494.01	2296.90	-197.11
HT II	975.88	812.74	-163.14
HTIII	10.76	8.64	-2.12
HT IV	820.98	557.44	-263.54
HT V	18.20	17.97	-0.23
HT VI	0.00		0.00
HT VII		0.27	0.27
HT Total	4319.83	3693.96	-625.87
EHT Category			
EHT-I	382.38	210.46	-171.92
EHT-II	808.12	615.24	-192.88
EHT-III	112.02	193.21	81.19
EHTGeneral	77.54	58.66	-18.88
Railway Traction	323.09	318.29	-4.8
KMRL	18.66	11.37	-7.29
EHT Total	1721.81	1407.236	-314.574
Bulk consumers/Licensees	693.1	506.91	-186.19
HT.EHT & Licensees	6734.74	5608.11	-1126.63
Total	24991.45	23499.59	-1491.86

Annexure-7
Comparison of energy sale for the year 2020-21 and 2021-22

Category	2020-21	2021-22	(%) of increase
	(MU)	(MU)	(MU)
LT Category			
Domestic	12695.8	12675.79	-0.16%
VI & VII Commercial	2981.19	3308.04	10.96%
Industrial	1086.67	1165.21	7.23%
Agricultural	403.24	374.09	-7.23%
Street Lights	376.94	362.83	-3.74%
LT II	3.84	3.60	-6.25%
Advertisement & Hoardings	1.11	1.23	10.81%
EV charging stations	0.17	0.69	305.88%
LT Total	17548.96	17891.48	1.95%
HT Category			
HT I	2051.03	2296.90	11.99%
HT II	714.4	812.74	13.77%
HTIII	8.98	8.64	-3.79%
HT IV	423.54	557.44	31.61%
HT V	16.83	17.97	6.77%
HT VI (EV charging stations)	0	0.00	0.00%
HT VII (Temporary connections)	0	0.27	
HT Total	3214.78	3693.96	14.91%
EHT Category			
EHT-I	133.96	210.46	57.11%
EHT-II	478.76	615.24	28.51%
EHT-III	51.25	193.21	277.00%
EHTGeneral	76.57	58.66	-23.39%
Railway Traction	141.29	318.29	125.27%
KMRL	9.65	11.37	17.82%
EHT Total	891.48	1407.23	57.85%
Bulk consumers/Licensees	496.37	506.91	2.12%
HT.EHT & Licensees	4602.63	5608.10	21.85%
Total	22151.59	23499.58	6.09%

Annexure-8
KSEB Ltd- T&D loss claimed for the year 2021-22

SI No	Particulars	2021-22
A	Energy Input	
i	Energy generation by KSEB Ltd excl auxiliary consumption	9763.05
ii	Power Purchase /energy injected by captive consumers/solar prosumers at Kerala periphery	18887.67
iii	Sub Total (MU) (A+B)	28650.72
iv	Energy injected to the grid by private IPPs for sale outside the State through OA	49.28
v	Energy wheeled by embedded open access consumers from outside the State at KSEB end	268.69
vi	Total energy input at Kerala periphery	28968.69
vii	Energy sales by KSEB Ltd outside the State	2094.41
viii	Energy transfer outside the State by KSEB Ltd through banking arrangement	106.28
ix	Energy sale by private IPPs for sale outside the State through open access	44.04
x	Total energy sale/transfer through banking outside the State	2244.74
xi	Net Energy Input at Kerala periphery (MU)(vi-x)	26723.95
xii	Substation auxiliary consumption (MU)	20.77
A.xiii	Net Energy Input excluding auxiliary consumption (MU) (xi-xii)	26703.19
B	Energy sales/usage	
i	Energy sales by KSEB Ltd	23499.59
ii	Energy supplied by KSEB Ltd for meeting the banked energy injected by captive prosumers/solar prosumers including solar prosumers under saura scheme	222.23
iii	Energy consumed by embedded open access consumers at consumer end by wheeling from outside the State	253.37
iv	Energy availed by RGCCPP to meet the auxiliary consumption	8.22
B.v	Energy at consumer end availed from grid(MU)	23983.42
C	T&D loss (MU) (A.xiii-B.v)	2719.77
D	T& D loss for 2020-21 in %(C*100/A.xiii)	10.19
E	T& D loss target approved for 2021-22 in %	11.62
F	Achievement in loss reduction in excess of target approved (E-D in %)	1.43

Annexure-9

T&D loss approved for the year 2021-22

Sl No	Particulars	2021-22
I.	ENERGY INPUT	
1	Generation and Power purchase by KSEB Ltd	
	Energy generation by KSEB Ltd excl auxiliary consumption (MU)	9763.05
	Power Purchase /energy banked at Kerala periphery (MU)	18887.67
	Sub Total of energy generation and power purchase by KSEB Ltd (MU)	28650.72
	Energy sale by KSEB Ltd outside the State	2094.41
	Energy transfer outside the State by KSEB Ltd through banking arrangement	106.28
	Substation auxiliary consumption (MU)	20.77
	Net Energy generation and power purchase by KSEB Ltd for sale within the State	26429.26
2	Energy input by other parties to the Kerala system for their use	
	Energy injected to the grid by private IPPs for sale outside the State through OA (MU)	49.28
	Energy wheeled by embedded open access consumers from outside the State at KSEB periphery (MU)	268.69
	Less Energy sale by private one private IPP outside the State	44.04
	Subtotal of energy input into Kerala system by others	273.93
3	Total energy input to the KSEB syem = (1)+(2)	26703.19
4	ENERGY SALES / CONSUMED BY DIFFERENT USERS (within the State)	
	Energy sale of KSEB Ltd to the consumers (including aux consumption of RGCCPP)	23499.59
	Energy consumed by embedded open access consumers at consumer end by wheeling from outside the State (MU)	253.37
	Banked energy consumed by prosumers & Captive consumers	222.23
	Auxiliary consumption of RGCCPP	8.22
	Total energy sale/out put through Kerala power system	23983.41
5	T&D Losses = (3)-(4)	2719.78
6	T&D loss achieved for 2021-22 = (5)/(3) (%)	10.19
7	T& D loss target for 2021-22 (%)	11.62
8	Excess loss reduction achieved over target 2021-22	1.43

Annexure-10
Key parameters of SBU-D as per petition

Particulars	Statistics
Area Sq.km.	38863
Districts No's	14
Electrical Circle Offices	25
Population in Cr	3.47
Consumers (Nos)	13422642
Distribution transformers (Nos)	85594
HT lines (Ckt. Kms)	68173
LT lines (Kms)	299538
Energy sales by KSEB Ltd including external sales MU	25594
Energy consumption inside the State (incl open access & captive consumption) in MU	24131.77
T&D loss in % (including transmission loss)	10.19%
Distribution loss in %	7.62%
AT&C loss in % as per CEA methodology	8.26%

Annexure-11
Surrender details from CGS

CGS	MYT Order dated 08.07.2019	Actual Schedule	Surrender	Total availability	Deviation
	(MU)	(MU)	(MU)	(MU)	(MU)
RSTPS I & II	1808.01	1329.76	386.87	1716.63	-91.38
RSTPS III	453.27	385.26	111.33	496.59	43.32
Talcher Stage-II	3172.90	2887.83	224.77	3112.60	-60.30
Simhadri TPS Stg II	584.87	428.97	204.07	633.04	48.17
NLC Stage-I	397.35	303.59	120.63	424.22	26.87
NLC Stage-II	567.42	447.46	96.63	544.09	-23.33
NLC 1 Expansion	429.02	385.49	118.91	504.40	75.38
NLC II Expansion	282.78	267.46	31.63	299.09	16.31
MAPS	123.59	40.68		40.68	-82.91
KAIGA	486.76	560.64		560.64	73.88
Kudankulam	1538.37	1847.60		1847.60	309.23
Vallur	347.05	214.54	144.28	358.82	11.77
NTPL	501.99	247.52	143.47	390.99	-111.00
Kudgi	742.20	315.87	490.02	805.89	63.69
Bhavini	271.21	0.00		0.00	-271.21
NNTPS	0.00	182.46	12.09	194.55	194.55
Total	11706.79	9845.13	2084.70	11929.83	223.04

Annexure-12
Plant Availability factor and reduction in Fixed cost due to Low PLF

Sl No	Station	PAF(%)				AFC Payable on normative availability	AFC for FY 2021-22	Fixed cost reduced on account of lower PAF
		Low Demand (May-21 to Jan-22)		High Demand (Apr-21, Feb-22 & Mar-22)				
		Peak	Off peak	Peak	Off peak	Rs Cr	Rs Cr	Rs Cr
A	Central Generating Stations							
1	Talcher	88.11	88.06	97.81	97.60	211.20	211.20	0.00
2	Simhadri	88.97	88.65	85.02	85.08	91.92	91.92	0.00
3	RSTPS Stage I & II	85.96	85.90	87.91	87.81	120.22	120.16	0.06
4	RSTPS Stage III	101.76	101.62	102.74	102.73	33.57	33.56	0.01
5	Kudgi	82.02	80.37	95.00	93.03	138.50	133.24	5.26
6	NLC IISStage I	81.72	82.30	95.12	95.42	28.06	27.38	0.68
7	NLC IISStage II	77.32	77.87	72.96	73.26	43.56	39.19	4.37
8	NLC II Exp I	94.91	94.91	83.74	83.59	45.34	44.13	1.21
9	NLC II Exp II	45.74	45.78	48.08	48.25	110.53	68.51	42.02
10	NTECL Vallur	85.66	85.94	100.80	101.01	60.33	60.29	0.04
11	NTPL	66.37	67.24	61.45	61.27	77.01	59.41	17.60
12	NNTPP	70.62	70.44	81.62	81.96	40.75	35.16	5.59
	Sub total					1000.99	924.15	76.84
B	IPPS							
	DVC Mejia	87.17	86.95	79.57	79.18	101.92	99.38	2.54
	DVC RTPS	72.98	73.15	81.20	80.71	58.15	52.45	5.70
	Maithon Power Ltd-I	91.20	91.16	97.41	97.32	156.78	156.78	0.00
	Maithon Power Ltd-II	91.20	91.16	97.41	97.32	156.78	156.78	0.00
	Sub total					473.63	465.39	8.24

Annexure-13
Month wise details of surrender from CGS and IPPs

Months	CGS	LTA	TOTAL	Remarks
Apr-21	49.85	2	51.85	36.76 MU corresponds to Deemed surrender from Kudgi STPS as the units were under RSD. The demand decreased from mid April-21 due to re-surgence of pandemic COVID-19. The reduction in demand was managed through sale and merit order surrender.
May-21	316.15	189.31	505.46	The consumption was curtailed downward in the month of May-21, this was further lowered drastically due to summer rains charged with heavy inflow to the reservoirs. The increased inflow about 5 times the anticipated in the month of May'21, along with drastic fall in demand due to the impact of COVID-19 pandemic resulted in a carryover storage of 1483.4MU.
Jun-21	286.5	153.02	439.52	The actual inflow received was much higher than the anticipated. at Idukki ,Sabarigiri and Idamalayar, Kuttiady. As a result ,actual hydro generation was more than the planned generation. The must run hydro and low demand balanced using sale and surrender in merit order.
Jul-21	364.43	146.43	510.86	
Aug-21	151.97	69.06	221.03	Aggressive market operation was continued in view of the probable revival of monsoon and to avoid any spillage in the event of a high inflow.
Sep-21	110.4	22.85	133.25	Heavy rainfall was received in almost all parts of Kerala after 07.10.21. The inflow was 256.62% of the 10-year moving average. Consequently, all generating stations including Idukki were brought into must run condition. As the inflow continued to be on the higher side, a decision was taken at government level for controlled release of water from Idukki, Pamba and Idamalayar reservoirs from 19-10-2021 and Kakki from 18.10.2021. In order accommodate the hydrogeneration ,energy was surrendered during periods of low demand as part of LGB management.
Oct-21	115.41	29.16	144.57	
Nov-21	272.11	95.89	367.99	The total inflow received during November 2021 was 1451.86 MU which is much more than the anticipated figure. In view of the increased inflow, the generation was also increased to maximum. The total average daily hydro generation including small HEPs was 38.15 MU in November 2021. Sale/surrender was done during low demand periods. The consumption decreased to 70.86MU due to the widespread rains received during the month.
Dec-21	134.72	41.95	176.67	The low demand period managed through surrender on merit order with sale
Jan-22	181.25	54.24	235.5	The low demand period managed through surrender on merit order with sale
Feb-22	81.43	18.06	99.49	The low demand period managed through surrender on merit order with sale
Mar-22	20.57	0.54	21.11	Summer rains received during second half of March-22, In view of the increased inflow, storage position, market conditions the generation from hydro stations was enhanced to 26.49MU/day during the second half of march . Hence high cost power was surrendered and hydro scheduled whenever possible, so as to meet the hydro plan.
Total	2084.77	822.51	2907.28	

Annexure-14

CGS- Details of the power purchase from CGS for the year 2021-22

Name of the Station	Energy (MU) at ex bus	Energy (MU) at Kerala periphery	Fixed charge paid (Rs. Cr)	Variable charge (Rs. Cr)	Incentive (Rs. Cr)	Supplementary claims (Income tax, water cess etc)	Total (Rs. Cr)
RSTPS I & II	1329.76	1284.35	120.16	370.57	0.09	0.48	491.30
RSTPS III	385.26	372.07	35.55	106.85	0.95	3.69	147.04
Talcher Stage-II	2887.83	2788.20	211.17	511.63	4.73	15.81	743.34
Simhadri TPS Stg II	428.97	414.11	105.01	128.79	0.00	10.90	244.70
NLC Stage-I	303.59	293.05	27.38	80.54	0.49	-1.22	107.19
NLC Stage-II	447.46	432.04	39.19	118.95	0.00	-0.20	157.94
NLC 1 Expansion	385.49	372.08	44.13	93.51	-0.18	-0.17	137.29
NLC II Expansion	267.46	258.26	68.51	72.51	0.00	-3.90	137.14
MAPS	40.68	39.24	0.00	10.27	0.00	0.31	10.58
KAIGA	560.64	541.33	0.00	190.41	0.00	1.22	191.64
Kudankulam	1847.60	1783.50	0.00	733.55	0.00	31.94	765.49
Vallur	214.54	207.12	60.29	71.37	0.02	2.30	133.98
NTPL	247.52	239.05	59.41	79.95	0.00	10.71	150.07
Kudgi	315.87	304.90	133.24	126.19	0.00	0.97	260.40
Bhavini	0.00		0.00	0.00	0.00	0.00	0.00
NNTPS	182.46	176.16	35.16	39.95	0.00	0.11	75.21
Eastern region			0.00	0.00	0.00	0.00	0.00
Sub Total	9845.13	9505.47	939.21	2735.03	6.10	72.96	3753.30

Annexure-15

Cost of power purchase from wind, SHPs, Solar and other IPPs in the State for the year 2021-22

Station	MYT Order dated 08.07.2019			Audited Accounts		Truing up petition			Difference	
	(MU)	(Rs.Cr)	Avg. Tariff (Rs/kWh)	(MU)	(Rs Cr)	(MU)*	(Rs Cr)	Avg. Tariff (Rs/ kWh)	(MU)	(Rs Cr)
Wind- Ramakkalmedu	27.87	8.75	3.14	23.79	19.83	23.79	19.83	3.14	7.34	2.19
Wind-Koundikkal	12.56	3.94	3.14	10.07		10.07		3.14		
Wind- Agali	29.72	9.33	3.14	28.95		28.95		3.14		
Wind Ahalya	20.98	10.97	5.23	17.42	9.11	17.42	9.11	5.23	3.56	1.86
INOX	30.84	12.61	4.09	32.97	13.48	32.97	13.48	4.09	-2.13	-0.87
Kosamattom	0.00	0.00		1.24	0.49	1.24	0.49	3.95	-1.24	-0.49
Wind Sub total	121.97	45.61	3.74	114.43	42.91	114.43	42.91	3.75	7.54	2.70
Ullunkal(EDCL)	17.79	4.34	2.44	25.36	6.19	25.36	6.19	2.44	-7.57	-1.85
Iruttukanam Stage-I & II(Viyyat)	24.69	6.67	2.70	26.37	7.25	26.37	7.25	2.75	-1.68	-0.58
Karikkayam HEP(AHPL)	37.56	15.62	4.16	58.76	24.45	58.76	24.45	4.16	-21.20	-8.83
Meenvallom(PSHCL)	8.44	4.12	4.88	8.71	4.25	8.71	4.25	4.88	-0.27	-0.13
Kallar of Idukki District Panchayat	0.08	0.04	5.00	0.00	-	-	-			
Mankulam of Grama Panchayat	0.09	0.04	4.44	0.00	-	-	-			
Minar Renewable energy project Ltd	0.00	0.00		25.27	8.82	25.27	8.82	3.49	-25.27	-8.82
Deviar micro hydro project				0.13	0.05	0.13	0.05	3.85	-0.13	-0.05
Anakkampoil				24.53	9.81	24.53	9.81	4.00	-24.53	-9.81
Arippara				6.40		6.40			-6.40	
SHEP subtotal	88.65	30.84	3.48	175.52	60.81	175.52	60.81	3.46	-86.87	-29.97
Solar										
Solar IREDA	70.08	27.33	3.90	75.90	29.07	75.90	29.07	3.83	-5.82	-1.74
Solar IPP ANERT				2.33	0.63	2.33	0.63	2.70	-2.33	-0.63
THDCIL				84.65	32.69	84.65	32.69	3.86	-84.65	-32.69
CIAL Ettukudukka				1.07		1.07			-1.07	0.00
Solar IPPs	70.08	27.33	3.90	163.95	62.38	163.95	62.38	3.80	-93.87	-35.05
Total IPPs subtotal	280.70	103.78	3.70	453.90	166.10	453.90	166.10	3.66	173.20	-62.32

Annexure-16
Details of material cost variance

SI No	ARU	Rs Cr
1	Electrical Circle, Harippad	2.76
2	Electrical Circle, Nilambur	0.55
3	Electrical Circle, Sreekandapuram	0.08
4	Electrical Circle, Shornur	0.49
5	Electrical Circle, Tirur	1.48
6	Electrical Circle, Trivandrum (Urban)	1.40
7	Electrical Circle, Kollam	0.03
8	Electrical Circle, Kottarakkara	0.96
9	Electrical Circle, Kottayam	0.47
10	Electrical Circle, Pala	0.30
11	Electrical Circle, Alappuzha	0.34
12	Electrical Circle, Ernakulam	0.84
13	Electrical Circle, Thrissur	2.01
14	Electrical Circle, Palakkad	-2.26
15	Electrical Circle, Kozhikode	0.70
16	Electrical Circle, Kannur	0.32
17	Electrical Circle, Manjeri	-0.04
18	Electrical Circle, Pathanamthitta	-0.04
19	Electrical Circle, Thodupuzha	-0.66
20	Electrical Circle, Kalpetta	0.00
21	Electrical Circle, Kasargode	0.01
22	Electrical Circle, Kattakkada	1.10
23	Electrical Circle, Perumbavoor	1.61
24	Electrical Circle, Irinjalakuda	0.66
25	Electrical Circle, Vadagara	0.29
26	T S D, Angamally	0.31
	TOTAL	13.70

Annexure-17
Circle wise details of the cost of trading and manufacturing activities

SI No	ARU	Sale of fixed Assets	Insurance claims received	TOTAL
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Generation Circle, Thrissur	0.00	0.00	0.00
2	Generation Circle, Moozhiyar		0.00	0.00
	Sub total SBU-G	0.00	0.00	0.00
1	Transmission Circle, Thrissur	0.00	0.00	0.00
2	Transmission Circle, Kannur	-6.15	0.00	-6.16
	Sub total SBU-T	-6.16	-0.01	-6.16
1	Electrical Division, Angamaly	0.00	0.00	0.00
2	Electrical Division, Irinjalakuda	0.00	-0.01	-0.01
3	Electrical Division, Chalakudy	0.00	-0.08	-0.08
4	Electrical Division, Thrissur(W)	0.00	-0.04	-0.04
5	Electrical Division, Palakkad	0.00	0.00	0.00
6	Electrical Division, Vadagara	-1.42	0.00	-1.42
7	Electrical Division, Nadapuram	0.00	-0.04	-0.04
8	Electrical Division, Kannur	0.00	-0.06	-0.06
9	Electrical Division, Tirur	0.00	0.00	0.00
10	Electrical Division, Nilambur	0.00	-0.01	-0.01
	Sub total SBU-D	-1.42	-0.25	-1.67
	TOTAL	-7.57	-0.26	-7.83

Annexure-18

Summary of withdrawal credits to revenue account during the year 2021-22

Sl. No	Name	Category	Rs Cr	Order reference
1	M/s.Essen Oxidisers(P) Ltd	HTB-12/1211	0.05	SOR/AMU5/HTB-12/1211/OTS2012-13 dtd.27.5.2021
2	M/s. Malabar Cements	LCN.13/1335	0.13	SOR/AMU5/HTB-13/1335/witdrwl of exs demnd/21-22 dtd.13.9.2021
3	M/s.Hotel Geo	HTB.16/4840	0.05	SOR/AMU.5/HTB-16/4840/OTS2021/witdrwl of exs demnd dtd.22.12.2021
4	M/s.Cannanore Spinning & Weaving Mills	LCN.18/1032	2.50	BO.(FTD)No.447/2021(SOR/HTB-18/1032/2020-21 dtd.16.6.2021
5	M/s.Gopika Dairy Farm	LCN.19/3577	0.08	SOR/HTB3.&33/LCN19/3577/2021-22 dtd.9.12.2021
6	M/s.Artech Power Products	HTB.23/2369	0.12	SOR/AMU.5/HTB.23/OTS/2010-11 dtd.10.06.2021
7	M/s. J & T Crusher Works	LCN 23/6923	0.07	SOR/HTB.23/6923/2022 dtd.21.2.2022
8	M/s.Rubber Wood Processing Unit	LCN.24/8490	0.02	SOR/HTB.24/8490/2021-22 dtd.5.3.2022
9	M/s.Kallada Irrigation Project	LCN.25/4739	0.03	SOR/AMU7/HTB.25/4739/2021-22 dtd.30.11.2021
10	M/s. Malabar Wires & Allied Products	LCN 26/2623	0.01	SOR/AMU.7/HTB.26/2623/2021-22 dtd.29.10.21
11	M/s.Little Flower Hospital	LCN.27/2765	0.02	SOR/HTB.27/2765/2021-22 dtd.31.3.22
12	M/s. Plant Lipids	LCN 28/2866	0.38	No.HTB.28/2866/2022/07 dtd.31.1.2022 of SOR
13	M/s. Milma	HTB 29/14/1946	0.14	No.SOR/CU/HTB.29/14/1946/2021-22 dtd.31.5.2021
14	M/s. Guruvayur Dewasom Rest House	HTB 29/14/6023	0.01	No.SOR/CU/HTB.29/6023/2020-21 dtd.15.4.2021 of SOR
15	.M/s.Thannikudam Bhagavathy mills Ltd.	HTB 3/360	0.15	No.SOR/AMU8/HTB.3/360/2020-21/48 dtd.10.6.21 of SOR
16	M/s.Delta Aggregates & Sand(P) Ltd.	LCN 3/4438	0.08	SOR/HTB3/4438/2021-22/95 dtd.14.5.2021
17	M/s.General Hospital, EKM	LCN 30/3989	4.68	SOR/AMU.8/HTB30/3989/2021-22/78 dtd.8.2.2022
18	M/s.General Hospital, EKM	LCN 30/3989	2.69	SOR/AMU.8/HTB30/3989/2021-22/50 dtd.9.7.2021
19	M/s.A-One Milk products	LCN 30/5775	0.04	SOR/HTB3&33/LCN30/5775/2021-22/103 dtd.21.07.2021
20	M/s.Delsa Exports Pvt.Ltd	LCN 30/7399	0.04	SOR/AMU8/HTB30/7399/2021-22/51 dtd.13.7.2021
21	M/s.Grove Snacks(P) Ltd	LCN 31/3414	0.02	SOR/AMU1/HTB31/3414/2021-22/322 dtd.18.3.2022
22	Beta Granite(P) Ltd.	HTB 31/3430	0.12	SOR/HTB31/3430/billing/2021-22 dtd.30.11.2021
23	M/s.Meenachil rubber Marketting & Processing Co-op society Ltd	LCN 32/3542	0.01	SOR/AMU8/HTB32/3542/2021-22 dtd.18.6.2021
24	M/s.Rub Tech crumb rubber Factory	LCN 32/4488	0.02	SOR/AMU.8/HTB.32/4488/2021-22/70 dtd.6.12.2021
25	M/s.Balaji Modern Spinners Ltd	LCN 4/1734	0.06	SOR/AMU.4/HTB.4/1734/2021-22 dtd.31.8.2021
26	M/s.Travacore Plywood Industries	HTB 6/608	1.68	SOR/AMU.5/HTB.6/608 & 6/609/2021-22 dtd.23.7.2021
27	M/s.Excel Glass Ltd.	HTB 6/627	7.12	SOR/AMU 5/HTB6/627/OTS/2009-10 dtd. 6.2021
28	M/s.Binani Zinc Ltd	LCN 7/701	105.14	SOR/AMU VI/LCN7/701/2021-22 dtd. 28.5.2021
29	Other write offs		0.09	
			125.56	

Annexure-19

KSEB petition- Details of Miscellaneous charges from the consumers for 2021-22

NO	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	TF/RF			10.84	10.84
2	LE/SC Minimum			0.03	0.03
3	Processing fee power allocation			3.25	3.25
4	STOA Registration and application			0.22	0.22
5	STOA Open access charges			15.32	15.32
6	Energization charges			0.36	0.36
7	Misc charges-PF penalty			49.84	49.84
8	Application fee & Registration fee for grid connectivity to solar plants			9.82	9.82
	TOTAL			89.70	89.70

Annexure-20

KSEB petition- Details of Miscellaneous receipts for the year 2021-22

NO	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Rental from staff quarters	0.07	0.06	0.14	0.27
2	Rental from contractors	0.12	0.03	0.1	0.25
3	Rent from others	0.75	0.08	0.39	1.22
4	Pole rent Cable TV Operators		0.02	52.84	52.87
5	Infra dev charges and supervision	0.1	2.67	12.53	15.3
6	Commission for collection of			9.98	9.98
7	Commission Inspection Fees			0.13	0.13
8	SD Forfeited	0.02	0.01	0.08	0.11
9	Sale of trees	0.02	0.43	0.01	0.45
10	Usufructs	0.09	0.09	0	0.18
11	Penalty/LD from contractors/suppliers	3.13	5.47	5.21	13.81
12	Interest/penalty on pole rent SD			2.86	2.86
13	Outside students-project	0.01	0.13	0.14	0.27
14	Fee for providing information	0	0	0.02	0.02
15	Revenue Energy audit consultancy			0.02	0.02
16	Rent from office cum complex			0.35	0.35
17	Optical fiber cable leasing		6.31		6.31
18	Registration and Application fee-Roof Top Solar Power Plants	0.38	-	0.18	0.55
19	Service charge from consumers under Soura Project	-	-	0.04	0.04
20	Other Income from EV charging stations	-	-	0.05	0.05
22	Testing fee from contractors	0.19	0.19	0.3	0.68
23	Centage from Govt deptt/ agencies	0.01	0.02	0.17	0.19
24	Course fee received from training institution as reimbursement	0.02	0.04	0.41	0.48
25	Other Income- Annual Maintenance Charges	-	0.74	-	0.74
26	Other Income-Performance Incentive from MNRE	10.6	0.71	0.71	12.01
	Total	15.52	16.99	86.64	119.15

Annexure-21
Income from sale of bulb, scrap,tender form (Rs. Cr)

NO	Particulars	SBU G	SBU T	SBU D	Total
		(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
1	Hire Charges from Contractors	0.01	-	0.02	0.03
2	Sale Of Scrap	7.46	19.13	96.79	123.38
3	Sale of LED Bulbs	-	-	15.06	15.06
4	Sale of safety equipment	-	-	0.01	0.01
5	Sale of tender forms	0.37	0.82	2.29	3.48
6	Income from sale of Energy	-	-	0.05	0.05
	Total	7.84	19.94	114.22	142.00

Annexure-22
Miscellaneous receipts/ charges from inter-state trading of energy

Particulars	SBU G	SBU T	SBU D	Total
	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Income from POSOCO towards UI Charges from Pool Account			86.47	86.47
Income from POSOCO towards Reactive Energy charges from Pool Account			6.08	6.08
Fixed charges from the provider of Reserves Regulation Ancillary Services(RRAS) Settlement Account			4.94	4.94
Income from POSOCO towards National Pool Account(SCED)			3.93	3.93
TOTAL			101.42	101.42

Annexure-23
Provision for doubtful debts for the year 2021-22

Sl No	Age of Debtors	Amount Due	Rate	Provision required
		(Rs. Cr)	(%)	(Rs. Cr)
1	Sale of Power			
	More than 5 years	227.69	75	170.77
	Between 3 to 5 years	154.40	40	61.76
	Between 1 to 3 years	712.62	15	106.89
	Between 6 months to 1 year	301.82	5	15.09
	Less than 6 months	859.16		0.00
	Sub total	2255.68		354.51
2	Ele Duty in the ratio of sale of power			
	More than 5 years	14.25	75	10.69
	Between 3 to 5 years	9.66	40	3.87
	Between 1 to 3 years	44.61	15	6.69
	Between 6 months & 1 year	18.89	5	0.94
	Less than 6 months	53.78		0.00
	Sub total	141.19		22.19
3	Miscellaneous in the ratio of sale of Power			
	More than 5 years	3.75	75	2.81
	Between 3 to 5 years	2.54	40	1.02
	Between 1 to 3 years	11.74	15	1.76
	Between 6 months & 1 year	4.97	5	0.25
	Less than 6 months	14.15		0.00
	Others	3.46	10	0.35
	Sub total	40.60		6.18
4	Grand total of the provision for doubtful debts required = (1)+(2)+(3)			382.89
5	Provisions as on 31.03.2021			439.19
6	Balance to be provided/ reversed = (4)-(5)			-56.30

Appendix 1

List of Persons attended the public Hearing

1. Shri. M.S. Suresh EE, KSEB Ltd
2. Shri. Suresh A, EE, TRAC KSEB Ltd
3. Shri. Jayaraj V, CE, C&T, KSEB Ltd
4. Shri. M.P. Rajan, DCE, TRAC
5. Shri. Manu Senan V, AEE, TRAC
6. Shri. Girishkumar V S, FO, TRAC
7. Shri. Rajeevkumar K, CE CCN, KSEB Ltd
8. Shri. Baburaj O, CE CCS, TVM
9. Shri. Jiji Panicker EE(Hydrology), KTM
10. Shri. Shaji.S, AEE O/o the CE, TVM
11. Smt. Seema P Nair, AEE, TRAC
12. Smt. Latha S V, AEE, TRAC
13. Shri. Babukuttan Nair DAO, TRAC
14. Shri. Ajithkumar KN, EE, TRAC
15. Shri. Shine Raj, AE, KSEB
16. Smt. Biji Christudas AE, TRAC
17. Shri. Anil Rosh T.S Dy CAO, O/o FA, KSEB Ltd
18. Shri. Padmakumar N, A.FO O/o FA
19. Shri. Sujit T R, AEE, KSEB Ltd
20. Shri. Edward P Bonafide AEE, KSEB Ltd
21. Shri. Rajesh R, AEE, KSEB Ltd
22. Shri. Saji Mathew, MRF, Kottayam
23. Shri. Rajesh Kuruvilla, CUMI, DGM
24. Shri. Prabhakaran. K. V, HT&EHT Association
25. Shri. Raymant Antony, Consumer