BEFORE THE HONOURABLE KERALA STATE ELECTRICITY REGULATORY COMMISSION

At its office at C V Raman Pillai Road, Vellayambalam, Thiruvananthapuram

FILING No		
CASE No		
IN THE MATTER OF :	Turing and A	
IN THE WATTER OF :	Truing up of Accounts of Generation, Transmission and Distribution Strategic Business Units of the Kerala State Electricity Board Limited	
	(KSEBL) for the year 2020-21.	
IN THE MATTER OF :	Kerala State Electricity Board Limited,	-
	Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 4	
	APPLICANT	
	all Ow	
	CHIEF ENGINEER	
	COMMERICAL AND TARIFF	
	Kerala State Electricity Board Limited	

AFFIDAVIT VERIFYING THE APPLICATION ACCOMPANYING THE PETITION FOR TRUING UP OF ACCOUNTS OF GENERATION, TRANSMISSION, AND DISTRIBUTION FUNCTIONS OF KSEBL FOR THE YEAR 2020-21.

I, Sasankan Nair C.S, son of Sri. G.Chellappan Pillai, aged 55 years residing at Sasindu, Snehapuri Road, Karimom, Thiruvananthapuram do solemnly affirm and say as follows:

I am working as Chief Engineer Commercial & Tariff, Kerala State Electricity Board Limited, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram and the petitioner in the above matter and I am duly authorized by the Board to make this affidavit on its behalf. I solemnly affirm at Thiruvananthapuram on this the 2nd day of February 2022 that the contents of the above petition are true to my information, knowledge and belief. I believe that no part of it is false and no material has been concealed there from.

Deponent

Chief Engineer

Commercial & Tariff

Kerala State Electricity Board Limited,

Vydyuthi Bhavanam, Pattom

Thiruvananthapuram - 695 004

VERIFICATION

I, the above-named deponent, solemnly affirm at Thiruvananthapuram on this, the 2nd day of February 2022 that the contents of the affidavit are true to my information, knowledge and belief, that no part of it is false and that no material has been concealed there from.

Deponent

Chief Engineer

Commercial & Tariff

Kerala State Electricity Board Limited

Vydyuthi Bhavanam, Pattom

Thiruvananthapuram - 695 004.

Solemnly affirmed and signed before me.

T.N. OMANA

Advocate & Notary
Thiruvananthapuram Revenue District

Kerala State South India

SPECIAL

BEFORE THE HONOROUBLE KERALA STATE ELECTRICITY REGULATORY COMMISSION

In the matter of: Truing up of Accounts of Generation, Transmission and

Distribution Strategic Business Units of the Kerala State Electricity

Board Limited (KSEBL) for the year 2020-21.

Petitioner: Kerala State Electricity Board Limited,

Vydyuthi Bhavanam, Pattom, Thiruvananthapuram - 4

THE PETITIONER HUMBLY STATES THAT:

CHAPTER- 1: INTRODUCTION

- 1.1 The petitioner, Kerala State Electricity Board Limited (KSEBL), is a State Public Sector power utility company constituted by the State Government. The Assets, Rights and Liabilities of former State Electricity Board was re-vested into the company on October 31, 2013. The petitioner company had been submitting ARR, ERC & Tariff and Truing up petitions in accordance with the Tariff regulations notified by the Hon'ble Commission from time to time.
- 1.2 Hon Commission notified the second MYT Regulation for determination of Tariff in 2018 on 05.10.2018, after repealing the earlier MYT Tariff Regulation, 2014, with a four-year control period starting from FY 2018-19 till 2021-22. The regulations contain a performance-based approval scheme along with a framework for sharing Gains and Losses and specifying the controllable and uncontrollable factors.
- KSEBL had submitted MYT petition for the above-mentioned control period containing ARR & ERC and capital investment plan for the four-year control period from 2018-19 to 2021-22 in respect of its three SBUs along with tariff revision proposals for the years 2018-19 and 2020-21, before KSERC on 31.10.2018, in full compliance with the MYT Regulations 2018 notified by KSERC. Hon'ble Commission has issued orders on the MYT petition on 08.07.2019 and also pleased to revise the electricity tariff of all categories of consumers in the state along with bulk supply tariff applicable to other licensees. Even though KSEBL had requested tariff revision for two years during the control period, (2018-19 and 2020-21) Hon'ble Commission issued tariff revision orders only for one year (2019-20). Subsequently, Hon'ble Commission, as per order dated 30.03.2020 in file no. 0476/DD(T)/2020/KSERC and order dated 19.03.2021 has issued orders extending the validity of the tariff order dated 08.07.2019 till 31.03.2021 and 31.03.2022 respectively.
- 1.4 The summary of the audited Annual statement of Accounts of KSEBL for the year 2020-21 vis-à-vis the amount approved by Hon Commission in the order on the MYT petition is furnished in the Table 1.1 given below. The Statutory Auditors of KSEBL has conducted audit and issued certificate for the year 2020-21 and a copy of the audited accounts is submitted separately along with this petition.

Tak	Table-1.1: Comparison of ARR, ERC and Revenue Gap of KSEBL for 2019-20 (Rs. Cr.)							
No	Particulars	Approved*	Audited	Truing up	Difference over approval			
1	ARR	16052.40	16991.74	15403.09	649.31			
2	ERC	15107.65	15169.39	14661.19	446.46			
3	Revenue gap (1-2)	944.75	1822.35	741.90	202.85			
	*Approved Vide Tariff Order dt.08.07.2019 in OP No. 15 / 2018							

1.8 The difference between audited accounts and true-up values for 2020-21 are mainly due to difference in treatment of Return on Equity, claw back depreciation, actuarial liability etc. The matter is explained in detail in the respective paragraphs in Chapters below. Function wise segregation of expenses, revenue and Profit / loss are summarised below.

Та	Table-1.2: Business Unit wise ARR, ERC and Revenue Gap for 2019-20 (Rs Cr)						
No	Particulars SBU-G SBU-T SBU-D						
1	ARR	414.27	860.08	15346.36			
2	ERC / Transfer Value	530.65	980.07	14604.46			
3	Revenue surplus (gap) (2-1)	116.38	119.99	-741.90			

1.9 Following chapters in this petition describe the Actual Expenses and Revenue of the petitioner in FY 2020-21 and the comparison with respective approved values.

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CHAPTER – 2: TRUING-UP OF ARR OF SBU – GENERATION

2.1 The generation capacity of SBU G comprises a mix of Hydel, Thermal, solar and wind power stations. The total installed capacity as on 31.03.2021 is **2240.22 MW** of which 91.89 % is Hydel, 7.14% is Thermal, 0.97 % from solar and rest from the wind. The source wise generation capacity details are given in the table- G 1 below:

Table- G 1: Source wise Generation Capacity				
Source Installed Capacity (MW) as on 31.03.2021				
Hydel	2058.76			
Thermal	159.96			
Wind	2.03			
Solar	19.47			
Total (Generation)	2240.22			

2.2 Energy generated and purchased by the petitioner at Kerala periphery excluding auxiliary consumption and external loss is 25320.24 MU. Energy generated by the petitioner's Generation Business Unit was **7109.09 MU** (28.07%) out of which **7071.37 MU** was from own Hydro-electric Stations and remaining **37.72 MU** was generated from thermal, wind and solar stations. Source wise generation details are enclosed as Table-G2 below. Details of energy generated and expenses are furnished in paragraphs hereunder.

Tab	Table – G2: Energy Generation from own stations for FY 2020-21 (MU)						
Source	KSERC approval	Audited Accounts	Difference				
Gross Generation							
Hydro	6866.40	7071.37	-204.97				
BDPP	0	0	0				
KDPP	0	7.845	-7.845				
Wind	2.08	1.140	0.94				
Solar	47.60	28.73	18.87				
Subtotal	6916.08	7109.09	-193.01				
Aux consumption							
Hydro	70.75	31.08	39.67				
BDPP	0	0.17	-0.17				
KDPP	0	0.91	-0.91				
Wind	0.5	0	0.5				
Solar	lar 0.5		0.5				
Sub total	71.25	32.16	39.09				
4Net Generation							
Hydro	6795.65	7040.29	-244.64				
BDPP	0	-0.17	0.17				
KDPP	0	6.935	-6.935				
Wind	40.10	1.140	10.21				
Solar	49.18	28.73	19.31				
Subtotal	6844.83	7076.925	-232.095				

2.3 Hydro Generation:

- 2.3.1 Approved net hydro generation for the FY 2020-21 as per the MYT Order dated 08.07.2019 was 6795.65 **MU** whereas the actual hydro generation was 7040.29 **MU**, resulting an excess generation of 244.64 MU. This excess generation is, mainly due to higher inflow received during the financial year than anticipated, for limiting the spillage in the reservoir.
- 2.3.2 The anticipated and actual inflow during the year 2020-21 are given in the table- G 3 below:

Table – G3: The anticipated and actual inflow during the year 2020-21							
Months	Anticipated Inflow (MU)	Net Inflow (MU) (considering Spill)	Spill (MU)	Surplus (+) / Deficit (-) (MU)			
Apr-20	116.48	87.28	0	-29.2			
May-20	164.23	118.19	0	-46.04			
Jun-20	812.41	328.56	0	-483.85			
Jul-20	1465.83	778.69	0	-687.14			
Aug-20	1290.91	1930.23	417.81	639.32			
Sep-20	863.99	1281.472	244.868	417.48			
Oct-20	735.86	878.172	25.588	142.31			
Nov-20	499.94	463.642	1.918	-36.30			
Dec-20	243.09	306.39	0	63.3			
Jan-21	124.83	327.5127	0.5273	202.68			
Feb-21	79.53	123.47	0	43.94			
Mar-21	96.31	106.38	0	10.07			
Total	6493.41	6729.989	690.71	236.58			

- 2.3.2 The details of hydel generation (Including auxiliary consumption) and station wise generation details are given in Table- G4 and G5 respectively hereunder. The metered energy for auxiliary consumption does not include the energy consumption of excitation system, generator transformer (transformer losses). Presently, in hydel stations, there is no metering provision for the energy consumed by excitation systems, generating transformer (GT) and switching losses. Hence the auxiliary consumption as per audited accounts is lower than the approved values.
- 2.3.3 During public hearing of 2017-18 truing up of accounts of KSEBL, the Hon'ble commission pointed out that the accounted auxiliary consumption was much lower than the prevailing norms and directed KSEBL to explore the reasons for the same. Based on the above KSEBL has worked out a methodology to capture actual auxiliary consumption of power station and its switchyard and presented the same during the public hearing of Tariff Regulation 2021(draft). In the proposed method, 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.
- 2.3.4 However, As the accounts were finalised with the earlier methodology for computing auxiliary consumption and details pertaining to T&D/AT&C losses computed with auxiliary consumption was forwarded to ministry of power. Hence for the purpose of true up, the petitioner is only claiming the auxiliary consumption based on auxiliary panel as recorded.

	Table-G4: Hydel Generation for FY 2020-21 (MU)									
Month	Generation	Aux Consumption	Net hydro Generation	Month	Generation	Aux Consumption	Net hydro Generation			
Apr-20	525.22	2.52	522.69	Oct-20	718.71	3.21	715.5			
May-20	662.63	2.65	659.98	Nov-20	510.01	2.76	507.25			
Jun-20	524.35	2.73	521.62	Dec-20	497.76	2.8	494.96			
Jul-20	417.00	1.79	415.21	Jan-21	594.27	2.11	592.17			
Aug-20	602.12	2.97	599.15	Feb-21	615.24	2.14	613.1			
Sep-20	732.83	2.96	729.88	Mar-21	671.33	2.45	668.78			
				Total	7071.37	31.08	7040.29			

	Table-G5: Station Wise Hydel Generation for 2020-21						
No	Hydro Electric Stations	Generation (MU)	No	Hydro Electric Stations	Generation (MU)		
1	Idamalayar	290.13	23	Chembukadavu- II	5.71		
2	Idukki	2526.93	24	Urumi - I	6.43		
3	Kakkad	184.91	25	Urumi - II	4.38		
4	Kallada	49.87	26	Poozhithode	8.13		
5	Kuttiyadi+KES+KAES	754.29	27	Ranni-Perinadu	7.75		
6	KuttiyadiTail Race	8.06	28	Peechi	0.46		
7	Lower Meenmutty	6.08	29	Vilangadu	16.29		
8	Lower Periyar	537.75	30	Chimmony	8.02		
9	Maduppatty	5.04	31	Addyanpara	6.88		
10	Malampuzha	2.7	32	Barapole	28.69		
11	Malankara	31.42	33	Perunthenaruvi	13.11		
12	Neriamangalam	205.65	34	Kakkayam SHEP	9.21		
13	Neriamangalam Extention	149.88	35	Poringal screw generation	0.05		
14	Pallivasal	132.26		KSEB Hydro (TOTAL)	7071.37		
15	Panniyar	181.67		Aux Consumption (MU)	31.08		
16	Peppara	8.85		Auxiliary consumption %	0.44%		
17	Poringalkuthu	154.92					
18	PLBE	86.25					
19	Sabarigiri	1228.54					
20	Sengualm	117.52		Net Generation in MU	7040,29		
21	Sholayar	289.95			, 5 . 5.25		
22	Chembukadvu - I	3.60					

2.4 Thermal Generation:

- 2.4.1 Due to high variable costs no generation has been proposed from the thermal power plants, BDPP & KDPP for the entire control period. However, it was also submitted that the scheduling of these plants will be done in case of contingency only. Accordingly, as per the system requirements, KSEBL was forced to generate a small quantum of energy from KDPP station to the tune of 7.85 MU in the FY 2020-21. The monthly split up details of the generation from thermal sources are shown in table G6.
- 2.4.2 It is respectfully submitted that M/s BPCL has approached KSEBL with a proposal for about 390 MT of LSHS, which was lying as dead stock with them, at a price of Rs.17240 per MT. It may kindly be noted that the rate offered by M/s BPCL was beneficial to KSEBL as the market value of LSHS at that time was Rs.30960 per MT + GST @ 18% +transportation @ Rs.4 per KL (appx). The proposal was accepted by KSEBL since power could be generated at a cost less than Rs.4 per unit at the rate offered by M/s BPCL for LSHS.
- 2.4.3 The 200 MVA, 220/110 kV transformer at 220 kV Substation, Nallalam was switched off due to switching off of 220kV Areacode- Nallalam I & II feeders for TRANSGRID 2.0 works and for construction of 220kV double bus in existing Nallalam yard during the months of December 2020, January 2021 and February 2021. Nallalam and associated stations will be left with the 110kV sources from Kuttiady PH and from Areakkode SS through 110kV Chelari and Kizhissery feeders. The sources available at Kozhikode belt is from Kakkayam GS and Areakode Substation (through 110kV feeders 1NLCL and 1NLKI) only. As maximum load during peak hours met from Nallalam system is around 200MW, which included besides local load met from Nallalam SS load of Koduvally, Kunnamangalam, Kinaloor, Chevayur, Gandhi Road, Mankavu & Westhill, in order to meet the peak demand during the peak hours it was decided in the PSP meeting to schedule KDPP from 5:30 pm to 10.30 pm, 60 MW generation from KDPP machines. The generation from KDPP and some feeding/load rearrangement at Nallalam side supported the demand at Nallalam and ensured the load generation balance.
- 2.4.4 In the case of BDPP, it may be noted that, last trial run of all three engines were on 28th Feb-2020. the following auxiliary equipment consumes power even without generation as the part of up keeping of machineries as recommended by the OEM.
 - (a) Lube oil circulating pump (75Kw) 3 nos -Weekly ones
 - (b) Jacket water Circulating Pumps (75kw) 3 Nos-Weekly ones
 - (c) Auxiliary boiler and all its accessories monthly one (This Boiler was under operation continuously between November 2020 to 12th January 2021 for transporting LSHS from BDPP to KDPP)
 - (d) Compressors 3 Nos Weekly ones (30bar-2nos & 7bar-1No)
 - (e) Air Conditioning systems
 - (f) Battery chargers 175A/110V in continuous operation
 - (g) 2.5MVA Station transformers no load consumption
 - (h) Fire system pumps weekly ones
 - (i) Water Pumps, lighting system
 - (j) Slow barring of all three engines monthly ones

The auxiliary energy consumption of such devices is unavoidable for the upkeeping of generator.

Table-G6: Generation from BDPP and KDPP (MU)								
Month	BDPP	KDPP	IV	lonth	BDPP	KDPP		
Apr-20	0	0	N	ov-20	0	0		
May-20	0	0	D	ec-20	0	2.33		
Jun-20	0	0	Ja	an-21	0	4.87		
Jul-20	0	0	Fe	eb-21	0	0.64		
Aug-20	0	0	M	lar-21	0	0		
Sep-20	0	0						
Oct-20	0	0	7	Γotal	0.00	07.85		

2.5 Solar & Wind projects:

2.5.1 Hon'ble Commission has approved an energy generation of 49.68 MU from wind and solar projects for the FY 2020-21. But the actual generation is only 29.87 MU. In the case of solar generation, the projects CoD expected to be achieved during these periods are still under construction due to covid Pandemic and hence the anticipated MU was not achieved. The covid pandemic heavily affected all the projects including solar in various aspects, In the case of solar lockdown imposed during the pandemic affected the global supply chain and labour shortages. Moreover, restricting the import of solar panels from China also affected solar industry. All these factors contributed to the delay in commissioning of the project. Thus, the total generation from renewable source was reduced to 27.37 MU.

2.6 ARR&ERC of SBU- G:

2.6.1 The actual ARR, ERC for the Generation Business Unit is furnished in **Form G-P&L.** A statement showing comparison of ARR & ERC approved by the Hon Commission and actual for the year as well as true up sought along with deviations are summarized below. Item wise explanation is furnished thereafter. The detailed explanation on prudence of various expenses and segregation of various costs among the three Strategic Business Units is submitted under chapter -5 of this petition. Accordingly, a gist of reasoning is provided hereunder.

Table–G7: COMPARISON OF GENERATION SBU ARR (Rs Cr)							
		TU sought	2020-21				
No	Particulars	2019-20	Approval	Actuals	TU	Difference over approval	
1	Cost of Generation of Power	5.71		4.80	4.80	-4.80	
2	Interest & Finance Charges	115.51	179.52	133.95	115.35	64.17	
3	Depreciation	125.93	174.35	179.25	127.72	46.63	
4	O&M Expenses (Excl terminal benefits)	132.16	153.37	303.06	139.75	13.62	
5	RoE (14% of Rs 1454.53 Cr)	116.38	116.38	131.16	116.38	0.00	
6	Other Expenses & PP expenses	0.02		0.07	0.07	-0.07	
7	Exceptional Items - Flood	3.75		1.01	1.01	-1.01	
8	Provision for pay revision	15.94		27.64	24.66	-24.66	
9	Additional contribution to Master Trust	10.26			10.26	-10.26	
10	ARR	525.66	623.62	780.94	539.99	83.63	
11	Less Non-Tariff Income	10.86	37.28	8.63	9.34	27.94	
12	Net ARR (Transferred to SBU-D)	514.80	586.34	772.31	530.65	55.69	

2.6.2 It may kindly be seen that the actual net ARR exceeded approval by Rs. 185.97 Cr and the amount sought for true up in line with Tariff regulation is less by Rs. 55.69 Cr from the approved figure.

2.7 Cost of generation of power

2.7.1 Rs. 4.80 Cr was actually incurred during the year towards the cost of fuel and lubricants for generation of stations owned by KSEBL, which may kindly be approved.

2.8 Interest and Finance charges:

2.8.1. Actual Interest and finance charges for the year 2020-21 has been133.95 Cr as against the approved figure of Rs 169.26 Cr. An amount of Rs 115.35 Cr is claimed under the head in true up. The details are given below.

	Table- G 8: Interest and Finance charges (Rs Cr)						
No	Particulars	Approved	Actual	TU	Difference		
1	Interest on Outstanding Capital Liabilities	116.32	85.89	68.36	47.96		
2	Interest on GPF	10.6	5.27	5.27	5.33		
3	Other Interests				0		
4	Interest on Master Trust Bonds	35.50	35.50	35.50	0		
5	Interest on Working capital	6.84	7.29	6.22	0.62		
6	Total	169.26	133.95	115.35	53.91		

- 2.8.2 **Interest on normative loan**: Actual entitlement of normative loan as on 01.04.2018, GFA addition during 2018-19 to 2020-21, repayment during the respective years and closing normative loan as on 31.03.2021, interest on normative loan along with SBU wise segregation are computed and explained in chapter 5. Based on the computation, an amount of Rs.68.36 Cr is claimed as interest on normative loan for the year 2020-21.
- 2.8.3 **Interest on PF:** Hon Commission approved Rs 10.60 Cr towards interest on PF. But as per the audited accounts, the actual interest paid on PF was Rs.5.27 Cr, which is less than the approval by Rs.5.33 Cr. The actual interest for SBU- G amounting to Rs.5.27 Cr may kindly be approved.
- 2.8.4 Interest on bond to Master Trust: 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 KSEBL. The total liability as on 31.10.2013 was estimated at Rs.12418.72 Cr and necessary funding arrangements put in place through issue of 2 series of Bonds. Hon Commission recognized the unfunded pension liabilities as above and approved recovery of interest on KSEBL share of Bonds as per Tariff Regulations, 2018. Thus, Hon Commission approved Rs.35.50 Cr towards interest on Master Trust bonds. As detailed in chapter 5, actual share of expenses for SBU G has been Rs. 35.50 Cr, which may kindly be approved.
- **2.8.5.1 Additional contribution to Trust:** In addition to the interest on bonds actually issued, an additional amount of Rs.200 Cr (Rs. 10.26 Cr for SBU G) has been provisionally approved

towards unfunded liability. Hon'ble Commission may kindly true up the provisional amount of Rs.10.26 Cr as detailed in chapter 5.

2.8.6 Interest on working capital: Even though there was no generation proposed from the thermal stations, KSEBL was forced to use the same during contingencies to the extent of 7.85 MU. Accordingly, in the computation of working capital, the cost of fuel is taken as the cost incurred on fuel during the FY 2020-21 of KDPP alone. The detailed calculation of the same is shown below.

	Table G 9 Interest on working capital - SBUG		
Sl.No	Particulars	Amount (Rs. Crore)	
1	Cost of fuel for FY 2019-20	4.17	
2	Cost of fuel for one month	0.348	
3	Approved O&M expenses FY 2020-21	136.05	
4	O&M Expenses for new stations	2.76	
5	O&M Expenses for one month	11.915	
6	Approved GFA as on 31.03.2018	4729.74	
7	GFA addition claimed for depreciation FY 2018-19	90.06	
8	GFA addition claimed for depreciation FY 2019-20	113.16	
9	Opening GFA - Plants and Equipment for FY 2020-21	4932.96	
10	Cost of maintenance of spares at 1% of historical cost	49.330	
11	Total requirement of working Capital	61.244	
12	Base rate as on 01-04-2020 (%)	8.15	
13	Interest rate on working capital (%)	10.15	
14	Interest on working capital	6.22	

2.8.7 In view of the above, the Hon'ble Commission may kindly approve interest and finance charges as detailed above.

2.9 **O&M** of SBU-G:

2.9.1 The Hon'ble commission had approved 17.32 Cr as O&M expense for new and ongoing hydro and solar projects for 2020-21. The Perunthenaruvi SHEP was commissioned on 24.10.2017 but as per the account, the same is capitalised only on 2018-19, hence the same is not considered for finalising the operation and maintenance cost of existing station of KSEBL under SBUG. Hence the same may be considered as new project with O&M expense, as per Hon'ble commission approved O&M base level and escalation for new SHP and solar projects on tariff order dated 08/07/2019, become Rs. 1.2 Cr for the period 2020-21. For Kakkayam (3 MW), the O&M expense for the financial year 2020-21 as per the approved base level and escalation factor become Rs. 1.0 cr. Further, solar projects have been added in the financial year 2018-19 and 2019-20, 2020-21. The O&M expense for Solar Project commissioned during FY 2018-19 (3.315 MW) become Rs. 0.28Cr, for the project commissioned during FY 2019-20 become RS.0.055 Cr. For the Soura Solar project commissioned during FY 2020-21 become Rs. 0.18 Cr. Also availing O&M expense for the project Banasurasagar floating solar commissioned during FY 2020-21 become Rs.0.04Cr. For the Soura Solar project commissioned during FY 2020-21 (KSEBL investment through (a) M/s. TATA POWER

SOLAR is 1.878 MW, (b) M/s INKEL is 0. 252 MW) O&M cost claimed is Rs. 0.18 Cr. Hence the O&M cost for new projects under SBUG for the FY 2020-21 become Rs.2.76Cr.

Table – G 10 O&M expense of New Generating stations Commissioned							
Project	CoD	Capacity-	Energy-	Capital	Addl.		
		MW	MU	cost	0&M		
				(RS Cr)	cost (Cr)		
Perunthenaruvi	23.10.2017	3.6	12.17	89.97	1.2		
Kakkayam	16.07.2018	3	10.39	41.72	1		
	Solar Projects						
Solar Project (Annexure G1)	FY 2018-19	3.315			0.28		
Solar Project commissioned FY 2019-20	FY 2019-20	0.65					
(Annexure G2)					0.06		
Banasurasagar Floating solar	31.03.2019	0.5			0.04		
Soura Solar	FY 2020-21	2.13			0.18		
Total		13.195			2.76		

- 2.9.2. In addition to the normative O&M expenses as per Tariff regulations and approval granted by the Hon'ble Commission for the for existing stations in ARR & ERC for the year 2020-21 amounting to Rs. 136.05 Cr, an amount of Rs.2.76 Cr is claimed towards O&M for new stations and expenses in connection with Covid 19 (Rs.0.94 Cr) are claimed for true up as explained in chapter 5.
- 2.9.2 The actual O&M expenses of the generation Business Unit was **Rs. 330.70 Cr.** Component wise details are given in the **Table-G14** and detailed in Form G4. Hon Commission had approved **Rs 153.37 Cr** towards O&M expenses based on the norms specified in the Tariff Regulation, 2018. However, based on the commissioning of the new generating stations and duly considering expenses in connection with Covid 19, a claim of Rs. 139.75 (Rs.136.05 Cr+ Rs.2.76 Cr+ Rs. 0.94 Cr) is sought for true up for the year 2020-21.

	Table G 11 Details of O&M expenses for 2020-21						
No	Particulars	Approved	Actual	TU requirement	Difference		
1	Employee Cost		264.33				
2	A&G Expenses		43.92				
3	R&M Expenses		22.45				
4	Sub total	153.37	330.70	139.75	13.62		

- 2.9.3 Pay revision provision (Rs.24.66 Cr) may kindly be approved over and above norms as detailed in chapter 5.
- 2.9.4 Detailed explanation on the O&M expenses is furnished in Chapter 5 of this petition. It is humbly prayed that the Hon'ble Commission may be pleased to approve the O&M expense as above.

2.10 Depreciation:

2.10.1 The approved depreciation for the Generation assets for the year 2020-21 was Rs 174.35 Cr whereas the actual amount was Rs.179.25 Cr and the amount sought for truing up is Rs. 127.72 Cr.

2.10.2. Hon'ble Commission may kindly note that depreciation as per accounts has been worked out in line with IND AS and claw back depreciation was determined and credited to other Income under Note 25(b) of Annual accounts. But, as per MYT Regulation for the control period 2018-22, 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. Accordingly, allowable depreciation for SBU G has been worked out at Rs. 127.72 Cr as detailed in Chapter 5. Hon'ble Commission may kindly approve the same.

2.11 Return on Equity:

2.11.1 Hon'ble Commission approved Return on equity at Rs.116.38 Cr. Actual RoE for the Generation SBU as per audited accounts amounts to Rs. 131.16 Cr. Hon'ble Commission may kindly approve Rs.116.38 Cr as detailed in Chapter 5.

2.12 Non-Tariff Income:

2.12.1 Hon'ble Commission approved Rs.37.28 Cr under this head. Actual income earned as per accounts has been Rs.8.63 Cr. SBU G seeks to true up Rs.9.34 Cr under the head non-tariff income as detailed in chapter 5 after excluding income booked under claw back depreciation. 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. Hon'ble Commission may kindly true up Rs.9.34 Cr under this head.

2.13 Other items and Prior period expenditure:

2.13.1 Other expenses amounted to Rs.0.07 Cr for the year 2020-21, as detailed in chapter 5, which may kindly be approved.

2.14 Exceptional items:

2.14.1 Share of SBU as detailed in chapter 5 amounts to Rs.1.01 Cr. Hon'ble Commission may kindly true up the claim.

2.15 Transfer of Generation Costs:

2.15.1 ARR for SBU G sought for true up is Rs. 539.99 Cr and Non-tariff income earned is Rs. 9.34 Cr. The net expenses of SBU G transferred to SBU-D are Rs. 530.65 Cr as detailed in Table G 7. This cost is considered as the Cost of own generation in the ARR of SBU-D, which may kindly be approved.

2.16 ARR & Tariff Formats:

- 2.16.1 Formats relating to Generation Business Units as per the Tariff regulation 2018 are furnished hereafter. However, Forms G-3.1, G-6.5 to G-6.8, G-6.10 to G-7.1 which are not directly relevant or applicable or on which data are not readily available are not included in this submission.
- 2.17 The Next Chapter thereafter provides the truing up of Transmission Business Unit.

Annexure G1

Sl.No	Туре	Project	MW
1	GM	Kuttippuram-500kW COD (28/11/2017)	0.5
2	Roof top	220kV S/Sn Kundara -30kW DOC -20.09.2017	0.03
3	Roof top	110kV S/Sn Kanjikode -25kW DOC -12.05.2017	0.025
4	Roof top	220kV S/Sn Palakkad -35kW DOC -10.07.2017	0.035
5	Roof top	220kV S/Sn Edappon -30kW DOC -25.08.2017	0.03
6	Roof top	220kV S/Sn Edappon -45kW DOC -21.12.2017	0.045
7	Roof top	110kV S/Sn Kunnamangalam -20kW DOC -18.04.2017	0.02
8	Roof top	220kV S/Sn Orkattery -35kW DOC -06.09.2017	0.035
9	Roof top	220kV S/Sn Nallalam -35kW DOC -05.05.2017	0.035
10	Roof top	220kV S/Sn Brahmapuram -55kW DOC -26.04.2017	0.055
11	Roof top	110kV S/Sn Thycattussery -20kW DOC -15.12.2016	0.02
12	Roof top	220kV S/Sn Kattakkada -20kW DOC -27.09.2017	0.02
13	Roof top	110kV S/Sn Paruthippara -30kW DOC -07.10.2017	0.03
14	Roof top	220kV S/Sn Pothencode-35kW DOC -18.07.2017	0.035
15	Roof top	66kV S/Sn GIS LA Complex-25kW DOC -03.08.2017	0.025
16	Roof top	66kV S/Sn GIS Power house-25kW DOC -02.08.2017	0.025
17	Roof top	66KV S/SnVeli -20kW DOC -16.02.2018	0.02
18	Roof top	TMR Thirumala-35kW-DOC-10.07.2017	0.035
19	Roof top	VB Pathanamthita-45kW- DOC-22.06.2017	0.045
20	Roof top	220kV S/Sn Malaparamba-20kW DOC -11.12.2017	0.02
21	Roof top	VB Manjeri-30kW DOC-20.01.2018	0.03
22	Roof top	220kV S/Sn Areacode -30kW DOC -03.01.2018	0.03
23	Roof top	PTRU-Kalamassery -40kW -DOC-14.03.2018	0.04
24	Roof top	220kV S/Sn Mylatty -30kW DOC -08.02.2018	0.03
25	Roof top	220kV S/Sn Kanhirode -35kW DOC -15.02.2018	0.035
26	Roof top	110kV S/Sn Viyyur -20kW DOC -12.01.2018	0.02
27	Roof top	110kV S/Sn Pathanamthitta -25kW DOC -13.07.2017	0.025
28	Roof top	Mini Control room & Workshop Madakkathara- 45kW DOC-12.01.2018	0.045
29	Roof top	Main Control room & Workshop Madakkathara-150kW DOC-09.07.2018	0.15
30	Roof top	Ele Dvn Kollam-35kW DOC-19.03.2018	0.035
31	Roof top	Ele Dvn Kundara-25kW DOC-08.12.2017	0.025
32	Roof top	Vaidyuthi bhavanam Chathnnoor-25KW COD (27.02.2018)	0.025
33	Roof top	Vaidyuthi bhavanam Kottarakkara-80KW COD (20.02.2017)	0.08
34	Roof top	220kV S/Sn New pallom -20kW DOC -15.01.2017	0.02
35	Roof top	220kV S/Sn Ambalamughal-20kW DOC -31.07.2017	0.02
36	Roof top	Vaidyuthi bhavanam Thodupuzha-50KW COD(25.02.2017)	0.05
37	Roof top	Ele Sn. Beach-20kW DOC-06.10.2017	0.02
38	Roof top	Vaidyuthi bhavanam Thrissur-45KW COD(23.09.2017)	0.045
39	Roof top	SLDC Building-35kW- DOC	0.035
40	Roof top	Ele Sn. Kesavadasapuram-25kW DOC-06.10.2017	0.025
41	Rooftop	110kV S/S Ponnani -500 kW DOC -16.1.2019	0.5
42	Rooftop	Peerumedu	0.5
43	Rooftop	IPDS at various locations	0.445
		Total	3.315

Annexure G2

Sl.No	Туре	Project	MW
1		Kottiyam,COD 27.1.2020	0.60
2		Dam safety,Pallom	0.05

Form G 1.1 Summary of Tariff Proposal

Name of the Generating Business/Company Name of the Generating Station/Unit:

KERALA STATE ELECTRICITY BOARD LTD.

				2020-21			Remarks
S.No.	Particulars	Ref.of Form No	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
1	Capacity Charge						
1.1	Annual Fixed Charges						
1.1.1	O & M Expenses	4	153.37	330.70		164.41	
1.1.2	Depreciation	6.1	174.35	179.25		127.72	
1.1.3	Interest on Loan Capital	6.2	116.32	85.89		68.36	
1.1.4	Interest on Bonds to meet Terminal Liabilities	6.2 ©	35.5	35.50		35.5	
1.1.5	Interest on Working Capital	6.11	6.84	7.29		6.22	
1.1.6	Return on Equity	6.9	116.38	131.16		116.38	
1.1.7	Tax on ROE	6.12					
1.1.8	PF interest & Master Trust addl contribution		20.86	5.27		15.53	
	Other expenses			1.08		1.08	
1.1.9	Less: Non-Tariff income	3.2	37.28	8.63		9.34	
	Total (1.1) Annual Fixed Charges		586.34	767.51		525.86	
2	Total- Energy (variable) charges			4.80		4.8	
3	Units sold to Discoms (MU)						
4	Rate of Variable Charges						
4.1	Rate of Energy Charge from Primary Fuel (REC) _p	5.3					
4.2	Total-(2) Rate of Energy Charge ex-bus(REC) ^{3A,3B}	5.1					

Form G 1.2 Aggregate Revenue Requirement KERALA STATE ELECTRICITY BOARD LTD.

Name of the Generating Business/Company Name of the Generating Station/Unit:

(Rs. Crore)

		Reference		Remarks			
S.No.	Particulars	Form	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
A	Expenditure						
1	Variable Costs, including Fuel Cost	5.1		4.80		4.80	
2	Depreciation	6.1	174.35	179.25		127.72	
3	Interest on term Loan & Finance charges	6.2	162.42	126.66		109.13	
4	Return on Equity	6.9	116.38	131.16		116.38	
5	Tax on ROE	6.12					
6	Interest on Working Capital	6.11	6.84	7.29		6.22	
7	O & M Expenses	4	153.37	330.70		164.41	
9	Any other item (to be specified)		10.26	0.00		10.33	
	Prior Period Expenditure			1.08		1.01	
	Total- (A) Expenditure		623.62	780.94		539.99	
В	Receipts						
1	Revenue from Sale of Power (Tariff income)	3.1	586.34	772.31		530.65	
2	Non Tariff income	3.2	37.28	8.63		9.34	
3	Revenue Subsidies, Grants & Subvention from						
<u> </u>	State Govt.						
	Total- (B)		623.62	780.94		539.99	
С	ARR (A-B(2)-B(3))		586.34	772.31		530.65	

Form G 2.2 Operational Parameters - Generation KERALA STATE ELECTRICITY BOARD LTD.

Name of the Generating Business/Company Name of the Generating Station/Unit:

2020-21 Remarks **Particulars** S. No. Units Approved in Truing Up Audited **Tariff Order** requirement 5 2 6 = 5 - 413 1 3 Operational Parameters - Hydel 1 Total Capacity 2240.22 1.1 MW AFC Capacity Charge Energy charge rate NAPAF % 1.2 Actual/Projected Annual Plant Availability Factor % 1.3 Design Energy MU 1.4 1.5 Gross Generation MU 7109.09 Auxiliary Energy Consumption 1.6 0.54 Auxiliary Energy Consumption 1.7 MU 32.167 Net Generation 1.8 MU 7076.923

Form G 3.1 Revenue from Sale of Power

Name of the Generating Business/Company	KERALA STATE ELECTRICITY BOARD LTD.
Name of the Generating Station :	
2020-21	

									Rs. Crore	
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (MU)	% of total Unit Sold	Fixed Charges	Energy Charges		Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
Ι Δ 1	Revenue from sale of Electricity (as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	SBU D KSEBL		7076.92							
2	Other recoveries									
3	Revenue From Sale of Power				1					

^{*}To be submitted from (n-1)th year, nth year, (n+1)th, (n+2)th and (n+3)th year

Form G 3.2 Non-Tariff Income

Name of the Generating Business/Company Name of the Generating Station/Unit:

KERALA STATE ELECTRICITY BOARD LTD.

					Rs. Crore		
Sr.	Particulars .		2020-21				
No	T attitudes	Approved in Tariff Order	Audited	Truing Up requirement	Remarks		
1	2	3	4	5 = 4 - 3	12		
	Non-tariff income						
1	Interest on staff loans and advances		0.00	0.00			
2	Income from statutory investments		0.00	0.00			
3	Income from sale of ash/rejected coal		0.00	0.00			
4	Income from rent of land or buildings		0.61	0.61			
5	Income from sale of scrap		3.70	3.70			
6	Income from staff welfare activities		0.00	0.00			
7	Rental from staff quarters		0.05	0.05			
8	Excess found on physical verification		0.00	0.00			
9	Interest on investments, fixed and call deposits and bank balances		2.36	2.36			
10	Interest on advances to suppliers/contractors		-0.04	-0.04			
11	Income from hire charges from contractors and others		0.01	0.01			
12	Income from advertisements, etc.						
13	Miscellaneous receipts		2.65	2.65			
14	Interest on delayed or deferred payment on bills						
15	Rebate from fuel suppliers						
	Clawback of Grant						
	Total non-tariff income	37.28	9.34	9.34			

Form G 3.3 Capital Subsidies and Grants

Name of the Generating Business/Company	KERALA STATE ELECTRICITY BOARD LTD.
Name of the Generating Station /Unit:	

Rs. Crore

				Remarks	
S. No.	Particulars	Approved in Tariff Order			
1	2	3	4	5 = 4 - 3	12
1	Subsidy towards cost of Capital Asset				
2	Grant towards cost of Capitals Assets				
3	Receipts from State Govt. under any				
	scheme as grant/subsidy				
	Total	0	0	0	

Form G 4 O&M Expenses

Name of the Generating Business/Company	
Name of the Generating Station / Unit:	

KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Crore)

			2020-21						
S.No.	Particulars	Approved in Tariff Order	Audited	Normative	Truing Up requirement	Remarks			
1	2	3	4	5	6	13			
1	Employee Expenses (as per norms)		264.33						
2	Annual Contribution for Terminal Liabilities based on actuarial valuation								
3	Repair & Maintenance Expenses (as per norms)		22.45						
4	Administrative & General Expenses (as per norms)		43.92						
5	Total O&M Expenses (as per Norms)	153.37			139.75				
6	Total O&M Expenses (actuals)		330.70						

Form G 4(a) **Employee Expenses**

Name of Generating Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD. Rs. Crore

No. Particulars Referent							Rs. Crore
Comparison to Directors Comparison to Contribution of KSEB Lid towards National Pension Scheme Comparison Comparis			Referen		2020-21		Remarks
1 Basic Salary 244.14 2 Dearness Allowance (DA) 42.85 3 House Rent Allowance 1.49 4 Conveyance Allowance 0.00 0 6 Earned Leave Encashment 9.78 7 Other Allowances 3.49 8 Medical Reimbursement 0.35 0.55 0 Overtime Payment 0.36 0.36 0 0 0 0 0 0 0 0 0	S. No.	Particulars			Audited	Truing Up requirement	
Dearness Allowance (DA)	1	2	3	4	5	6 = 5 - 4	13
House Rent Allowance	1	Basic Salary			244.14		
Conveyance Allowance	2	Dearness Allowance (DA)			42.85		
Leave Travel Allowance 0.00	3	House Rent Allowance			1.49		
Earned Leave Encashment 9.78	4	Conveyance Allowance			0.00		
7 Other Allowances 3.49 8 Medical Reimbursement 0.55 9 Overtime Payment 0.36 10 Bonus/Ex-Gratia Payments 0.38 11 Interim Relief / Wage Revision 0.00 12 Staff welfare expenses 0.09 13 VRS Expenses/Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.12 10 Others 0.12 10 Gross Employee Expenses 304.52 11 Less: Expenses Capitalised 40.19 12 Net Employee Expenses 264.33	5	Leave Travel Allowance			0.00		
8 Medical Reimbursement 0.55 9 Overtime Payment 0.36 10 Bonus/Ex-Gratia Payments 0.38 11 Interim Relief / Wage Revision 0.00 12 Staff welfare expenses 0.09 13 VRS Expenses/Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 0.12 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less:	6	Earned Leave Encashment			9.78		
9 Overtime Payment 0.36 10 Bonus/Ex-Gratia Payments 0.38 11 Interim Relief / Wage Revision 0.00 12 Staff welfare expenses 0.09 13 VRS Expenses/ Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 18.5 Annual Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19	7	Other Allowances			3.49		
Bonus/Ex-Gratia Payments 0.38 11 Interim Relief / Wage Revision 0.00 12 Staff welfare expenses 0.09 13 VRS Expenses/Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation Contribution of KSEB Ltd towards National Pension 1.16 Scheme 0.12 Corss Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 Net Employee Expenses 264.33 20.00 20.	8	Medical Reimbursement			0.55		
Interim Relief / Wage Revision 0.00	9	Overtime Payment			0.36		
12 Staff welfare expenses 0.09 13 VRS Expenses/Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	10	Bonus/Ex-Gratia Payments			0.38		
13 VRS Expenses/Retrenchment Compensation 0.00 14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	11	Interim Relief / Wage Revision			0.00		
14 Commission to Directors 0.00 15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	12	Staff welfare expenses			0.09		
15 Training Expenses 0.00 16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	13	VRS Expenses/Retrenchment Compensation			0.00		
16 Payment under Workmen's Compensation Act 0.08 17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	14	Commission to Directors			0.00		
17 Net Employee Costs 303.22 18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	15	Training Expenses			0.00		
18 Terminal Benefits 0.03 18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	16	Payment under Workmen's Compensation Act			0.08		
18.1 Provident Fund Contribution 0.00 18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	17	Net Employee Costs			303.22		
18.2 Provision for PF Fund 0.00 18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	18	Terminal Benefits			0.03		
18.3 Pension Payments 0.00 18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	18.1	Provident Fund Contribution			0.00		
18.4 Gratuity Payment 0.00 18.5 Annual Contribution for Terminal Liabilities based on actuarial valuation 0.00 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	18.2	Provision for PF Fund			0.00		
Annual Contribution for Terminal Liabilities based on actuarial valuation Contribution of KSEB Ltd towards National Pension Scheme 19 Others Coross Employee Expenses 10.12 20 Gross Employee Expenses 21 Less: Expenses Capitalised 22 Net Employee Expenses 264.33	18.3	Pension Payments			0.00		
18.5 on actuarial valuation 1.16 Contribution of KSEB Ltd towards National Pension Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	18.4	Gratuity Payment			0.00		
Scheme 1.16 19 Others 0.12 20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	18.5				0.00		
20 Gross Employee Expenses 304.52 21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33					1.16		
21 Less: Expenses Capitalised 40.19 22 Net Employee Expenses 264.33	19				0.12		
22 Net Employee Expenses 264.33	20				304.52		
	21				40.19		
	22	Net Employee Expenses			264.33		

Form G 4(b) Administrative & General Expenses

Name of Generating Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

C N	D (1)	D (2020-21		Remarks	
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up requirement		
1	2	3	4	5	6 = 5 - 4	13	
1	Rent Rates & Taxes			1.02			
2	Insurance			0.76			
3	Telephone & Postage, etc.			0.14			
4	Legal charges			0.61			
5	Audit Fees			0.03			
6	Consultancy charges			0.05			
7	Other Professional charges			0.85			
8	Conveyance			3.69			
9	Vehicle Running Expenses Truck / Delivery Van			0.05			
10	Vehicle Hiring Expenses Truck / Delivery Van			0.01			
11	Electricity charges			0.00			
12	Water charges			0.01			
13	Entertainment			0.08			
14	Fees & subscription			0.25			
15	Printing & Stationery			0.29			
16	Advertisements, exhibition publicity			0.06			
17	Contribution/Donations			0.11			
18	Training expenses			0.17			
19	Miscellaneous Expenses			0.30			
20	DSM activities			0.00			
21	SRPC expenses			0.18			
22	Sports and related activities			0.07			
23	Freight			1.32			
24	Purchase Related Advertisement Expenses			0.80			
25	Bank Charges			0.00			
26	Office Expenses			17.14			
27	License Fee and other related fee			0.51			
28	Cost of services procured			0.00			
29	Outsourcing of metering and billing system			0.00			
30	V-sat, Internet and related charges			0.78			
31	Security arrangements			0.00			
32	Books & periodicals			0.03			
33	Computer Stationery			0.00			
34	Others			14.86			
	Others- Other Purchase related Expenses			0.09			
	Others - Expenditure inconection with distribution of			3.05			
25	LED Gross A&G Expenses						
35	•			44.25			
36	Ele. Duty u/s 3(I), KED Act			0.00			
37	Less: Expenses Capitalised			0.32			
38	Net A&G Expenses			43.92			

Form G 4(c) Repair & Maintenance Expenses

Name of Generating Busin **KERALA STATE ELECTRICITY BOARD LTD.**

Rs. (Crore
-------	-------

			202	0-21		Remarks	
Particulars	Reference	Approved in Tariff Order Audited		flood (Exceptional Items)	Truing Up requirement		
2	3	4	5		6 = 5 - 4	13	
Plant & Machinery			12.49	0.12	12.62		
Buildings			2.76	0.00	2.76		
Civil Works			3.55	0.57	4.12		
Hydraulic Works			2.74	0.20	2.95		
Lines & Cable Networks			0.00	0.12	0.11		
Vehicles			0.66		0.66		
Furniture & Fixtures			0.03		0.03		
Office Equipment			0.23		0.23		
Gross R&M Expenses			22.45	1.01	23.47		
Less: Expenses Capitalised							
Net R&M Expenses			22.45	1.01	23.47		

Form G 5.1 Energy Charges for Thermal Generation

Name of the Generating Business/Company Name of the Generating Station/Unit:

KERALA STATE ELECTRICITY BOARD LTD.

ime of the	Generating Station/Unit:		
			2020
S No	Particulare	Limite	

		2020-21				Remarks	
S.No.	Particulars	Units	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
1	Operational Parameters						
1.1	Total Capacity	MW					
1.2	Availability	%					
1.3	PLF	%					
1.4	Gross Generation	MU					
1.5	Auxiliary Energy Consumption	%					
1.6	Auxiliary Energy Consumption	MU					
1.7	Net Generation	MU					
1.8	Heat Rate	kcal/kWh					
2	Fuel Parameters (for each primary and secondary fuel)						
2.1	Gross Calorific Value						
2.1.1	Fuel 1	kcal/unit					
2.2	Landed Fuel Price per unit (Please specify the fuel)						
2.2.1	Fuel 1	Rs/unit					
3	Fuel Consumption and Heat Contribution (for each fuel separately)						
3.1	Specific Fuel Consumption						
3.1.1	Fuel 1	unit/kWh					
3.2	Total Fuel Consumption						
3.2.1	Fuel 1	unit					
3.3	Heat Content (each fuel separately)						
3.3.1	Fuel 1 (2.1.1 x 3.1.1)	Million kcal					
	Total Heat Content						
4	Total Fuel Cost						
4.1.1	Fuel 1 (2.2.1 x 3.2.1)	Rs Crore					
7.1.1	Total Fuel Cost	Rs Crore					
	Total ruel Cost	KS Crore					
5	Other Charges and Adjustments						
5.1.1	Other Charges and Adjustments Other Charges (pl. specify details)	Rs Crore					
5.1.2	Other Adjustments (Pl. specify details)	Rs Crore					
	Total Other Charges and Adjustments	Rs Crore					
6	Total Cost (4+5)	Rs Crore		4.8		4.8	
7	Cost of Generation per unit (at Generation Terminal) (6/1.4)	Rs/kWh					
8	Energy Charge per unit (ex-bus) (6/1.7)						
8.1.1	Fuel 1	Rs/kWh					
	Total(9)	Rs/kWh					

Form G 6.1 Fixed assets & provisons for depreciation

Name of the Generating Business/Company Name of the Generating Station :

KERALA STATE ELECTRICITY BOARD LTD.

	ŭ										
			Year (n-	-1)*						(Rs Crore)	
			Gross fixed assets for 2020-21				Provisions for		l		
S.		Rate of								Net fixed assets	
٠.	Particular	14446 01		Danes I to billion		C			Communitations of	at the beginning	at the and of

		D. C	Gross fixed assets for 2020-21				Provisions for depreciation				Not Conditions	N. F. 14
S. No.	Particular	Rate of depreciation %	At the beginning of the year	Additions during the year	Decom. Liability provided for the year	At the end of the year	Cumulative upto the begining of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year		Net Fixed Asset at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights	10.1	1504.65	48.76	0.00	1553.41		0.00			1504.65	1553.41
1A	Hydraulic works	10.3	1401.39	2.92	0.00	1404.32	774.36	66.56		840.92	627.03	563.40
2	Building & Civil works of Power plant	10.2+10.4	615.41	7.59	0.01	623.01	277.92	19.22		297.15	337.48	325.87
3	Plant & machinery including sub-station equipments	10.5	13524.82	63.16	0.07	13588.05	1995.73	91.21		2086.94	11529.09	11501.11
4	Communication equipment	10571,10572	3.49	0.38	0.00	3.86	3.43	0.00		3.43	0.06	0.44
5	Vehicles	10.7	10.19	0.08	0.00	10.27	7.52	0.67		8.19	2.67	2.09
6	Furniture & fixtures	10.8	6.20	0.16	0.00	6.36	3.71	0.31		4.02	2.49	2.34
7	Office Equipments	10.9	4.92	0.52	0.00	5.44	3.18	0.64		3.81	1.74	1.62
8	Capital spares				0.00	0.00	0.00	0.00		0.00	0.00	0.00
9	IT Equipments	10.905	6.99	0.08	0.00	7.07	5.96	0.00		5.96	1.03	1.12
11	Any other items (Lines, Cable Network etc.)	10.6	8.37	0.26	0.00	8.64	5.51	0.33		5.84	2.86	2.80
	Total (1) to (11)		17086.45	123.92	0.08	17210.44	3077.33	178.92	0.00	3256.25	14009.12	13954.19

Form G 6.2(a)

Calculation of Weighted Average Rate of Interest on Actual Loans

Name of Generating Business/Company Licensed Area of Supply KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Cr) 2020-21 S.No Particulars (specify items) Remarks **Approved in Tariff** Truing Up Audited requirement Order 12 1 3 4 5 = 4 - 3SEPARATE SHEET ATTACHED Loan 1 Gross Loan -Opening Cumulative repayments of Loans upto previous year Net loan-Opening Add: Drawal(s) during the Year Less: Repayment (s) of Loans during the year Net loan - Closing Average Net Loan viii Rate of Interest on Loan on annual basis Interest on loan X Loan repayment effective from (date to be indicated) 2 **Loan 2** Gross Loan -Opening Cumulative repayments of Loans upto previous year

iii.	Net loan-Opening		
iv.	Add: Drawal(s) during the Year		
v.	Less: Repayment (s) of Loans during the year		
vi	Net loan - Closing		
vii	Average Net Loan		
viii	Rate of Interest on Loan on annual basis		
ix	Interest on loan		
х	Loan repayment effective from (date to be indicated)		
3	Loan 3		
	•••		
	•••		
4	Total Loan		
i.	Gross Loan -Opening		
ii.	Cumulative repayments of Loans upto previous year		
iii.	Net loan-Opening	1275.61	
iv.	Add: Drawal(s) during the Year	426.77	
v.	Less: Repayment (s) of Loans during the year	349.52	
vi	Net loan - Closing	1352.86	
vii	Average Net Loan	1314.24	
viii	Interest on Loan	129.77	
	Weighted average Rate of Interest on Loans	9.87%	

TERM-LOAN

SL NO	NAME OF THE FINANCIAL INSTITUTION	Net Loan - Opening	(IND Adj) 2019-20	Gross loan- Opening - 01/04/2020	Add: Drawal(s) during the Year	Less: Repaymen t (s) of Loans during the year	Gross loan - Closing - 31/03/2021	CFL	Net loan - Closing - 31/03/2021	Average Net Loan	Rate of Interest on Loan on annual basis	Interest on loan	Loan repayment effective from (date to be indicated)
A	SECURED LOANS TERM LOANS												
	Loan from REC-Thottiyar Gene. Scheme	71.45	10.12	81.58	0.00	81.58	0.00	0.00	0.00		11.29-12.03%	8.88	
	Special Loan Assistance from REC	331.51	29.91	361.42	0.00	51.70	309.72	28.16	281.57		9.08-10.65%	34.64	
	Loan from REC - Peringalkuthu. Scheme	72.95	0.00	72.95	8.92	0.00	81.87	0.00	81.87		10.06-10.16%	8.06	
	Loan from REC – Bhoothathankettu Scheme	114.70	0.00	114.70	0.00	0.00	114.70	0.00	114.70		10.2%	11.65	
	Loan from SOUTH INDIAN BANK-Barapole SHEP	68.99	6.00	74.99	0.00	6.00	68.99	7.20	61.79		9.8%	7.07	
	Loan from REC for the DDG Scheme	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.14		11.0%	0.02	
	Loan from RIDF of NABARD Banasurasagar SPVP	0.45	0.00	0.45	0.00	0.00	0.45	0.00	0.45		6.3%	0.03	
	Loan from RIDF of NABARD Upper Kallar SHEP	3.61	0.00	3.61	0.00	0.00	3.61	0.00	3.61		6.3%	0.23	
	Loan from SBI	164.72	19.02	183.73	83.39	21.04	246.08	27.32	218.76		8.0%	16.86	
	Special Loan Assistance from PFC	229.93	18.39	248.33	0.00	31.88	216.45	17.32	199.13		9.1%	26.31	
	Loan from PFC GEL Kakkayam	17.83	1.37	19.21	0.00	1.37	17.84	1.37	16.47		10-10.25%	3.02	
	Loan from PFC GEL Perumthenaruvi	32.05	2.56	34.61	0.00	2.57	32.04	2.56	29.48		10.3%	2.21	
	Kerala Financial Corporation				94.17	0.83	93.34	9.91	83.43		9.0%	4.22	
	Medium Term Loan Kerala Financial Corporation				94.17	1.88	92.29	22.60	69.69		8.0%	0.63	
	SUB-TOTAL	1108.20	87.38	1195.58	280.79	198.85	1277.53	116.44	1161.09			123.82	
В	UNSECURED LOANS TERM LOANS												
	From Banks								75.0				
	Loans - Short term loan from Bank of Baroda	80.03		80.03	145.98	150.67	75.34	0.00	75.34		7.9%	5.95	
	SUB-TOTAL	80.03	0.00	80.03	145.98		75.34	0.00	75.34			5.95	
	TOTAL	1188.23	87.38	1275.61	426.77	349.52	1352.86	116.44	1236.42			129.77	

TOTAL UNSECURED LOAN AS PER BS

С	Bond				9129.73		

Form G 6.2(b)

Calculation of Interest on Normative Loan

Name of Generating Business/Company Licensed Area of Supply

KERALA STATE ELECTRICITY BOARD LTD.

S.No		2020-21						
	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement				
1	2	3	4	5 = 4 - 3				
1	Gross Normative loan - Opening							
2	Cumulative repayment of Normative Loan upto previous year							
3	Net Normative loan - Opening		1275.61					
4	Increase/Decrease due to ACE/de-capitalization during the Year		426.77					
5	Repayments of Normative Loan during the year		349.52					
6	Net Normative loan - Closing		1352.86					
7	Average Normative Loan		1314.24					
8	Weighted average Rate of Interest of actual Loans		9.87%					
9	Interest on Normative loan		129.77					

Form G 6.2 (c)

Interest on Bonds to meet Terminal Liabilities

Name of Generating Business/Company

KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Cr)

S.No					
	Particulars (specify items)	Approved in Tariff Order	Normative	2,936.36 9%	Remarks
1	2	3	4	5 = 4 - 3	12
Α	Bond Series 1				
1	Value of Bond		6,922.40	6,922.40	
2	Rate of Interest on Bond		10%	10%	
3	Interest on Bond		692.24	692.24	
В	Bond Series 2				
4	Value of Bond		2,936.36	2,936.36	
5	Rate of Interest on Bond		9%	9%	
6	Interest on Bond	35.50	35.50	35.50	Share of SBU G
С	Bond Series 3				

Form G 6.4 Consilidated report on additions to Fixed Assets during the year

Name of the Generating Business/Company: KERALA STATE ELECTRICITY BOARD LTD.

Name of the Generating Station :

			2020-21 (Actuals/audited)									
Sr.		Asset										
No.	Asset Description	Code	Cost	Interest	Finance Charges	Pre- Operative expenses	Exchange fluctuations	Total	Date of commissioning			
1	2	3	4	5	6	7	8	9	10			
01.	Land & Land Rights	10.1	48.76					48.76				
02.	Buildings	10.2						0.00				
03.	Hydraulic Works	10.3	2.92					2.92				
04.	Other Civil Works	10.4	7.59					7.59				
05.	Plant & Machinery	10.5	63.54					63.54				
06.	Lines, Cable, Network etc.	10.6	0.26					0.26				
07.	Vehicles	10.7	0.08					0.08				
08.	Furniture & Fixtures	10.8	0.16					0.16				
09.	Office Equipments	10.9	0.60					0.60				
	TOTAL		123.92					123.92				

Form G 6.9 Return on Equity/Return on Net Fixed Assets

Name of the Generating Business/Company:	KERALA STATE ELECTRICITY BOARD LTD
Name of the Generating Station :	

Rs. Crore

				Remarks			
S.No.	Particulars	Reference	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
1	Equity at the beginning of the year				831.27		
2	Capitalisation						
3	Equity portion of capitalisation						
4	Equity at the end of the year				831.27		
	Return Computation						
5	Return on Equity at the beginning of the year	14%*(1)	116.38		116.38		
6	Return on Equity portion of capitalisation (on prorata basis)	14%*(3)/2			0		
7	Total Return on Equity	(5)+(6)	116.38	131.16	116.38	116.38	

Form G 6.11 Interest on Working Capital

Name of the Generating Business/Company Name of the Generating Station :

KERALA STATE ELECTRICITY BOARD LTD.

	Particulars		Rs. Crore			
S. No.		Approved in Tariff Order	Audited	Normative	Truing Up requirement	Remarks
1	2	3	4	5	6	13
1	Fuel cost (as per norms)		4.80			
2	Liquid fuel stock (as per norms)		-14.44			
3	O & M expenses (as per norms)		330.70			
4	Maintenance Spares (as per norms)					
5	Receivables (as per norms)		-2630.82			
	Total Working Capital		-2309.76			
	Rate of Interest (as per norms)					
	Interest on Working Capital	6.84	7.29	6.22	6.22	

Form G 6.12 Tax on ROE

Name of the Generating Business/Company: Name of the Generating Station:

KERALA STATE ELECTRICITY BOARD LTD.

Rs. 2020-21 S. No. **Particulars** Remarks Approved in Tariff Truing Up Audited Order requirement 5 = 4 - 310 1 2 4 A) Advance Tax assessed & deposited on for Quarter I & deposited on 15 th June. a) for Quarter II & deposited on 15 th Sept. b) for Quarter III & deposited on 15 th Dec. c) for Quarter IV & deposited on 15 th March. d) Total---(A) 0 0 0

							Form G	6.13						
						Ir	nflow Review (Water Year)						
	Name of t	he Generating	Business/Com	npany:						-		KERALA STA	TE ELECTRICITY	BOARD LTD.
Sr. No.	Year	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1996-97	614.190	1519.380	1020.470	834.300	735.430	302.990	210.410	127.060	77.630	86.200	83.700	115.960	5727.720
2	1997-98	150.100	1232.260	1049.010	658.180	739.670	922.500	476.930	185.600	113.000	72.740	77.050	108.600	5785.640
3	1998-99	678.700	1476.490	2357.600	1036.910	1243.800	694.700	457.530	157.270	118.000	94.110	96.030	421.890	8833.030
4	1999-00	1046.460	1416.490	973.600	441.590	1198.430	451.570	197.190	130.380	148.000	82.900	104.000	98.600	6289.210
5	2000-01	835.070	946.100	2199.130	789.140	502.590	227.580	198.970	153.050	80.740	47.500	162.210	127.200	6269.280
6	2001-02	1062.210	1765.900	1079.950	501.100	865.140	712.890	231.180	116.030	86.990	81.260	71.060	161.750	6735.460
7	2002-03	489.760	750.900	1255.860	322.190	585.440	391.140	134.130	78.510	63.040	63.210	52.630	81.220	4268.030
8	2003-04	304.740	748.030	916.010	376.530	983.430	325.980	160.000	91.920	78.810	39.280	58.560	426.200	4509.490
9	2004-05	1401.610	986.940	1436.860	510.740	716.440	464.390	208.730	155.270	70.420	72.180	109.300	99.290	6232.170
10	2005-06	569.380	2261.040	1252.980	1475.760	715.880	714.760	442.330	217.850	110.070	170.310	154.370	434.290	8519.020
11	2006-07	725.230	1596.830	1117.810	963.410	1009.560	907.560	253.210	164.440	90.930	111.600	123.390	113.140	7177.110
12	2007-08	1002.940	2797.480	1499.210	1700.290	1095.250	596.390	283.090	140.524	126.850	214.100	180.180	132.230	9768.534
13	2008-09	433.630	1144.880	1358.870	962.980	629.358	297.351	169.300	69.864	44.425	78.414	65.672	115.774	5370.518
14	2009-10	330.869	2023.700	779.469	1147.562	898.700	642.910	242.242	128.347	76.470	81.110	102.159	128.296	6581.834
15	2010-11	800.020	1407.075	1175.575	818.336	921.176	651.470	364.200	167.411	122.624	103.110	208.129	136.990	6876.116
16	2011-12	1236.187	1318.659	1654.185	1192.892	592.550	587.895	262.645	127.970	88.150	90.260	132.780	94.840	7379.013
17	2012-13	340.070	726.860	893.790	744.060	435.670	245.570	102.811	53.308	35.017	76.890	75.527	65.056	3794.629
18	2013-14	1642.940	2392.970	1895.437	1164.500	634.760	441.392	213.842	120.227	68.197	96.717	88.400	180.090	8939.472
19	2014-15	583.250	1678.100	1798.890	1034.020	843.430	540.030	273.580	143.588	79.231	113.477	241.440	255.403	7584.439
20	2015-16	1053.951	1106.827	829.560	614.380	619.180	605.991	420.659	148.697	92.364	86.872	90.835	107.889	5777.203
21	2016-17	582.873	1105.091	748.035	393.751	267.585	152.933	81.911	57.873	40.627	94.900	70.596	107.458	3703.633
22	2017-18	569.72	633.92	1323.47	1269.17	706.25	487.89	326.86	110.03	68.37	113.65	122.90	242.45	5974.67
23	2018-19	1479.306	2499.747	573.390	416.872	599.289	338.191	161.654	87.770	69.704	78.240	85.623	113.400	6503.186
24	2019-20	165.19	695.75	1950.17	1082.66	766.14	473.20	242.43	131.00	58.57	70.38	87.28	118.19	5840.960
25	2020-21	328.56	778.69	1930.23	1281.472	878.172	463.642	306.39	327.5127	123.47	106.38	127.96	697.22	7349.699
	Average	737.078	1400.404	1322.782	869.312	767.333	505.637	256.889	135.660	85.268	93.032	110.871	187.337	6471.603

Form G 6.15
Maintenance Schedule and net hydro capacity available (MW)

Name	of the	Generating	Business/Company:
Minana	of the	Comonation	Chatian

KERALA STATE ELECTRICITY BOARD LTD.

Name of the Generating Station :

																Ks. Clufe
				Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Remarks
Sr. No.	Stations	No. of units and unit size	Installed Capacity under operation (MW)					Main	tenance S	Schedule	(MW)					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Neriyamangalam Power House				17.5								17.5			
2	Neriyamangalam Power House											17.5	17.5			
3	NES													2	25	
4	PANNIAR HEP													16	5.2	
	Sengulam											12				
	Pallivasal			7.	.5					7	.5		7	.5		
	Moozhiyar					5	5	55			60 + 55				U#6 shut down maint, U2, U3 under AM	
	Idukki			130	130	130		13	30	1:	30	130	130	130		U#6 forced outage, U#2 Planned R&M, annual maintenance
	Average	<u> </u>														

Form G 8

Name of Generation Business/Company

Deviation AnalysisKERALA STATE ELECTRICITY BOARD LTD.

Year: 2020-21

(Rs. Crore)

S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
A	Expenditure						
1	Variable Costs, including Fuel Cost		4.80				
2	1) Depreciation	174.35	179.25				
3	Interest on term Loan & Finance charges	162.42	126.66				
4	Return on Equity	116.38	131.16				
5	Tax on ROE						
6	Interest on Working Capital	6.84	7.29				
7	O & M Expenses	153.37	330.70				
9	Additional contribution to Master Trust	10.26					
	Other expenses		1.08				
	Prior Period Expenditure						
	Total (A) Expenditure	623.62	780.94				
В	Receipts						
1	Revenue from Sale of Power (Tariff income)	586.34	772.31				
2	Non Tariff income	37.28	8.63				
3	Revenue Subsidies, Grants & Subvention from State Govt.						

Form G P&L

Profit & Loss Account
Name of Generation Business/Company KERALA STATE ELECTRICITY BOARD LTD.

S.No.	Particulars	Ref	Previous Year	Previous Year	Remarks
		100	2020-21	2019-20	- Temarko
1	2	3	4	5	6
	LINCOME				
	a. Revenue from Sale of Power		771.60	613.28	
	b. Revenue Subsidies and Grants				
	c. Other Income		9.34	16.30	
	Total (a+b+c)		780.94	629.58	
	II. EXPENDITURE				
	a. Repairs and Maintenance.		22.45	25.48	
	b. Employee Cost		304.52	223.75	
	c. Administration and General Expenses		44.25	26.34	
	d.Depreciation		178.92	185.71	
	1). Amortisation of Intangible Assets		0.33	0.33	
	e.Interest and Finance charges		177.83	153.08	
	f. Subtotal (a+b+c+d+e)		728.31	614.68	
	g. Less Capitalised Expenses:				
	- Interest & Finance Charges		43.88	57.51	
	- Other Expenses		40.52	69.76	
	h. Other Debits		0.07	0.02	
	Change in fair valuation and other adjustments				
	I. Extra Ordinary Items		1.01	3.75	
	j.Fuel cost (Generation of Power)		4.80	5.71	
	Total Expenditure (f-g+h+i+j)		649.79	496.89	
	III. Profit/(Loss) before Tax (I-II)		131.15	132.69	
	IV. Provision for Income Tax				
	V.Net Prior period credits (Charges)				
	V.(a). Other Comprehensive Income		-31.25	-26.90	
	VI. Surplus (Deficit)		99.90	105.79	
	VII. Net Assets at the beginning of the year (Less consumer's Contribution)		14009.12	14073.59	
	VIII. Rate of Return (VI/VII)				

Form G BS

Balance Sheet at the end of the year

Name of Generation Business/Company KERALA STATE ELECTRICITY BOARD LTD.

S.No.	Particulars	Ref	Previous Year	Previous Year		Remarks
5.110.	1 atticulars	Kei	2020-21	2019-20	2018-19	Kemarks
1	2	3	4	5	5	6
	Sources of Funds:					
	(A)Capital Funds:					
	Share Capital (Govt. equity)		831.27	831.27	831.27	
	Reserves & Surplus		839.03	739.12	600.69	
	Total (A)		1670.30	1570.39	1431.96	
	(B) Loan from State Government					
	Loan from others :					
	-Secured		10290.82	10264.51	10685.53	
	-Unsecured		75.34	80.03	85.30	
	Total (B)		10366.15	10344.54	10770.83	
	(C) Contribution, grants & subsidies towards cost of capital assets		62.24	72.78	76.36	
	Provident Fund		114.79	105.66	121.55	
	Terminal Benefit Fund		375.51	286.40	406.09	
	Borrowings for working capital					
	Long term Provision & Other Non current Liabilities		-852.58	-1189.45	1385.19	
	Grand total of sources of funds (A+B+C)		11736.41	11190.32	14191.98	

*Application of Funds:			
A) Fixed assets			
a) Gross fixed assets	17210.44	17086.45	16965.21
b) Less accumulated depreciation	3256.25	3077.33	2891.62
c) Net Fixed assets((a)-(b))	13954.19	14009.12	14073.59
d) Capital works in progress	1722.30	1584.50	1247.39
e) Assets not in use			
f) Deferred costs	0.00	0.00	108.40
g) Intangible assets	1.42	1.75	0.70
h) Investments	8.85	9.00	9.52
Other Non current assets	145.10	172.19	44.70
Total (c) $+(d)+(e)+(f)+(g)+(h)$	15831.86	15776.56	15484.30
B)Subsidy receivable from Government			
Contribution receivable from State Government towards			
pension liability	98.87		190.86
C) Net Current Assets			
(1) Current assets, loans and advances			
a) Inventories*	-14.44	8.68	41.63
b) Receivables against Sale of Power			
c) Cash & bank balances	18.39	30.97	38.90
d) Loans and advances			9.93
e) Sundry receivables	-2630.82	-2957.27	56.90
Total (C)(1)	-2626.87	-2917.62	147.36
(2) Current liabilities & provisions			
a) Borrowings for working capital	239.61	411.61	492.66
b) Payments due on Cap. liabilities			
c) Other current liabilities	1327.84	1257.01	1137.88
Total (C)(2)	1567.45	1668.62	1630.54
Net Current Assets (C) [(C(1)) - (C(2))]	-4194.32	-4586.24	-1483.18
Grand Total of Application of funds (A)+(B)+(C)	11736.41	11190.32	14191.99
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Form G CF

Cash Flow for the year
Name of Generation Business/Company

KERALA STATE ELECTRICITY BOARD LTD.

S.No.	Particulars	Ref	Previous Year 2020-21	Previous Year 2018-19	Remarks
1	2	3	4	5	6
_		3	7	3	
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants		99.90	105.79	
	Less: Income Tax Payment during the year				
	: Other Comprehensive Income		-31.25	-26.90	
	Total of (a)		131.15	132.69	
	b. Add: Debits to rev. account not requiring cash Flow:				
	I) a) Depreciation		178.92	185.71	
	b) Depreciation on IND As Adj		0.00	0.00	
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets		0.33	0.33	
	iv) Investment Allowance Reserve				
	v) Others, if any		336.87	-2574.64	
	Total of (b)		516.12	-2388.60	
	c. Less: Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)		0.00	0.00	
	Net Funds from Earnings (a)+(b)-(c)		647.27	-2255.91	

S.No.	Particulars	Ref	Previous Year	Previous Year	Remarks
5.110.	1 atticulars	Kei	2020-21	2018-19	Remarks
2	Contributions, Grants & Subsidies to cost of Capital Assets		-10.54	-3.58	
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3)		636.73	-2259.50	
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories		-23.12	-32.95	
	ii) Receivables against sale of power				
	iii) Loans and Advances		0.00	-9.93	
	iv) Sundry receivables		326.45	-3014.17	
	Total of (a)		303.33	-3057.05	
	(b) Increase/(Decrease) in Current liabilities				
	I)Borrowings for working Capital		-172.00	-81.05	
	ii) Other current liabilities		70.83	119.14	
	iii) Others (Increase in Reserve + payment due on cap.liab)		-31.24	5.74	
	Total of (b)		-132.40	43.83	
	Net Increase/(Decrease) in working Capital (a)- (b)		435.73	-3100.88	
7	Net Funds from operations before subsidies and Grants (5-6)		201.00	841.38	
8	Receipts from revenue subsidies and Grants		-98.87	190.86	
	Total Net Funds from operations including subsidies & Grants (7+8)		102.13	1032.24	
II.	Net increase/ decrease in Capital liabilities				
	a). Fresh borrowings				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		426.77	732.89	
	Total of (a)		426.77	732.89	

S.No.	Particulars Particulars	Ref	Previous Year	Previous Year	Remarks
5.140.	Tattettais	KCI	2020-21	2018-19	Kemarks
	b) Repayments :				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		405.16	1159.18	
	Total of (b)		405.16	1159.18	
	Net Increase/(Decrease) in Capital liabilities (a) - (b)		21.61	-426.28	
III.	Increase/(Decrease) in equity Capital		0.00	0.00	
IV.	Total Funds available for Capital Expenditure (I+II+III)		123.74	605.96	
\mathbf{v}	Funds utilised on Capital Expenditure				
	a)On projects		261.80	458.34	
	b)Advance to Suppliers & Contractors				
	c) Intangible Assets		0.00	1.39	
	d) Deferred Cost		0.00	-108.40	
	e) Long Term Loans and Advances		-27.09	127.49	
	Total of V (a+b+c+d)		234.71	478.83	
VI	Net Increase/(Decrease) in Government contribution				
VII	Net Increase/(Decrease) in Terminal benefit fund		89.11	-119.69	
VIII	Net Increase/(Decrease) in Provident fund		9.13	-15.89	
IX	Net Increase/(Decrease) in investments		-0.15	-0.52	
X	Net Increase /(Decrease) in cash / bank balance (IV - V- VI-IX)+ (VII+VI	III)	-12.58	-7.93	
XI	Add opening cash & Bank balance		30.97	38.90	
XII	Closing Cash & Bank balance		18.39	30.97	

CHAPTER 3: TRUING UP OF ARR OF SBU - T & SLDC FOR 2020-21

As per the second Transfer Scheme, SBU-T is entrusted with the construction of 33KV and above system of KSEBL. The voltage level wise capacity of Transmission system and number of substations and transmission lines within the State as on 31st March, 2021 is summarized below:

	Table-T1: Transmission	System statistics	
No	Item	Unit	Quantity (as on 31-3-2021)
1	400 kV Lines	Ckt-km	1329.58*
2	220 kV Lines	Ckt-km	3141.40
3	110 kV Lines	Ckt-km	5030.86
4	66 kV Lines	Ckt-km	2004.79
5	33KV lines	Ckt-km	2108
6	400 kV Substations	Nos	5* + 1
7	220 kV Substations	Nos	27
8	110 kV Substations	Nos	173
9	66KV Substations	Nos	60
10	33 KV Substations	Nos	160
11	Total transmission capacity (MVA)	MVA	21304.60
	*PGCIL owned + KSEBL owned Madakkathara-		
	Malaparamba-Areekode line (177 ckt-km)		

The SBU-T handle total energy sold to consumers and licensees within the state, open access power drawn by the consumers and the quantum of energy sold outside the state. The ARR, ERC and Transfer cost of SBU-T are furnished as per Form T P&L and Form T1. Transfer price for SBU T as per accounts has been Rs. 1329.45 Cr against approval of Rs. 1162.47 Cr. Net ARR in line with the Tariff Regulation sought for true up in this petition amounts to Rs.980.07 Cr, which is less than Rs.182.40 Cr approved as detailed in table below. Item wise explanation is furnished thereafter.

	TABLE – T2: ARR OF TRANSMISSION BUS	INESS UNIT (SBU-T) & SL	DC for 2020-21	(Rs Cr)
No	Particulars	Approved	Actual	Truing up requirement	Variation from approval
1	Interest & Finance Charges	263.65	127.77	138.62	125.03
2	Depreciation	222.92	251.34	171.49	51.43
3	O&M Expenses	452.88	690.27	418.62	34.26
4	Return on equity (14%)	119.99	201.8	119.99	0
5	Interest on GPF	23.39	16.29	16.29	7.1
6	Additional contribution to Master Trust	78.34	67.36	67.36	10.98
7	Interest on working capital	20.48	15.02	17.54	2.94
8	Exceptional items		0.07	0.07	-0.07
9	Amortization of intangible assets			2.87	-2.87
10	Other items		1.17	1.17	-1.17
11	Provision for pay revision			50.80	-50.80
12	Additional contribution to Master Trust	22.64		22.64	0
13	ARR	1204.29	1371.09	1027.46	176.83
14	Less: Non-tariff Income	41.82	41.64	47.39	-5.57
15	Net ARR (Cost Transferred to SBU-D)	1162.47	1329.45	980.07	182.40

3.3 Interest and Finance charges:

- **3.3.1** An amount of Rs 408.50 Cr had been approved by the Hon Commission under this head. The actual expense incurred was Rs.226.44 Cr (net of capitalized interest Rs.36.90 Cr). Item wise explanation is furnished below.
- **3.3.2 Interest on Normative loan:** While issuing orders on MYT petition, Hon'ble Commission approved Rs.2441.81 Cr as opening normative loan as at 01.04.2020 after considering provisional asset addition for the year 2020-21 and contributions and grants. The interest was approved at 9.25%. Further, provisional approval of Rs.1427.76 Cr was granted for the asset addition during 2020-21 with contribution and grant as Rs.389.58 Cr. Actual entitlement of normative loan as on 01.04.2020, GFA addition during 2020-21, repayment during the year and closing normative loan as on 31.03.2021, interest on normative loan along with SBU wise segregation are computed and explained in chapter 5. Based on the computation, an amount of Rs.138.70 Cr is claimed towards interest on normative loan for the year 2020-21.
- **3.3.3** Cost incurred for capital works during 2020-21 by SBU-T is Rs.1219.61 Cr and Rs.679.64Cr is capitalized during the year 2020-21. The details are tabulated below.

	Table-T3: Details of actual capitalization as per accounts					
SI.	Brief description of the work	of the work Cost incurred C				
no.		during the year				
		(Rs Cr)	(Rs Cr)			
1	Electrical Transmission Schemes	331.06	410.87			
2	Power System Development Fund	249.52	29.63			
3	Load Despatch & Communication Schemes	6.67	7.60			
4	Expenditure due to Natural Calamity	-	-			
5	CWIP - General	160.22	173.60			
6	TRANSGRID 2.0 PROJECT	472.14	57.94			
	Total	1,219.61	679.64			

3.3.4 The details of the substations and lines commissioned during the year 2020-21 are enclosed as **Annexure-1**; the summary of the same is given below.

	Table-T4: Summary of Capital Works executed in 2020-21				
No	Item	Quantity			
1	400KV lines	79 ckt-km			
1	220KV lines	237.9 ckt-km			
2	110KV lines	324 ckt-km			
3	66KV lines	8.4 ckt-km			
4	33KV lines	39.2 ckt-km			
5	EHT Substations	15 numbers			
6	33KV Substations	2 numbers			
7	Capacity addition/enhancement	1242 MVA			

3.3.5 Interest on GPF: Interest paid on GPF during the year amounts to Rs.160.69 Cr as detailed in chapter 5. The share of interest on GPF for SBU-T along with approved figure is furnished below.

Table-T5: Interest on GPF for SBU-T for 2020-21						
Approved Actual True-up requirement						
	Rs. Cr	Rs. Cr	Rs.Cr			
SBU-T	23.39	16.29	16.29			

- **3.3.6** Interest on Master Trust Bonds: Hon'ble Commission, by virtue of provision contained in Tariff Regulation, 2018 had approved Rs.78.34 Cr towards interest on Master Trust bonds. Actual expenses for SBU T have been Rs. 67.36 Cr as explained in Chapter 5. Thus, Hon'ble Commission may kindly approve Rs.67.36 Cr for the year 2020-21.
- **3.3.7 Additional contribution to Master Trust:** Hon'ble Commission, by virtue of provision contained in Tariff Regulation, 2018 had approved Rs.22.64 Cr towards additional bond to Master Trust bonds. Hon'ble Commission may kindly true up the provisional amount of Rs.22.64 Cr as detailed in chapter 5.
- **3.3.8** Interest on Working Capital: As per the Regulation 32(2), interest on working capital is allowed normatively 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. Hon'ble Commission approved the Interest on Working capital at a rate of 10.15% on the working capital of Rs.201.81 Cr and the interest on working capital approved for SBU-T for 202-21 is Rs. 20.48 Cr. A comparison of the Interest on Working Capital approved by Hon'ble Commission, actual and the true-up requirement calculated on normative basis is given below, which may kindly be approved:

Table-T6: Interest on working capital (Rs Cr)					
	Approved	Actual	True up requirement		
O&M Expenses As per norms	452.88		416.69		
GFA Plants and Equipment	6719.97		5922.70		
Transmission charges	1162.47		936.34		
O&M Expenses for one month	37.74		34.72		
1% of Historical cost of plants & Equipment	67.20		59.23		
Receivables (Transmission charges for one month)	96.87		78.03		
Total requirement of working capital	201.81		171.98		
Rate of interest	10.15%		10.15%		
Interest on Working Capital	20.48	15.02	17.46		

3.3.9 Summary of Interest & Finance charges: A comparison of the approved and actual values of various items of Interest & Finance charges are given below:

	Table- T7: Summary of Interest and Finance charges (Rs Cr)						
No	Particulars	Approved	Actual	True-up requirement			
1	Interest on Outstanding Capital Liabilities	263.65	127.77	138.70			
2	Interest on GPF	23.39	16.29	16.29			
3	Interest on Master Trust Bonds	78.34	67.36	67.36			
4	Interest on Working capital	20.48	15.02	17.46			
5	Total	385.86	226.44	239.81			

3.4 O&M Expenses: As per the provisions of Regulation 58, the O&M expenses applicable for the SBU-T is based on the number of bays and transmission line length in ckt km for the previous year (2019-20). The no. bays and circuit kilometers and the O&M cost based on the norms approved for 2020-21 and actual are as shown below:

Table-T8: Approved and actual Cost Drivers of Transmission Business for 2020-21						
Item Approved Actual						
Substation Bays*	2914	2671				
Tran Lines***	10670.15	9933.11				
* Excluding 33 kV bays	*** (in CktKms)					

3.4.1 The O&M cost norm for SBU-T for 2020-21 as per the Regulation and the O&M cost based on the norms amounts to Rs.416.69 Cr as submitted below.

Table-T9: O&M of Transmission Business for 2020-21						
Item Actual Norm						
Substation Bays*	2671	Rs.11.77 Lakh/bay				
Tran Lines*** 9933.11 Rs.1.03 Lakh						
* Excluding 33 kV bays *** (in CktKms)						
O&M Cost = Rs. (11.77 * 2671 + 9933.11 * 1.03) Lakh = Rs.416.69 Cr						

- 3.4.2 Hon'ble Commission may kindly approve expenses in connection with Covid 19 amounting to Rs.1.93 Cr above norms as detailed in chapter 5. Thus, O&M expenses claimed for true up amounts to Rs. 418.62 Cr. (Rs.416.69 Cr+ Rs.1.93 Cr)
- 3.4.3 Hon'ble Commission may kindly approve Rs. 50.80 Cr towards Pay revision provision Rs.50.80 Cr as explained in chapter 5.
- 3.4.4 It is respectfully submitted that the O&M expenses as per CERC norms (Regulation 35(3) (a) of CERC (T&C of Tariff) Regulations, 2019) for the above drivers are Rs. 23.30 Lakh per bay (for 220 KV), Rs.0.254 Lakhs per MVA and 0.391 Lakh per km for (Double Circuit single conductor) lines. Thus, the permissible O&M cost as per CERC Regulations would be (2671 x Rs. 23.30 Lakhs + 9933.11 km x 0.391 + 0.254*21182.90 =) Rs. 714.986 Cr. Therefore, it may kindly be noted that the actual O&M expense of the petitioner (Rs.690.27 Cr) is less than the allowable cost as per CERC norms.

3.5 Depreciation:

3.5.1 Hon'ble Commission approved depreciation for the year 2020-21 on the provisionally approved asset additions of Rs. 1038.18 Cr for 2020-21. Based on Tariff Regulations; the depreciation for the Transmission assets for the year 2020-21 has been approved at Rs 222.92 Cr. Hon Commission may kindly note that the depreciation as per audited accountswas Rs.251.54 Cr as detailed in Form T3. The difference in depreciation is because of the asset addition in 2014-15, 2015-16, 2016-17, 2017-18, impact of fully depreciated assets and Ind AS changes as detailed in Chapter 5.

3.5.2 Depreciation eligible as per MYT Regulation for the year 2020-21 has been worked out at Rs. 171.49 Cr as detailed in chapter 5. Comparison of approval, actual and true up requirement is furnished below:

	Table-T12: Depreciation (Rs Cr)					
No	No Particulars Approved Actual True-up requirement					
1	Depreciation	222.92	251.34	171.49		

3.6 **Return on Equity:** Hon'ble Commission approved Rs.119.99 Cr towards RoE of SBU-T. Same amount is sought for true up in this petition.

	Table-T13: Return on Equity (Rs Cr)						
No	No Particulars Approved Actual True-up						
	requirement						
1	Return on Equity	119.99	201.80	119.99			

- 3.7 **Other items:** Other items amount to Rs.1.17 Cr and exceptional items Rs.0.07 Cr for the year 2020-21, as detailed in chapter 5, may kindly be approved.
- 3.8 **Amortization of intangible assets:** The Government of Kerala, 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.
- 3.8.1 Hon'ble 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 KSEBL's share as per the orders of the Government. KSEBL share of compensation actually paid was allowed to be recovered in 12 years with interest as part of truing up.
- 3.8.2 An amount of Rs. 22 Crore has been transferred to the District Collector, Ernakulam during the year 2020-21 as detailed below. Amount disbursed under Special Compensation Package During 2020-21

SI.No	Amount	Payment Details	Remarks
1	Rs.22 Crore	Ch.No. 752018 dtd 24.11.20.	Sanctioned vide BO (FTD)No.594/2020/D(T& SO) T3/Koodamkulam/2020-21

3.8.3 Out of the above, share of KSEBL to the tune of Rs.11 Cr has been accounted under Intangible Assets. It is respectfully submitted that a sum of Rs.18 Cr was paid during 2019-20 out of which, KSEBL share was Rs.9 Cr. A sum of Rs. 0.75 Cr has been proposed for amortization during 2020-21.

3.8.4 As per orders of the Hon'ble Commission interest (at average interest rate for 2020-21 at 9.88%) and amortization amounts to Rs.2.87 Cr for 2020-21 as shown below.

SI.No	Amount	Payment Details	KSEBL share	Amortization during 2019-20	Balance	Amortization during 2020-21	Interest @ 9.88%
1	Rs.5.20 Crore	Cheque No. 524635 dated 12.04.2019	2.60	0.22	2.38	0.22	0.24
2	Rs 80 Lakh	Cheque No. 582512 dated 25.10.2019	0.40	0.03	0.37	0.03	0.04
3	Rs.12 Crore	Cheque No. 582552 dated 14.11.2019	6.00	0.50	5.50	0.50	0.54
4	Rs.22 Crore	Ch.No. 752018 dated 24.11.20.	11.00			0.92	0.38
	Total		20.00	0.75	8.25	1.67	1.20

- 3.8.5 Hon'ble Commission may kindly approve Rs.1.67 Cr towards amortization of intangible asset and Rs. 1.20 Cr towards interest as part of truing up for the year 2020-21.
- 3.9 **Transmission Availability:** The transmission system of KSEBL could achieve an availability of 98 %. The certificate of SLDC is enclosed as **Annexure-2.**
- 3.10 **Non-Tariff Income:** Hon'ble Commission approved Rs. 41.82 Cr under this head. As per trifurcated accounts, a sum of Rs.41.64 Cr has been accounted. The non-tariff income sought for true up amounts to Rs.47.39 Cr as detailed under chapter 5, which may kindly be approved.
- 3.11 **Net ARR (Transfer Cost) of SBU-T and SLDC :** ARR for Transmission Business Unit for the year 2020-21 had been Rs. 1027.46 Cr and non-tariff income earned was Rs. 47.39 Cr. Therefore, Net ARR of SBU-T has been Rs. 980.07 Cr. This cost has been considered as the Cost of intrastate Transmission in the ARR of SBU-D.
- 3.12 **Transmission loss:** The total energy <u>delivered to</u> the transmission system was 25132.93 MU in FY 2020-21. The losses in the transmission system at different voltage levels are given in the Table below. The actual peak demand met during the year 2020-21 was 4284MW. The losses are segregated based on Load flow studies done up to 33 kV level using computer simulation model in "Mi-Power" Software The methodology adopted for study is similar to that suggested by CEA and Adopted by Forum of regulators (FOR) for loss assessment. Balance losses are attributable to the HT and LT Network. Thus, the actual energy losses in the transmission system (upto 66KV) were 707.933 MU. The transmission loss approved by Hon'ble Commission for the year 2019-20 and the actual are submitted below.

	Table-T15: Transmission Losses						
No	Voltage Level (kV)	Approved	Losses	Losses upto the voltage level	Actual Losses up to voltage level		
		(%)	MU	MU	(%)		
1	400		37.073	37.073			
2	220		312.674	349.747			
3	110		295.370	645.117			
4	66		62.816	707.933			
6	Transmission loss (%)	3.85	707.933		2.82		

3.13 Auxiliary consumption of substations of Transmission SBU:

Hon'ble Commission had approved an auxiliary consumption of **17.18 MU** for the year 2020-21. The actual auxiliary consumption was **19.03 MU** as tabulated below. The auxiliary consumption in substations comprise of energy required for lighting, air compressors, battery charging, switch gears operating mechanism etc.

Table-T16: Total Auxiliary consumption of Substations for 2020-21							
Auxiliary consumption	Auxiliary consumption in MU						
April	1.63						
May	1.63						
June	1.47						
July	1.79						
August	1.47						
September	1.41						
October	1.63						
November	1.59						
December	1.54						
January	1.52						
February	1.54						
March	1.81						
Total	19.03						

This energy loss is not captured in the transmission losses determined by simulation using load flow software. This energy consumption is actually measured by meters in the respective substations. The energy transferred to SBU-D including sales at EHT level was 25132.92 MU after deducting transformer losses and auxiliary consumption.

3.14 The formats for Truing up of Transmission Business Units as per the Tariff Regulation 2018 are provided hereunder.

	Substations an	d Lines C	ompleted	during 2020-21	Added Capacity					
SI. No		Voltage level (kV)	New / Upgn.	District/ LA Constituency	Date of Commng.	33	66	110	220	400
1	Muttathara	110	New	Kovalam	28.05.2020			25		
2	Balaramapuram Upgn	110	Upgn	Kovalam	4.06.20 & 27.08.20			5		
3	Thambalamanna Upgn	110	Upgn	Thiruvambady	6.11.2020			32		
4	Kuttikkattor Upgn	110	Upgn	Kunnamangalam	17.08.2020			12.5		
_	Thiruvalla Upgn	110	Upgn	Thiruvalla	21.12.2020			10		
_	Kothamangalam	220	Upgn	Kothamangalam	20.10.2020	_			200	
8	Pothukallu Chalakkudy	33 220	New New	Nilambur	17.08.2020	5			200	
9	Kaloor GIS	220	New	Chalakkudy Ernakulam	11.12.2020 12.5.20				320	
_	Marady	110	Upgn	Muvattupuzha	30.11.2020			2.5	320	
11	Koothattukulam	110	Upgn	Ernakulam/ Piravom	29.01.2021			2.5		
12	Aluva	220	New	Ernakulam/Aluva	26.02.2021				400	
13	Ambalavayal	66	New	Kalpetta	13.02.2021		10			
	Nenmara	110	Upgn	Nenmara	17.02.2021			10		
15	Vilakkulam	33	New	Thiruvananthapuram/ Varkala	15.02.2021	5				
16	Edathala	110	Upgn	Ernakulam	17.02.2021			2.5		
17	Mankada	110	Upgn	Malappuram	20.03.2021					
					Total	10	10	102	1120	0
SI.		Voltage	Line							
No	Name of Line	level (kV)	length (Ckm)	Date of Commng.	Remarks					
1	Veli - Muttathara UG Cable 630 Sq mm	110	8.45	21.05.2020						
2	Neyyattinkara - Balaramapuram DC line	110	7.65	30.5.20						
3	Agasthiamoozhy - Thambalamanna UG cable 630 Sq mm	100	11.5	6.11.20						
4	Kunnamangalam - Kuttikkattoor	110	11.2	17.8.20						
5	Kattakkada - Balaramapuram DC (II - 7.8.20 & I - 22.09.20)	110	20.4	7.8.20 & 22.09.20						
6	Kothamangalam-Edathala DC	110	60	15.02.2021						
	Adyanpara-Pothukallu SC line	33	9.5	14.8.2020						
	Brahmapuram - Kaloor (UG+OH)	220	21	12.5.2020						
	Malapramba - Areacode DC	400	79	11.2.2021						
	Malapramba - Areacode DC	200	79	11.2.2021						
_	Konnakkuzhy - Chalkkudy DC Chelari - Nallalam DC	220 220	22 25	5.12.2020 18.5.2020				1		
_	Pallikkara Aluva	220	22.9	31.3.2021				-		
_	Kothamangalam-Aluva DC	220	68	15.2.21						
_	Kothamangalam-Aluva DC	110	68	15.2.21						
16	Koothattukulam- Karukadom DC	110	36.4	29.1.2021						
17	110 kV MCMV line from Ambalathara to Kanhangad - Cheruvathoor line	110	12	25.5.20						
18	Pinarayi - Thalassery II	110	6.9	31.3.21						
19	Solar park, Paivalike - Kubanoor 33 kV DC UG	33	16	31.12.20						
20	Tanline to Thiruvalla-LIG Cable	110	0.38	22.12.2020	From Loc 77 (Manjadi) of 110kV MPCG feeder to Thiruvalla substation					

SI. No	Name of Substation	Voltage level (kV)	New / Upgn.	District/LA Constituency	Date of Commng.	33	66	110	220	400
21	Varkala - Vilakulam SC line (3.7 UG + 1.8 OH)	33	5.5	12.02.2021						
	LILO line to Ambalavayal from S bathery tap	66	8.4	13.02.2021						
23	LILO line to Mankada (Malapramba - Mankada)	110	3.58	20.3.2021						
24	Kollengode - Vadakkenchery DC	110	78	5.3.2021						
25	Parappur - Mullassery	33	7.5	5.6.2020						
26	LILO to 33 kV SS Mundur	33	0.715	14.9.2020					-	





KERALA STATE ELECTRICITY BOARD LTD.

(Incorporated under the Indian Companies Act, 1956)
Office of the Chief Engineer(Transmission System Operation)

LD Centre, H.M.T.Colony P.O., Kalamassery - 683 503.

Phone: O484 2555965,2543850,9496019100 Fax: 0484 2555950

Email: cesoklsy@gmail.com, ceso@kseb.in

Website: www.kseb.in, CIN:U40100KL2011SGC027424

No. CESO/EELD1/AEE (GS)/Tr.Avblty/2021-22/ 2-259 Dated: 6 .12.2021

To

The Dy. Chief Engineer TRAC, VB, Thiuvananthapuram

Sub:-Certification of availability for 2020-21-reg Ref:-

CERTIFICATE FOR AVAILABILITY OF KERALA TRANSMISSION SYSTEM

This is to certify that as per records, the availability of Kerala system for the year 2020-21 is as under.

Transmission Elements	Availability	
400kV System	97.57%	
220kV System	98.407%	
110kV System	97.92%	
66kV System	97.79%	1
System Availability	98.00%	

Yours faithfully,

Chief Engineer (Trans-SO).

AELLAD

Summary of Aggregate Revenue Requirement

SBU-T

KERALA STATE ELECTRICITY BOARD LTD.

			Previous Year						
S. No.	Particulars	Reference	2020-21						
3.140.	T directions	Form No.	Approved in Tariff Order	Audited	Normative	Truing Up requirement			
1	2	3	4	5	6	7			
1	Operation & Maintenance Expenses	Form T 2	452.88	690.27	418.62	418.62			
2	Interest and finance charges on long-term loans	Form T4(b)	263.65	127.77		138.62			
3	Interest on Bonds to meet Terminal Liabilities	Form T4 (c)	78.34	67.36		67.36			
4	Depreciation	Т3	222.92	251.34		171.49			
5	Interest on Working Capital and deposits from Users of the transmission system	Form T 5	20.48	15.02		17.54			
6	Exceptional items			0.07		0.07			
7	Interest on GPF		23.39	16.29		16.29			
8	Adjustment for profit/loss on account controllable/uncontrollable factors								
9	Other items	Form T 6		1.17		1.17			
10	Amortisation of Intangible Assets					2.87			
11	Prior period Expenditure			0.00					
12	Provision for pay revision					50.8			
13	Addiitonal contribution to Master Trust		22.64			22.64			
10	Total Revenue Expenditure		1084.30	1169.29		907.47			
11	Return on Equity	Form T 7	119.99	201.80		119.99			
12	Tax on RoE	Form T 8							
13	Aggregate Revenue Requirement (9+10+11)		1204.29	1371.09		1027.46			
14	Less: Non Tariff Income	Form T 10	41.82	41.64		47.39			
14	Less: Revenue from Short Term/Medium Term Open Access								
15	Less: Income from Other Business								
16	Aggregate Revenue Requirement from Transmission Tariff		1162.47	1329.45		980.07			

W7	-	-

Operation and Maintenance Expenses

SBU-T

KERALA STATE ELECTRICITY BOARD LTD.

		Previous Year							
S. No.	Particular		D 1						
5. No.	Particular	Approved in Tariff Order	Audited	Normative	Truing Up requirement	Remarks			
1	2	4	5	6	7	14			
1	Bay Basis								
a	Op. Balance of no. of Bays								
b	Addition of no. of Bays during year								
С	Deletion of no. of Bay during year								
d	Cl. Balance of no. of Bays	2914	2671		2671				
е	Average no. of Bays during Year								
f	Applicable O&M cost Norm for Bay :- Rs Lakh/Bay	11.77	11.77		11.77				
A	O&M Expense per Bay, Rs L	34297.78	31437.67		31437.67				
2	ckt-km Basis								
а	Op. Balance of ckt-km								
b	Addition of ckt-km during year								
С	Deletion of ckt-km during year								
	Cl. Balance of ckt-km	10670.15	9933.11		9933.11				
	Average ckt-km during Year								
	Applicable O&M cost Norm - RsLakh / ckt-	1.03	1.03		1.03				
В	O&M Expense Rs. Lakh	10990.25	10231.10		10231.10				
3	Total O&M Expenses (as per norms) (A+B) (Rs.Cr.)	452.88	416.69		418.62				
4	Total O&M Expenses (actual)	T 2(a), T 2(b), T 2(c	690.27						

Form T 2(a)

Employee Expenses

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

						Rs. Crore
			Previous Y			
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up requiremen	Remarks
1	2	3	4	5	6 = 5 - 4	13
1	Basic Salary			510.37		
2	Dearness Allowance (DA)			91.67		
3	House Rent Allowance			5.72		
4	Conveyance Allowance			0.00		
5	Leave Travel Allowance			0.00		
6	Earned Leave Encashment			19.94		
7	Other Allowances			1.67		
8	Medical Reimbursement			1.41		
9	Overtime Payment			0.00		
10	Bonus/Ex-Gratia Payments			0.87		
11	Interim Relief / Wage Revision			0.00		
12	Staff welfare expenses			0.15		
13	VRS Expenses/Retrenchment Compensation			0.00		
14	Commission to Directors			0.00		
15	Training Expenses			0.00		
16	Payment under Workmen's Compensation Act			0.00		
17	Net Employee Costs			631.81		
18	Terminal Benefits			0.00		
18.1	Provident Fund Contribution			0.00		
18.2	Provision for PF Fund			0.00		
18.3	Pension Payments			0.00		
18.4	Gratuity Payment			0.00		
18.5	Annual Contribution for Terminal Liabilities based on actuarial valuation	1		0.00		
	Contribution of KSEB Ltd towards National Pension Scheme			2.40		
19	Others			0.03		
20	Gross Employee Expenses			634.24		
21	Less: Expenses Capitalised			91.73		
22	Net Employee Expenses			542.51		

Form T 2(b)

Administrative & General Expenses

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

	_					Rs. Crore
			Previous			
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up requirement	Remarks
1	2	3	4	5	6 = 5 - 4	13
1	Rent Rates & Taxes			1.01		
2	Insurance			1.16		
3	Telephone & Postage, etc.			1.75		
4	Legal charges			0.61		
5	Audit Fees			0.00		
6	Consultancy charges			0.05		
7	Other Professional charges			1.11		
8	Conveyance			6.67		
9	Vehicle Running Expenses Truck / Delivery Van			0.15		
10	Vehicle Hiring Expenses Truck / Delivery Van			0.21		
11	Electricity charges			0.00		
12	Water charges			0.12		
13	Entertainment			0.13		
14	Fees & subscription			0.35		
15	Printing & Stationery			0.88		
16	Advertisements, exhibition publicity			0.07		
17	Contribution/Donations			0.23		
18	Training expenses			0.02		
19	Miscellaneous Expenses			0.73		
20	DSM activities			0.00		
21	SRPC expenses			0.18		
22	Sports and related activities			0.07		
23	Freight			1.47		
24	Purchase Related Advertisement Expenses			0.86		
25	Bank Charges			0.00		
26	Office Expenses			91.48		
27	License Fee and other related fee			0.67		
28	Cost of services procured			0.00		
29	Outsourcing of metering and billing system			0.00		
30	V-sat, Internet and related charges			2.99		
31	Security arrangements			0.00		
32	Books & periodicals			0.02		
33	Computer Stationery			0.00		
34	Others			1.91		
	Others- Other Purchase related Expenses			1.28		
35	Gross A&G Expenses			116.18		
36	Ele. Duty u/s 3(I), KED Act			0.00		
37	Less: Expenses Capitalised			0.04		
38	Net A&G Expenses			116.14		

Form T 2(c)

Repair & Maintenance Expenses

Name of Transmission Business/ KERALA STATE ELECTRICITY BOARD LTD.

S. No.	Particulars	Reference	Approved in Tariff Order	Audite d	flood (Exceptiona 1 Items)	Truing Up requirement	Remarks
1	2	3	4	5		6 = 5 - 4	13
1	Plant & Machinery			17.35	0.00		
2	Buildings			1.70	0.00		
3	Civil Works			5.42	0.00		
4	Hydraulic Works			0.06	0.00		
5	Lines & Cable Networks			5.84	0.07		
6	Vehicles			0.77			
7	Furniture & Fixtures			0.06			
8	Office Equipment			0.41			
9	Gross R&M Expenses			31.62	0.07		
10	Less: Expenses Capitalised						
11	Net R&M Expenses			31.62	0.07		

Form T 3 Fixed assets & Depreciation

Name of Transmission Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.
Year (n-1)*
2020-21

Year (n-1)*					Provisions for depreciation						
Assets Group (as per notification in respect of	Rate of	At the	Gross fix Additions	Decom.	At the end of	Cumulative Additions Adjustment Cumulative at				Net fixed assets at the beginning	
depreciation)	depreciation	beginning of	during the	Liability for	the year	upto the	during the	during the	the end of	of the year	year
1 /	•	the year	year	the year	tite year	beginning of	year	year	year	-	
2	3	4	5	6	7	8	9	10	11	12	13
Land & land rights	10.1	280.28	222.59	0.00	502.87	0.00	0.00		0.00	280.28	502.87
Other Civil works	10.4	473.84	24.11	0.02	497.98	160.44	16.32		176.77	313.40	321.21
EHV		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Transmission lines	10601	1312.21	145.53	0.15	1457.89	788.18	69.34		857.52	524.03	600.37
Sub-station equipments	10543	1069.38	96.89	0.10	1166.36	573.48	58.27		631.75	495.90	534.61
Transformers	10541	923.55	58.97	0.06	982.58	556.77	42.81		599.58	366.78	383.00
Switchgeares, Control gear & Proteciton	10561	62.41	0.06	0.00	62.47	32.15	1.63		33.78	30.26	28.69
Batteries	10563	33.70	1.54	0.00	35.25	23.41	1.20		24.61	10.29	10.64
Others	10.5	251.71	18.36	0.02	270.09	183.55	7.10		190.65	68.16	79.43
HV & LT		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Transmission lines	10.6	847.72	76.82	0.08	924.62	487.18	30.34		517.53	360.54	407.09
Sub-station equipments		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Transformers	10542	150.62	3.75	0.00	154.38	111.93	3.05		114.98	38.69	39.40
Switchgeares, Control gear & Proteciton		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Batteries		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Others		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Communication equipment	10571,72	81.35	2.45	0.00	83.80	59.60	4.59		64.19	21.74	19.61
Meters	10631	12.87	0.00	0.00	12.87	11.58	0.05		11.63	1.29	1.24
Vehicles	10.7	7.82	0.32	0.00	8.14	6.06	0.36		6.42	1.76	1.72
Furniture & fixtures	10.8	7.09	0.56	0.00	7.65	4.84	0.34		5.18	2.25	2.47
Office Equipments	10.9	5.39	0.28	0.00	5.67	2.82	0.26		3.08	2.57	2.59
Assets of Partnership projects etc.		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Capital spares of		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
EHV transmission		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
HV & LT transmisison		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Assets taken over & pending final valuation		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
IT equipments	10.905	9.89	0.56	0.00	10.46	7.34	0.92		8.25	2.56	2.20
Buildings	10.2	381.78	26.20	0.00	407.97	171.09	12.79		183.88	210.69	224.09
Any other items (Hydraulic Works)	10.3	11.09	0.21	0.00	11.30	15.88	0.58		16.45	-4.79	-5.15
Gross Asset (Total (1) to (14))		5922.70	679.22	0.43	6602.35	3196.31	249.95	0.00	3446.26	2726.40	3156.09
Less: Consumer contribution	55.1	124.24	18.53	8.27	134.50					124.24	134.50
Less: Government grants	55.2&.3	398.93	41.07	20.56	419.44					398.93	419.44
Less: Deposit Works		0.00			0.00					0.00	0.00
Less: Capital Subsidies	55.4	42.07	10.07	2.66	49.47					42.07	49.47
Less: Contribution from Public	55.5	1.08	0.00	0.08	1.00					1.08	1.00
Net Asset considered for depriciation (15-16-17-18-19)		5356.39	69.66	31.57	5997.94					2160.08	2551.68

Form T 4(a)

Calculation of Weighted Average Rate of Interest on Actual Loans sion Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Cr)

Name or	Fransmission business/ Licensee	
Licensed	Area of Supply	

S.No		Previous Ye	ear (n-1)	2020-21	
5.NO	Particulars (specify items)	Approved in Tariff Order	Audited	Truing Up requirement	Remarks
1	2	4	5	6 = 5 - 4	13
1	Loan 1		HED		
i.	Gross Loan -Opening		AC		
ii.	Cumulative repayments of Loans upto previous year		ATT		
iii.	Net loan-Opening		BEIL		
iv.	Add: Drawal(s) during the Year		SEPARATE SHEET ATTACHED		
v.	Less: Repayment (s) of Loans during the year		ATE		
vi	Net loan - Closing		PAR		
vii	Average Net Loan		SE		
viii	Rate of Interest on Loan on annual basis				
ix	Interest on loan				
х	Loan repayment effective from (date to be indicated)				
2	Loan 2				
i.	Gross Loan -Opening				
ii.	Cumulative repayments of Loans upto previous year				
iii.	Net loan-Opening				
iv.	Add: Drawal(s) during the Year				
v.	Less: Repayment (s) of Loans during the year				
vi	Net loan - Closing				
vii	Average Net Loan				
viii	Rate of Interest on Loan on annual basis				
ix	Interest on loan				
х	Loan repayment effective from (date to be indicated)				
3	Loan 3				
	20m v				
	•••				
4	Total Loan				
i.	Gross Loan -Opening				
ii.	Cumulative repayments of Loans upto previous year				
iii.	Net loan-Opening		1489.95		
iv.	Add: Drawal(s) during the Year		763.59		
v.	Less: Repayment (s) of Loans during the year		393.80		
vi	Net loan - Closing		1859.74		
vii	Average Net Loan		1674.85		
viii	Interest on Loan		164.67		
ix			9.83%		
	Weighted average Rate of Interest on Loans		9.83%		

TERM LOAN

SL NO	NAME OF THE FINANCIAL INSTITUTION	Net Loan - Opening	(IND Adj) 2019-20	Gross loan- Opening – 01/04/2020	Add: Drawal(s) during the Year	Less: Repayment (s) of Loans during the year	Gross loan - Closing - 31/03/2021	CFL	Net loan - Closing - 31/03/2021	Average Net Loan	Rate of Interest on Loan on annual basis	Interest on loan	Loan repayment effective from (date to be indicated)
A	SECURED LOANS TERM LOANS												
1	Loan from REC-TRAN-Group I	77.46	7.51	84.97		9.83	75.14	9.07	66.07		9.92-10.66%	8.45	
2	Loan from REC-TRAN.Kattakkada -Pothencode Scheme	72.85	14.33	87.19		15.53	71.66	14.33	57.33		10.09-11.39%	9.32	
3	Loan from SBI	248.49	28.69	277.18	165.68	34.88	407.97	45.30	362.67		8%	27.95	
4	Special Loan Assistance from PFC	346.88	27.75	374.63	12.92	28.71	358.84	28.71	330.13		9%	43.62	
5	Special Loan Assistance from REC	500.13	45.12	545.25	18.80	50.57	513.48	46.68	466.80		9.08-10.65%	57.43	
	Kerala Financial Corporation			0.00	156.12	1.37	154.75	16.43	138.32		9%	7.00	
	Medium Term Loan Kerala Financial Corporation			0.00	156.12	3.12	153.00	37.47	115.53		8%	1.04	
	SUB-TOTAL	1245.82	123.40	1369.22	509.63	144.01	1734.84	197.99	1536.85			154.81	
В	UNSECURED LOANS TERM LOANS												
1	Loans - Short term loan from Bank of Baroda	120.7339732		120.73	253.96	249.79	124.90	0.00	124.90		0.087	9.86	
	SUB-TOTAL	120.73	0.00	120.73	253.96	249.79	124.90		124.90			9.86	
	TOTAL	1366.55	123.40	1489.95	763.59	393.80	1859.74		1661.74			164.67	

Form T4(b)

Calculation of Interest on Normative Loan KERALA STATE ELECTRICITY BOARD LTD.

Name of Transmission Business/Licensee Licensed Area of Supply

	Electrica in tar of supply				(Rs. Cr)
C N -		Previous Y	(ear (n-1)	2015-19	
S.No	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement	Remarks
1	2	4	5	6 = 5 - 4	13
1	Gross Normative loan - Opening				
2	Cumulative repayment of Normative Loan upto previous year				
3	Net Normative loan - Opening		1489.95		
4	Increase/Decrease due to ACE/de-capitalization during the Year		763.59		
5	Repayments of Normative Loan during the year		393.80		
6	Net Normative loan - Closing		1859.74		
7	Average Normative Loan		1674.85		
8	Weighted average Rate of Interest of actual Loans		9.83%		
9	Interest on Normative loan		164.67		

Form T4(c)

Interest on Bonds to meet Terminal Liabilities

Name of Transmission Business/Licensee Licensed Area of Supply

KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Cr)

S.No			2020-21		
	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement	Remarks
1	2	3	4	5 = 4 - 3	12
Α	Bond Series 1				
1	Value of Bond		6,922.40	6,922.40	
2	Rate of Interest on Bond		10%	10%	
3	Interest on Bond		692.24	692.24	
В	Bond Series 2				
4	Value of Bond		2,936.36	2,936.36	
5	Rate of Interest on Bond		9%	9%	
6	Interest on Bond	78.34	67.36	67.36	Share of SBU T
С	Bond Series 3				

Interest on working capital requirement KERALA STATE ELECTRICITY BOARD LTD.

Name of Transmission Business/Licensee

Rs. Crore

S1.	Particulars		2020-21						
No.		Approved in Tariff Order	Audited	Normative	Truing Up requirement	Remarks			
1	2	3	4	5	6	13			
1	O&M expenses (as per norms)		690.27						
2	Maintenance Spares (as per norms)								
3	Receivables calculated on target availability (as per norms)								
	Less								
4	Amount, if any, held as security deposits except security deposits held in the form of Bank Guarantees from Users of the transmission system								
5	Total Working Capital								
6	Interest Rate (as per norms)								
7	Interest on Working Capital	20.48	15.02	17.46	17.46				

11/26

Other items (Other debits or any other items) Name of Transmission Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

			Previous Year						
S. No.	Particulars (specify items)		2020-21		Remarks				
		Approved in Tariff Order	Audited	Truing Up requirement					
1	2	3	4	5 = 4 - 3	12				
A1	Material Cost Variance		1.05	1.05					
2	Research and Development Expenses			-					
3	Cost Of Trading/Manufacturing Activity			-					
3	Miscellaneous Losses and Write Offs		0.12	0.12					
4	Loss/(compensation) on account of flood cyclone etc		0.01	0.01					
				-					
	Total		1.17	1.17					
				-					
				-					
	Less								
В	Chargeable to Capital Expenses								
	Net chargeable to revenue(A-B)	0.00	1.17	1.17					

Return on Equity/Return on Net Fixed Assets

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

S.No.	Particulars	Ref.			ous Year 20-21		Remarks
			Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
1	Equity at the beginning of the year				857.05		
2	Capitalisation						
3	Equity portion of capitalisation				0.00		
4	Equity at the end of the year				857.05		
	Return Computation						
5	Return on Equity at the beginning of the year	14%*(1)			119.99		
6	Return on Equity portion of capitalisation	14%*(3)/2			0.00		
7	Total Return on Equity	(5)+(6)	119.99	131.16	119.99	119.99	

Income Tax Provisions

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

S. No.	Particulars		2020-21		Remarks
3.110.		Approved in Tariff Order	Audited	Truing Up requirement	
1	2	3	4	5 = 4 - 3	12
(A)	Advance Tax assessed & deposited on				
a)	for Quarter I & deposited on 15th June				
b)	for Quarter II & deposited on 15th September				
c)	for Quarter III & deposited on 15th December				
d)	for Quarter IV & deposited on 15th March				
_	Total (A)				

Form T 9 Revenue at Existing Transmission Tariff

Name of Transmission Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

Year (n-1)* 2020-21

	rear (n-1)"		Tr	ansmission Tai	iff	Revenu	ie from Trans	mission char	ges (Rs. Cr.)
S. No	Category	Amount of Energy Transmitted (specify unit)	Capacity based Charge (Specify part name and unit)	charge, (Specify	Any other charge (Specify part name and unit)	Capacity based Charges	Energy based Charges	Any other charge (Please specify)	Total
1	2	3	4	5	6	7	8	9	10
1	Long Term Open Access								
Α	Distribution Licensees								
	Discom 1								
	Discom 2								
	Discom 3								
	sub-total								
В	Traders								
	Trader 1								
	Trader 2								
	Trader 3								
	sub-total								
С	Consumers								
	Consumer 1								
	Consumer 2								
	Consumer 3								
	sub-total								
2	Short Term Open Access								
	Consumer 1								
	Consumer 2								
	Consumer 3								
	sub-total								
	Total								

^{*} Note: To be furnished separately for each year commencing from (n-1)th year to (n+3)th year.

	Form T 10				
	Non-tariff Income	_	_		
	Name of Transmission Business/Licensee	KERALA ST		ICITY BOARD L	TD.
			Previous Ye	ar	
S.No	Particulars		2020-21		Remarks
		Approved in Tariff Order	Audited	Truing Up requirement	
1	2	3	4	5 = 4 - 3	12
	Non Tariff Income				
1	Interest on staff loans and advances		0.01	0.01	
2	Income from statutory investments		0.00	0.00	
3	Income from rent of land or buildings		0.60	0.60	
4	Income from sale of scrap		23.15	23.15	
5	Income from staff welfare activities		0.00	0.00	
6	Rental from staff quarters		0.06	0.06	
7	Excess found on physical verification		0.00	0.00	
8	Interest on investments, fixed and call deposits and bank balances		2.33	2.33	
9	Interest on advances to suppliers/contractors		-0.12	-0.12	
10	Income from hire charges from contractors and others		0.00	0.00	
11	Income due to right of way granted for paying fibre optic cables/co-axial cables on transmission system			0.00	
12	Income from advertisements, etc.			0.00	
13	Miscellaneous receipts		21.36	21.36	
14	Interest on delayed or deferred payment of bills			0.00	
15	Clawback of Grant		34.42	34.42	
	Total Non-Tariff Income	41.82	81.81	81.81	

Revenue Subsidy and Grant

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

Rs. Crore

S.No	Particulars		(n-1)				
3.110	Turreduis	Approved in Tariff Order	Audited	Truing Up requirement	Remarks		
1	2	3	4	5 = 4 - 3	12		
	Revenue Subsidies & Grants						
1	Subvention from the State Government						
2	The State Govt. Grant						
3	Any Other item						
	Total	0	0	0			

Consumer Contribution, Capital Subsidy and Grant

Name of Transmission Business/Licensee

KERALA STATE ELECTRICITY BOARD LTD.

Rs. Crore

S.	Particulars		(n-1)		Remarks
No.		Approved in Tariff Order	Audited	Truing Up requirement	
1	2	3	4	5 = 4 - 3	12
1	Consumer's Contribution for service connection lines and associated wiring		134.50		
,	Any other Contribution by consumers or for consumers under any scheme.				
a)	from public		1.00		
b)					
c)					
3	Sub-Total		135.50		
4	Subsidies towards cost of Capital Asset		49.47		
5	Grant towards cost of Capital Assets		419.44		
6	Amount received from State Govt. under any scheme as grant /subsidy				
7	Total		604.41		

Proposed improvement in performance
Name of Transmission Business/Licensee

S.No.	Paritculars	Approved	Performance parameters Actual for the previous year 2020-21	
1	2		3	8
1	EHV Trransmission losses	3.85%	2.82%	
2	System availability			
a)	400 kV System		97.57%	
b)	220 kV System		98.41%	
c)	132 kV System		97.92%	
d)	66 kV Systerm		97.79%	
e)	33 kV System			
	Total System Availability		98%	

Transmission Losses

Name of Transmission Business/Licensee Year (n-1)*

KERALA STATE ELECTRICITY BOARD LTD.

			Prev			
S.no.	Particulars	Unit		Audited	Truing Up requiremen t	Remarks
1	2	3	4	5	6 = 5 - 4	13
1	Energy input into the sysrtem					
(a)	Energy from the sources Inside the State (T-G interface)	MU				
(b)	Energy from the sources outside the State (State Periphery)	MU				
(c)	Total (a)+(b)	MU				
2	Energy transmitted to Discoms (including their direct EHT consumers being fed from Grid SS)	MU				
3	Energy transmitted to open access consumers	MU				
4	Energy transmitted for inter-state sale	MU				
5	Intra-State transmission losses (1(c)-(2+3+4))/1(c))					

Forecast of Electricity Transmitted (MU)

Name of Transmission Business/Lic **KERALA STATE ELECTRICITY BOARD LTD.**

S. No.	Category		Remarks		
5.110.	- Carregery	Approved in Tariff Order	(n-1) Audited	Truing Up requirement	
1	2	3	4	5 = 4 - 3	10
1	Distribution Licensees				
	Discom 1				
	Discom 2				
	Discom 3				
	sub-total				
2	2 Traders				
	Trader 1				
	Trader 2				
	Trader 3				
	sub-total				
3	Consumers				
	Consumer 1				
	Consumer 2				
	Consumer 3				
	sub-total				
	Total				

Name of Transmission Business/Licensee Licensed Area of Supply

Deviation AnalysisKERALA STATE ELECTRICITY BOARD LTD.

Year: 2020-21

(Rs. Crore)

						1	(Rs. Crore)
S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
1	Operation & Maintenance Expenses	452.88	690.33				
2	Interest and finance charges on long-term loans	263.65	127.77				
3	Interest on Bonds to meet Terminal Liabilities	78.34	67.36				
4	Depreciation	222.92	249.95				
5	Interest on Working Capital and deposits from Users of the transmission system	20.48	15.02				
6	Contribution to contingency reserves						
7	Other items						
8	Adjustment for profit/loss on account controllable/uncontrollable factors						
9	Other items		1.17				
	Amortisation of Intangible Assets		1.39				
	PF interest	23.39	16.29				
	Additional contribution to Master Trust	22.64	0.00				
10	Total Revenue Expenditure	1084.30	1169.28				
11	Return on Equity	119.99	201.80				
12	Tax on RoE						
13	Aggregate Revenue Requirement (9+10+11)	1204.29	1371.09				
D	Revenue						
1	Revenue from sale of electricity	1162.47	1289.28				
2	Less: Non Tariff Income	41.82	81.81				
3	Less: Revenue from Short Term/Medium Term Open Access						
4	Less: Income from Other Business						
	<u> </u>						

Form T P&L

Profit & Loss Account

Name of Transmission Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

S.No.	Particulars	Ref	Previous Year	Previous Year	Remarks
			2020-21	2019-20	
1	2	3	4	5	6
	LINCOME				
	a. Revenue from Sale of Power		1289.28	1037.63	
	b. Revenue Subsidies and Grants				
	c. Other Income		81.81	70.86	
	d. Claw back of Grant				
	Total (a+b+c)		1371.09	1108.49	
	II. EXPENDITURE				
	a. Repairs and Maintenance.		31.62	39.06	
	b. Employee Cost		634.24	413.92	
	c. Administration and General Expenses		116.18	97.54	
	d.Depreciation		249.95	234.39	
	1). Amortisation of Intangible Assets		1.39	1.07	
	e.Interest and Finance charges		263.34	230.02	
	Purchase of Power				
	f. Subtotal (a+b+c+d+e)		1296.71	1016.00	
	g. Less Capitalised Expenses:				
	- Interest & Finance Charges		36.90	37.73	
	- Other Expenses		91.77	62.12	
	h. Other Debits		1.17	1.35	
	Change in fair valuation and adjustmetns				
	I. Extra Ordinary Items		0.07	0.13	
	Total Expenditure (f-g+h+i)		1169.28	917.63	
	III. Profit/(Loss) before Tax (I-II)		201.81	190.87	
	IV. Provision for Income Tax				
	V.Net Prior period credits (Charges)				
	V.(a). Other Comprehensive Income		-64.40	-58.86	
	VI. Surplus (Deficit)		137.41	132.00	
	VII. Net Assets at the beginning of the year (Less consumer's Contribution)		2160.08	2143.11	
	VIII. Rate of Return (VI / VII)				

Form T BS

	Balance Sheet at the e Name of Transmission Business/Licens			OTTD	
	Name of Transmission Businessy Licens	KENALA 317	TE ELECTRICITY BOARD	210.	
S.No.	Particulars	Ref	Previous Year 2020-21	Previous Year 2019-20	Remarks
1	2	3	4	5	6
-		,	7	,	
	Sources of Funds:				
	(A)Capital Funds:				
	Share Capital (Govt. equity)		857.05	857.05	
	Reserves & Surplus		459.97	322.57	
	Total (A)		1317.02	1179.62	
	(B) Loan from State Government				
	Loan from others :				
	-Secured		1536.84	1245.81	
	-Unsecured		124.90	120.73	
	Total (B)		1661.73		
	(C) Contribution, grants & subsidies towards cost of capital assets		604.41	572.58	
	Provident Fund		236.54	231.26	
	Terminal Benefit Fund		773.74	626.82	
			773.74	020.02	
	Borrowings for working capital Long term Provision & Other Non current		071100	2522.44	
	Liabilities		-2514.23	-3502.41	
	Grand total of sources of funds (A+B+C)		2079.21	474.42	
	*Application of Funds:				
	A) Fixed assets				
	a) Gross fixed assets		6602.35	5922.70	
	b) Less accumulated depreciation		3446.26	3196.31	
	c) Net Fixed assets((a)-(b))	*	3156.09	2726.40	
	d) Capital works in progress		1696.42	1156.43	
	e) Assets not in use				
	f) Deferred costs				
	g) Intangible assets		19.61	10.00	
			9.41	7.49	
	h) Investments		410.36		
	Other Non current assets				
	Total (c) +(d)+(e)+(f)+(g)+(h)		5291.89	4243.35	
	B)Subsidy receivable from Government				
	Contribution receivable from State	-	203.73		
	Government towards pension liability C) Net Current Assets				
	(1) Current assets, loans and advances				
	a) Inventories*		122.03	121.12	
	b) Receivables against transmission charges c) Cash & bank balances		4.67	20.02	
	d) Loans and advances		4.07	20.02	
	e) Sundry receivables		-1978.98	-2337.03	
	Total (C)(1)		-1852.28	-2195.90	
	(2) Current liabilities & provisions a) Security Deposits from Consumers				
	b) Borrowings for working capital		397.24	578.56	
	c) Payments due on Cap. liabilities				
	d) Other current liabilities		1166.88	994.47	
	Total (C)(2) Net Current Assets (C) [(C(1)) - (C(2))]		1564.12 -3416.40		
	Grand Total of Application of funds		2079.22		

Form T CF

Cash Flow for the year
Name of Transmission Business/Licensee

S.No.	Particulars	Ref	Previous Year		Remarks
-	2	_	2020-21	2019-20	
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants		137.41	132.00	
	Less: Income Tax Payment during the year				
	: Other Comprehensive Income		-64.40	-58.86	
	Total of (a)		201.81	190.87	
	b. Add: Debits to rev. account not requiring cash Flow:				
	I) a) Depreciation		249.95	234.39	
	b) Depreciation on Assets capitalised in the initial BS of the IND As Account	nts	0.00	0.00	
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets		1.39	1.07	
	iv) Investment Allowance Reserve				
	v) Others, if any		988.18	-2430.23	
	Total of (b)		1239.52	-2194.76	
	c. Less : Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)		0.00	0.00	
	Net Funds from Earnings (a)+(b)-(c)		1441.33	-2003.90	
2	Contributions, Grants & Subsidies to cost of Capital Assets		31.83	125.01	
3	Security Deposit from consumers				
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3+4)		1473.15	-1878.89	
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories		0.91	24.06	
	ii) Receivables against transmission charges				

CN	P. C. 1	D (Previous Year	Previous Year	n 1
S.No.	Particulars	Ref	2020-21	2019-20	Remarks
	iii) Loans and Advances		0.00	-12.96	
	iv) Sundry receivables		358.05	-2436.00	
	v)Subsidy receivables				
	Total of (a)		358.96	-2424.90	
	(b) Increase/(Decrease) in Current liabilities				
	I)Borrowings for working Capital		-181.31	-113.92	
	ii) Other current liabilities		172.41	236.02	
	iii) Others (Increase in Reserve + payment due on cap.liab)		-64.41	-13.12	
	Total of (b)		-73.31	108.98	
	Net Increase/(Decrease) in working Capital (a)- (b)		432.28	-2533.88	
7	Net Funds from operations before subsidies and Grants (5-6)		1040.87	654.98	
8	Receipts from revenue subsidies and Grants		-203.73	354.43	
	Total Net Funds from operations including subsidies & Grants (7+8)		837.14	1009.42	
II.	Net increase/ decrease in Capital liabilities				
	a). Fresh borrowings				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		763.59	845.28	
	Total of (a)		763.59	845.28	
	b) Repayments:				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		468.39	618.61	
	Total of (b)		468.39	618.61	
	Net Increase/(Decrease) in Capital liabilities (a) - (b)		295.19	226.68	
III.	Increase/(Decrease) in equity Capital		0.00	0.00	
IV.	Total Funds available for Capital Expenditure (I+II+III)		1132.34	1236.09	
v	Funds utilised on Capital Expenditure				
	a)On projects		1219.63	899.34	
	b)Advance to Suppliers & Contractors				
	c) Intangible Assets		11.00	10.37	
	d) Deferred Cost		0.00	-0.01	
	e) Long Term Loans and Advances		67.33	213.31	
	Total of V (a+b+c+d)		1297.96	1123.02	
VI	Net Increase/(Decrease) in Government contribution				
VII	Net Increase/(Decrease) in Terminal benefit fund		146.92	-127.29	
VIII	Net Increase/(Decrease) in Provident fund		5.28	5.54	
IX	Net Increase/(Decrease) in investments		1.92	2.18	
х	Net Increase /(Decrease) in cash / bank balance (IV - V- VI-IX)+ (VII+VIII)	-15.35	-10.85	
XI	Add opening cash & Bank balance	-	20.02	30.87	
XII	Closing Cash & Bank balance (X+XI)		4.67	20.02	

Chapter – 4: TRUING UP OF ARR OF SBU – DISTRIBUTION

1 An overlook on Kerala Distribution network:

Kerala State Electricity Board Limited supplies electricity to the entire population across 14 districts in Kerala. There are about 98.81 Lakh domestic consumers, 22.85 Lakh commercial/general consumers, 1.43 Lakh industrial consumers, 4.76 Lakh agricultural consumers. The key statistics of distribution network is given below:

Table-D1 Key Statistics of KSEBL Distribution Network as on 31.03.2021				
Particulars	Statistics			
Area Sq.km.	38863 km ²			
Districts No's	14			
Electrical Circle Offices	25			
Population in Cr	3.47			
Consumers (Nos)	13142910			
Distribution transformers (Nos)	83399			
HT lines (Ckt. Kms)	66663.50			
LT lines (Kms)	2,95,697.00			
Energy sales including external sales MU	22413.03			
Energy consumption (incl open access & captive consumption) in MU	22830.54			
T&D loss in % (including transmission loss)	10.32			
Distribution loss in %	7.72%			
AT&C loss in %	7.72%			

2 Availability of Electricity for Supply:

The petitioner has ensured 100% availability of power for supply in the state. There had been no power cut or load shedding enforced in the State even during the extreme summer months of 2020, except for emergency supply interruptions caused by uncontrollable factors. The gross availability of electricity for supply for 2020-21 as per regulations was 102.97 % and the monthwise details of power availability is given as **Appendix D1**.

3 Energy Sales for 2020-21:

Hon'ble Commission, vide order dated 08.07.2019, had approved energy sale of 23957.28 MU for the year 2020-21. Actual energy sale of KSEBL inside the State for FY 2020-21 was 22151.60 MU. 261.43 MU had been sold outside the state. The category wise energy sale to consumers as well as the total energy sales by KSEBL inside the State is given in table below.

Table –D2: -Energy sales by KSEBL 2020-21	(MU)
Category	Actual
LT Category	
Domestic	12695.80
LT VI & VII Commercial	2981.19
Industrial	1086.67
Agricultural	403.24
Street Lights	376.94
LTII	3.84
Advertisement & Hoardings	1.11
LT Electric vehicle charging stations	0.17
LT Total	17548.9648
HT Category	
нті	2051.03
HTII	714.40
нтііі	8.98
HT IV	423.54
HT V	16.83
HT VI	0.00
HT VII	0.00
HT Total	3214.78
EHT Category	
EHT-I	133.96
EHT-II	478.76
EHT-III	51.25
EHT General	76.57
Railway Traction	141.29
KMRL	9.65
EHT Total	891.48
Bulk consumers/Licensees	496.37
HT.EHT & Licensees total	4602.63
Total energy sales by KSEB Ltd inside the State	22151.60
Energy sales outside the State	261.43
Total energy sales by KSEB Ltd	22413.03

II. While approving the energy sales for FY 2020-21, Hon'ble Commission considered the energy sales including energy wheeled through open access. The embedded open access consumers availed 388.72 MU through open access at consumer end. A comparison of actual vs approved is given in table below

Table –D3: -Details of Energy sales inside the State and energy wheeled through open- access- comparison with approved (MU)						
Category	Approved*	Actual	Energy thru open access	Energy incl OA	% variation against appvl**	
LT Category						
Domestic	11901.3	12695.80		12695.80	6.68	
VI & VII Commercial	3660.73	2981.19		2981.19	-18.56	
Industrial	1146.03	1086.67		1086.67	-5.18	
Agricultural	377.8	403.24		403.24	6.73	
Street Lights	420.75	376.94		376.94	-10.41	
LTII	5.1	3.84		3.84	-24.64	
Advertisement & Hoardings	2.18	1.11		1.11	-48.99	
EV charging stations		0.17		0.17		
LT Total	17513.89	17548.96		17548.96	0.20	
	HT Ca	itegory				
HTI	2385.08	2051.03	20.16	2071.20	-13.16	
HT II	918.7	714.40	15.56	729.96	-20.54	
HTIII	10.46	8.98	0	8.98	-14.16	
HT IV	772.88	423.54	11.62	435.16	-43.70	
HT V	17.33	16.83		16.83	-2.90	
HT VI	0	0.00		0.00		
HT VII		0.00		0.00		
HT Total	4104.45	3214.781	47.34	3262.12	-20.52	
	EHT C	ategory				
EHT-I	375.75	133.96	114.87	248.83	-33.8	
EHT-II	793.12	478.76	205.95	684.70	-13.7	
EHT-III	106.69	51.25	17.15	68.41	-35.9	
EHTGeneral	75.62	76.57		76.57	1.3	
Railway Traction	307.7	141.29		141.29	-54.1	
KMRL	17.77	9.65		9.65	-45.7	
EHT Total	1676.65	891.48	337.97	1229.45	-26.7	
Bulk consumers/Licensees	662.29	496.37	3.42	499.78	-24.5	
HT.EHT & Licensees total	6443.39	4602.63	388.72	4991.36	-22.5	
Total	23957.28	22151.60	388.72	22540.32	-5.91	

III. The actual energy sale inside the State by KSEBL was 1805.68 MU less than approval. Considering the impact of open access, the actual quantum was 1416.96 MU less than the approved quantum (5.91%).

- IV. The energy sale inside the State to its consumers during 2020-21 was 22151.60 MU against 22660.93 MU in 2019-20. The domestic energy sales, agricultural and public lighting category shows an increase over previous year whereas the remaining LT categories shows a decrease over previous year. The total LT energy sales was increased by 2.48 % and HT & EHT energy sales decreased by 16.65 %. The total energy sales in 2020-21 registered a net decrease of 2.25 % over the year 2019-20.
- V. The reason for reduction in energy sales is due to the reduction in energy demand owing to the restrictions imposed by the Governments to contain Covid Pandemic. Consequent to the national lockdown due to Covid pandemic, the energy demand drastically reduced during the period from April to June by about 11 to 15 %. Also, the intermittent lock downs and shut down of sectors causes reduction in energy consumption throughout the year.
- VI. A comparison of energy demand in MU for the last three years is given in table below.

Tabl	Table D4 Comparison of energy demand over previous years								
Month	2018-19	2019-20	2020-21	% increase	% increase of				
	Α	В	С	of B over A	C over B				
April	2243.12	2440.53	2054.62	8.80	-15.81				
May	2163.36	2553.02	2189.18	18.01	-14.25				
June	1911.24	2172.47	1920.33	13.67	-11.61				
July	1915.68	2094.06	1932.97	9.31	-7.69				
August	1794.77	1903.63	1929.72	6.07	1.37				
September	2012.98	1989.57	1991.49	-1.16	0.10				
October	2080.00	2046.55	2033.41	-1.61	-0.64				
November	2058.25	2083.64	2098.38	1.23	0.71				
December	2143.58	2165.46	2172.55	1.02	0.33				
January	2000.33	2239.13	2179.75	11.94	-2.65				
February	2045.49	2183.99	2080.46	6.77	-4.74				
March	2479.95	2361.82	2550.06	-4.76	7.97				

- VII. From the above table it may be seen that there is much decrease in the energy demand in FY 2020-21 from FY 2019-20. This reduction in energy demand causes reduction in energy sales during the financial year 2020-21. But owing to the lock down, the consumption of domestic category increased during the year whereas consumption of other categories such as general and commercial category registered reduction in energy consumption.
- VIII. Further, 290.21 MU was consumed from captive generation. Thus, the total energy consumption at consumer end was 22830.54 MU against 23283.71 MU during 2019-20. The reduction in energy consumption at consumer end including open access and captive generation was 1.95%. During the year 2020-21, 261.43 MU had been sold outside the state and 331 MU was transferred outside the State through banking arrangements.

IX. Details in respect of consumption of different categories of consumers during the year 2020-21 are given below.

Table D5. Total energy consumption of State							
Category	Energy sales by KSEBL (MU)	Open access import (MU)	Sub Total (MU)	Consumption against Captive generation (MU)			Total (MU)
				SHP	Solar	Wind	
LT	17548.96		17548.96		135.36		17684.33
HT	3214.78	47.34	3262.12		35.81		3297.93
EHT	891.48	337.97	1229.45	60.62	42.03	16.39	1348.49
Bulk licensees	496.37	3.42	499.79				499.79
Total	22151.60	388.72	22540.33	60.62	213.20	16.39	22830.54

X. Embedded open access consumers imported about 388.72 MU and energy injected by IPPs into the grid for sale outside the State through open access was 38.66 MU. The details are furnished below.

Table – D6 Energy availed and sold through OA by embedded open access consumers in FY-21 (MU)						
Particulars Energy at Energy at Loss on injection/drawal accounting of Periphery point wheeled units						
Energy (Import)	407.41	388.72	18.69			
Energy (Export)	37.14	38.66	1.52			
Total loss			20.21			

XI. The energy sales pattern for 2020-21 is given in table below:

	Table-D7: Energy Sales pattern for 2020-21					
No	Category	Energy sales				
		MU	%			
1	LT Domestic	12699.64	57.33			
2	LT Industrial	1086.67	4.91			
3	LT Agriculture	403.24	1.82			
4	LT Commercial	2982.47	13.46			
5	LT Public Lighting	376.94	1.70			
6	HT &EHT Total	3955.33	17.86			
7	EHT Railway Traction	141.29	0.64			
8	KMRL	9.65	0.04			
9	Bulk Supply	496.37	2.24			
10	Total sales to consumers (within state)	22151.60	100.00			
11	External sale	261.43				
12	Total energy sale by KSEBL	22413.03				

4 T & D Loss:

- I. Hon Commission, vide order dated 08.07.2019, had approved the T& D loss target of 2020-21 at 12.02%, over the loss level of 2019-20 (12.42%). Further, the transmission loss and total AT &C loss were approved at 3.85 % and 9.15 % respectively with a collection efficiency target of 99 %. The actual T&D loss achieved for the year 2020-21 was 10.32%.
- II. Hon'ble Commission may kindly note that KSEBL was able to reduce loss by 1.70% over and above the target approved (12.02%), as detailed below:

	Table D8: T&D loss for the year 2020-21 (MU)				
SI No	Particulars	2020-21			
Α	Energy generation by KSEBL excl auxiliary consumption	7076.93			
В	Power Purchase /energy banked at Kerala periphery	18262.34			
С	Sub Total (MU) (A+B)	25339.27			
D	Energy injected to the grid by private IPPs for sale outside the State through OA	38.661615			
E	Energy wheeled by embedded open access consumers from outside the State at KSEB end	407.41			
F	Energy sales by KSEBL outside the State	261.43			
G	Energy transfer outside the State by KSEBL through banking arrangement	334.82			
Н	Energy sale by private IPPs through intra state open access	37.14			
1	Energy Input (MU)(C+D+E-F-G-H)	25151.95			
J	Substation auxiliary consumption (MU)	19.03			
K	Net Energy Input excluding auxiliary consumption (MU) (I-J)	25132.92			
L	Energy sales by KSEBL	22151.60			
М	Energy consumed by embedded open access consumers at consumer end by wheeling from outside the State	388.72			
N	Energy supplied at consumer end (MU) (L+M)	22540.32			
0	T&D loss (MU) (K-N)	2592.60			
Р	T& D loss for 2020-21 in %(O*100/K)	10.32			
Q	T& D loss target approved for 2020-21 in %	12.02			
Т	Achievement in loss reduction in excess of target approved (%)	1.70			

- a. It may be seen from the above table that the loss reduction achieved during this year is much higher as compared to the previous 8 years. Normally the Category wise energy sales for a particular year were arrived at based on the monthly billed energy sales for the period from May of the financial year to April of the next financial year. This is done because the consumption of a particular month is billed in the subsequent month in the case of monthly billed consumers and in the case of bimonthly consumers it is spread over three months.
- **b.** Consequent to the Covid 19 lock down, recording of meter reading of LT consumers was dispensed with during the period from 20th March 2020 to 19th April 2020. Average consumption-based billing was adopted during this period in all areas and in containment zones afterwards. As majority of domestic, general and commercial consumers are billed on bimonthly basis, the billing data of April did not reflect the actual consumption of February

- and March 2020 due to average billing. The consumption adjustments for the lock down period was billed in the subsequent billing months as door lock units and adjustments.
- **c.** On detailed analysis of month wise data, it is seen that the energy billed data for the period from billing month May to July 2020 is on higher side as compared to the energy input during those months.
- d. Consequent to the national lock down and state lock down due to covid pandemic, the energy demand during the year 2020-21 is lesser by 1102 MU. The energy demand for the period from of April 2020 to July 2020 was less by 1160 MU compared to the period from April to July 2019. Further the lock down during subsequent months also resulted in further reduction of energy sales.
- e. Thus, the higher T&D loss reduction during this year is due to the following factors:
 - Shifting of portion of billed energy from previous year to this year (Energy consumption over average consumption for the period from February to March billed in June 2020) owing to the national lock down due to Covid pandemic.
 - Due to the demand reduction, there is a net reduction of 1094 MU in input energy during 2020-21. Majority of reduction energy demand occured in peak summer months during which higher losses occurs normally in a financial year.
 - The combined effect of all these resulted in overall reduction in T&D losses.

Distribution loss:

III. The actual transmission and distribution loss during the year 20-21 was 10.32%. It may please be noted that the total transmission loss up to 66 KV level was 707.93 MU. Based on the above the distribution loss for 2020-21 is assessed as follows:

Table – D9: Distribution losses						
SI No	Particulars	Quantum	Unit			
(i)	Total Generation and Power Purchase at Kerala periphery (item k of tableD7)	25,132.92	MU			
(ii)	Transmission loss	707.933	MU			
(iii)	Total energy input into the distribution system (i)-(ii)	24,424.99	MU			
(iv)	Total energy output (item O of Table D7)	22,540.32	MU			
(v)	Distribution loss (iii)-(iv)	1,884.67	MU			
(vi)	Distribution loss in % (v)*100/(iii)	7.72	%			

IV. As already submitted, Hon'ble Commission approved a collection efficiency target of 99% and target of AT&C loss at distribution level is 9.15 %. The collection efficiency for the year 2020-21 was 103 %. This is because State Government is pleased to release Rs 872.24 Crores towards the dues of Kerala water authority during the year 2020-21. The AT&C loss achieved during 2020-21 was 7.72% as tabulated below.

	Table D 10 AT&C loss for FY-21					
	Particulars	Quantum				
Α	Energy Input (MU)	25,132.92				
В	Transmission loss (MU)	707.93				
С	Net Energy input (MU) (A-B)	24,424.99				
D	Energy Sold (MU)	22,540.32				
Ε	Revenue from sale of power (Rs. Crore)	13775.69				
F	Adjusted Revenue based on subsidy received basis (Rs. Cr.)	13775.69				
G	Net Opening debtors (Rs. Crore)	3041.61				
Н	Adjusted closing debtors (Rs. Crore)	2630.39				
1	Collection efficiency limited to 100% (F+G-H)/E*100	100%				
J	Units realised (MU) (D*I/100)	22540.32				
K	Units unrealised (MU) (C-J)	1884.67				
L	AT&C Loss (%) (K-C*100)	7.72%				

- V. Hon'ble Commission may kindly note that, KSEBL has been continuously reducing the T&D loss since the year 2001-02. KSEBL was able to reduce the total T&D loss in the KSEBL system including transmission system to the level of 10.32% during the year 2020-21. Thus, the losses in the Distribution system, as a percentage of the total energy input is one of the lowest among the distribution utilities in the country. Consistent T&D loss reduction was one of the major achievements of the Board. It may kindly be noted that, since 2001-02 Board could bring down T&D loss from the level of 30.76% in 2001-02 to 10.32% in 2020-21.
- VI. KSEBL has undertaken a series of measures during 2020-21, as detailed below, in order to achieve the above loss reduction.

Table- D11 Steps taken for T&D loss reduction					
Particulars	Achievement during 2020-21				
Substations Commissioned					
400 kV					
220 kV	4				
110 kV	10				
66 kV	1				
33 kV	2				
Total	17				
Lines Commissioned (Ckt km)					
400kV	79				
220kV	237.90				
110 kV	324				
66 kV	8.40				
33 kV	39.20				
Total	688.50				
Capacity addition/enhancement (MVA)	1242				
11 KV line constructed(km)	2194.63				
LT line constructed(km)	3650.2				
No. of distribution transformers	2372				
HT re conductoring (km)	1138				
LT re conductoring (km)	31845				
1 phase to 3 phase conversion(km)	2130.23				
Meter Replacement (Nos)	440687				

- VII. It is respectfully submitted that, due to loss reduction of 1.70% achieved above the target of 12.02%, KSEBL was able to save an additional quantum of 454 MU against power purchase. Considering the average power purchase cost of Rs 4.36 per unit for the year 2020-21; KSEBL was able to save Rs 200.21 Cr under cost of power purchase on account of this achievement.
- VIII. 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
- IX. The high loss reduction achieved during this year is as a result of the peculiar conditions consequent to nation-wide lock down and subsequent lock downs imposed at State level for combatting Covid pandemic, ie; a force majeure condition. Due to the average billing imposed during April to May 2020, a portion of energy sales from previous year got accounted in current year. Hence KSEBL is not considering this loss as the base for estimating the gain sharing mechanism.
- X. As part of normalization of the energy sales data. the units based on average consumption corresponding to the period of February 2020 and March 2020 billed during May 2020 to July 2020 was extracted from the billing software and the same is deducted from this year's energy sales and adjusted to the previous years energy sales which amounts to 117.61 MU. Based on this the energy sales for the billing month from March 2020 to July 2020 was reworked. The energy sales approved for the year 2019-20 as part of annual accounts was 22660.93 MU. After adjusting the above units (117.76 MU) the energy sales for FY 2019-20 and the energy billed for the financial year 2020-21 is revised as 22777.31 MU and 22033.83 MU respectively. The T&D loss approved for the year 2019-20 based on 22660.93 MU was 12.08%. Based on the revised energy sales the T&D loss became 11.63% for 2019-20 and 10.76 % for 2020-21
- XI. Therefore, KSEBL is proposing weighted average of energy details of FY 2019-20 and FY 2020-21 for arriving at the T&D loss so as to address the shifting of energy sales.

	Table D12: T&D loss for the year 2020-21 (MU)						
SI No	Particulars	2019-20 (based on actual billed data)	2019-20 (after normalizing the billed data)	2020-21 (based on actual billed data)	2020-21 (revised after normalizing the billed data)		
А	Energy generation by KSEBL excl auxiliary consumption	5742.41	5742.41	7076.93	7076.93		
В	Power Purchase /energy banked at Kerala periphery	20383.76	20383.76	18262.34	18262.34		
С	Sub Total (MU) (A+B)	26126.17	26126.17	25339.27	25339.27		
D	Energy injected to the grid by private IPPs for sale outside the State through OA	37.5	37.5	38.66162	38.66		
E	Energy wheeled by embedded open access consumers from outside the State at KSEB end	405.86	405.86	407.41	407.41		
F	Energy sales by KSEBL outside the State	55.95	55.95	261.43	261.43		
G	Energy transfer outside the State by KSEBL through banking arrangement	231.93	231.93	334.82	334.82		
Н	Energy sale by private IPPs for sale outside the State through open access	35.96	35.96	37.14	37.14		
1	Energy Input (MU)(C+D+E-F-G-H)	26245.69	26245.69	25151.95	25151.95		
J	Substation auxiliary consumption (MU)	19.6	19.6	19.03	19.03		
К	Net Energy Input excluding auxiliary consumption (MU) (I-J)	26226.08	26226.09	25132.92	25132.92		
L	Energy sales by KSEBL inside State	22672.39	22790.15	22151.6	22033.84		
М	Energy consumed by embedded open access consumers at consumer end by wheeling from outside the State	386.52	386.52	388.72	388.72		
N	Energy supplied at consumer end (MU) (L+M)	23058.91	23176.67	22540.32	22422.56		
0	T&D loss (MU) (K-N)	3167.17	3049.42	2592.6	2710.36		
Р	T& D loss for 2020-21 in %(O*100/K)	12.08	11.63	10.32	10.78		
Q	T& D loss target approved for 2020-21 in %	12.42	12.42	12.02	12.02		
Т	Achievement in loss reduction in excess of target approved (%)	0.34	0.79	1.70	1.24		

XII. Hon'ble Commission may kindly permit KSEBL to claim the gain attributable due to T&D loss reduction based on the normalised energy sales. Thus, KSEBL may be permitted to retain the gain amounting to Rs.101.17 Cr and the share of consumers is Rs 50.59 Cr as detailed below, which may kindly be approved.

Table- D 13 Gain attributable to KSEBL on over achievement of T&D loss reduction target.						
Particulars	Quantum	Unit				
Energy sales by KSEBL	22033.84	MU				
Energy input needed at 12.02% loss	25044.15	MU				
Energy input needed for 2020-21	24696.08	MU				
Energy savings	348.07	MU				
Power Purchase cost saved due to over achievement of loss	151.76	Cr.				
2/3 of savings	101.17	Cr.				

XIII. The comparison of actual energy sales and energy input as against the approval is given in table below:

Table- D14 Comparison of energy availability						
Particulars	Approved	Actual	Difference			
Energy sales by KSEBL in MU	23957.28	22151.60	-1805.68			
Energy input for meeting the energy sales in MU(C-F-G-J) of table D7	27247.53	24723.99	-2523.54			
Internal Generation in MU (excl aux)						
Hydro	6795.65	7040.29	244.64			
Thermal	0	6.773589	6.77			
Solar & wind	49.18	29.87	-19.31			
Subtotal generation	6844.83	7076.93	232.10			
Power Purchase in MU at Kerala periphery						
CGS	11274.77	9167.26	-2107.51			
RGCCPP	0	92.53	92.53			
IPP-wind & SHPs CPPs &solar prosumers	280.70	374.47	93.77			
LTA	8647.06	8098.67	-548.39			
RPO-solar	740.50		-740.50			
RPO-nonsolar	691.04	5.97	-685.07			
Short term purchase (MU)		523.43	523.43			
Sub Total generation & Power Purchase by KSEBL (MU)	28478.9	25339.27	-3139.63			
Substation auxiliary consumption (MU)		19.03	19.03			
Energy availability(MU)	28478.9	25320.24	-3158.66			
External sale/swap return(MU)	1231.36	596.25	-635.11			
Energy requirement for sale inside the State	27247.54	24723.99	-2523.55			

XIV. It may be seen from the table that the energy demand has decreased by about 1805.68 MU. Hydro generation was more by 244 MU. There was a reduction of 2108 MU from CGS and 548 MU from IPPs outside the State against the approval granted by the Hon Commission. The shortfall from that of approved was compensated by purchasing power amounting to from exchanges and banking arrangements as well as through increased hydro, which were not originally approved in the order. The sale of power outside the State also came down accordingly.

Analysis of various ARR components

- 5 Cost of Power Purchase: The Distribution Business Unit of the petitioner had sold 22151.60 MU to its consumers during the year 2020-21 within the State. The total own generation (net of auxiliary consumption) and power purchase was 25320.34 MU at Kerala periphery and the energy requirement for meeting the energy sales is 24723.99 MU. SBU G was able to supply 7076.93 MU (28.62%) only of the total requirement and balance was purchased from CGS and IPPS within and outside the State, power exchanges etc.
- I. **Cost of Generation**: The energy generation from own generating stations was 7076.93 MU as detailed in Table D 12. ARR for SBU G for the year 2020-21 was **Rs. 539.99 Cr** and Non-tariff income earned is **Rs.9.34 Cr**. The net expenses of SBU G transferred to SBU-D are **Rs. 530.65 Cr**. Deviation from approval is explained in chapter 2 of this petition dealing with Truing up of SBU G.

II. Cost of Purchase of power: Hon'ble Commission had approved Rs. 8797.94 Cr for the purchase of 21634.06 MU from various sources. The actual power purchase quantum was 18262.34 MU at Kerala periphery at a cost of Rs 8057.95 Cr as detailed in Form D3.1. The true up requirement is Rs. 7962.23 Cr, which is less than the approved by Rs 835.72 Cr. A summary of the approved and actual power purchase and true up requirement is given in Table below. The source wise procurement of power is detailed in Appendix-D4. Hon'ble Commission may please note that the petitioner had taken earnest effort to obtain power at the lowest cost from different sources without imposing any load shedding or power restriction in the state duly observing merit order dispatch.

	Table -	- D15: Pov	wer Purch	nase for th	ne year 2	020-21			
		Approved Actual		Truin	ıg up	Va	riation		
No	Particulars	Energy	Cost	Energy	Cost	Energy	Cost	Val	iation
140	i articulars	(MU)*	(Rs Cr)	(MU)*	(Rs Cr)	(MU)*	(Rs Cr)	Energy (MU)*	Cost (Rs Cr)
1	Central Gen. Stations	11275.85	4196.26	9167.26	3541.29	9167.26	3541.29	-2108.59	-654.97
2	Small IPPs within the State	280.70	103.78	374.47	115.65	374.47	115.65	93.77	11.87
3	RGCCPP, Kayamkulam (net)	0.00	0.00	92.53	149.66	92.53	149.66	92.53	149.66
4	IPPs / Traders outside state	8647.06	3518.12	8098.67	3517.35	8098.67	3421.64	-548.39	-96.48
5	Short term / Exchanges/UI/Swap	0.00	0.00	523.43	111.18	523.43	111.18	523.43	111.18
6	RPO solar	740.50	222.15	0.00	0.00	0.00	0.00	-740.50	-222.15
7	RPO non solar	691.04	200.40	5.97	1.63	5.97	1.63	-685.07	-198.77
8	Transmission charges		557.24		618.78	0.00	618.78	0.00	61.54
9	Other charges in connection with sale				2.40	0.00	2.40	0.00	2.40
10	Total	21635.15	8797.95	18262.34	8057.95	18262.34	7962.23	-3372.81	-835.72
	Average Power Purchase cost (Rs/unit)				Rs 4	1.36/unit		·	
* E	nergy at KSEB Bus					·	•	•	

a) **Power Purchase from Central Generating Stations:** A comparison of approved and actual energy purchased from CGS and their costs are given in the Table below.

	Table – D16 Power Purchase from Central Generating Stations for the year 2020-21												
		Approv	ved	Audited	accounts	True up red	quirement	Varia	ation				
SI No	Station	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	584.02	1544.50	500.4459	1544.50	500.45	-263.51	-83.57				
2	RSTPS III	453.27	146.02	377.05	117.8094	377.05	117.81	-76.22	-28.21				
3	Talcher Stage-II	3172.9	776.79	3051.88	812.9988	3051.88	813.00	-121.02	36.21				
4	Simhadri TPS StgII	584.87	257.79	376.92	212.87937	376.92	212.88	-207.95	-44.91				
5	NLC Stage-I	397.35	135.66	298.29	138.36285	298.29	138.36	-99.06	2.70				
6	NLC Stage-II	567.42	195.14	237.80	91.616388	237.80	91.62	-329.62	-103.52				
7	NLC 1 Expansion	429.02	148.99	395.21	152.23803	395.21	152.24	-33.81	3.25				
8	NLC II Expansion	282.78	140.83	289.19	154.10171	289.19	154.10	6.41	13.27				
9	MAPS	123.59	35.06	70.53	21.113655	70.53	21.11	-53.06	-13.95				
10	KAIGA	486.76	184.11	531.29	183.14311	531.29	183.14	44.53	-0.97				
11	Kudankulam	1538.37	657.17	1503.14	616.70819	1503.14	616.71	-35.23	-40.46				
12	Vallur	347.05	170	114.90	100.26167	114.90	100.26	-232.15	-69.74				
13	NTPL	501.99	240.44	364.90	186.7311	364.90	186.73	-137.09	-53.71				
14	Kudgi	742.2	408.38	256.74	209.7314	256.74	209.73	-485.46	-198.65				
15	Bhavini	271.21	115.86			0.00	0.00	-271.21	-115.86				
16	NNTPS			99.65	43.015356	99.65	43.02	99.65	43.02				
17	Eastern region				0.1340721	0.00	0.13	0.00	0.13				
	Total	11706.78	4196.3	9512.00	3541.29	9512.00	3541.29	-2194.79	-654.97				
	*Energy at exbus												

- (i) It may kindly be noted that Unit I (500 MW) of New Neyveli Thermal Power Station (NNTPS) which was not approved in Hon'ble Commission commenced its commercial operation on 28.12.2019 and Unit II (500 MW) commenced its operation on February 2021. KSEBL has an allocation of 32.4 MW. 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. KSEBL scheduled 99.65 MU during 2020-21 for Rs 43.02 Cr.
- (ii) Hon'ble Commission may please be noted that KSEBL entered the PPA with NLC for power allocation from NNTPS on 10.12.2010. Regulation 18 of Tariff Regulation, 2014 (for the control period from 2015-16 to 2017-18) clearly stipulated that in the case of existing generating stations, approval of PPA shall not be required in the case of purchase of power based on Central allocation of generation capacity of Central Generating Stations to the State or in the case of purchase of power from generating stations/units at a tariff approved by Central Electricity Regulatory Commission though not under central allocation of generation capacity to the State or in case of purchase of power from generating stations/units at tariff approved by other State Electricity Regulatory Commissions. The same is reiterated in Tariff regulations 2018 (applicable for the control period from 2018-19 to 2021-22) also. Accordingly, KSEBL has been seeking approval for power purchase based on pre-existing PPAs with Central Generating Stations (allocation of power by Ministry of Power) in the petition for approval for ARR & ERC for the financial year as and when the power started scheduling from Central Generating Stations and Hon'ble Commission was pleased to approve the same vide ARR & ERC orders. As per the Tariff regulations 2014 also, KSEBL has been continuing the same approach for all the PPAs with Central Generating Stations entered before November 2014.
- (iii) Similar procedure was adopted for all Central Generating Stations whose power is allocated as per Ministry of Power such as NTPC Kudgi, NLC II Expansion, NTPL, NTECL Vallur, NTPC Simhadri, NPCIL Kudamkulam etc whose PPA was entered till FY 2010. But, as per Regulation 76 of Tariff Regulations 2018, KSEBL had sought approval for all power procurements through long term contracts, medium term contracts and short-term contracts entered into with IPPs and private generators, entered after FY2014.
- (iv) As NNTPS did not commence its operation at the time of filing of MYT petition and it was not certain about the date of commencement of scheduled operation, KSEBL did not submit the energy schedule of NNTPS in the MYT petition dated 31.10.2018. The date of commercial operation of unit I of NNTPS was declared on 28.12.2019 and KSEBL considered the energy schedule of the Station in Mid Term review petition filed by KSEBL on 24.03.2020. Considering the fact that KSEBL entered PPA with M/s NNTPP before the issuance of MYT Regulations KSEBL humbly requests before the Hon'ble Commission to kindly consider the power procurement of NNTPS and allow the power purchase cost of M/s NNTPP.
- (v) Table D14 shows that there was an overall reduction in CGS to the extent of 2194.79 MU from the approved quantum during the year 2020-21. The actual power purchase cost from CGS had been less by Rs 654.97 Cr from the amount approved by the Hon Commission as detailed in table above.

- (vi) It may please be noted that owing to the national lock down and subsequent lock downs introduced during FY 2020-21 there was drastic reduction in demand during the year 2020-21. During the period from April to June 2020 there was reduction in demand of about 1159 MU which results in surrender of energy from central generating stations during the low demand periods. Hon'ble Commission may please note that KSEBL has been scheduling energy based on merit order despatch basis. The reasons for month-wise reduction in availability is enclosed as Annexure.
- (vii) The reasons for reduction in energy availability as well as the details of energy surrender are detailed in table below:

	Table	D17: Rec	luction in p	ower avai	lability during	2020-21 (MU)
CGS			Surrender	Total	Reduction in availability after surrender	Remarks for reduction in availability
RSTPS I & II	1808.01	1544.50	206.28	1750.78	57.23	Forced outage during August, September due to high turbine vibrations;
RSTPS III	453.27	377.05	16.92	393.97	59.30	Shut down from 11.03 2020 to 8.06.2020 due to steam leakage in turbine;
Talcher Stage-II	3172.9	3051.88	61.35	3113.24	59.66	Unit 2 under forced outage due to boiler tube leakage from 14.01.2021;
Simhadri TPS Stg II	584.87	376.92	339.62	716.54		
NLC Stage-I	397.35	298.29	79.82	378.11	19.24	Unit III forced outage due to boiler side problem during Octobeer, Unit I,II & III forced outage during January
NLC Stage-II	567.42	237.80	80.68	318.48	248.94	Unit V & VI due to boiler side problem from May to Dec; Forced outage due to boiler side problem during October, Unit I,II & III forced outage during January
NLC 1 Expansion	429.02	395.21	30.15	425.36	3.66	Unit I outage during Oct,Nov and Dec due to turbine problem
NLC II Expansion	282.78	289.19	26.37	315.56		Unit 1 Forced outage during Nov,Dec,Jan,Feb and Unit II forced outage during Dec, Jan,Feb and March
MAPS	123.59	70.53		70.53	53.06	
KAIGA	486.76			531.29		
Kudankulam	1538.37	1503.14		1503.14	35.23	
Vallur	347.05	114.90	228.11	343.01	4.04	
NTPL	501.99		170.65	535.55		
Kudgi	742.2	256.74	645.91	902.65		
Bhavini	271.21	0.00	_	0.00	271.21	not commissioned
NNTPS	0	99.65	4.28	103.93		
Eastern region	0	0.00	4055.45	0.00	*** = =	
Total	11706.79	9512.00	1890.14	11402.14	811.56	

- (viii) The variation in actual cost from the approved cost is due to the reasons mentioned below
- (ix) 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 approved vide corresponding regulations/CERC orders. 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 Hon'ble CERC from time to time. As per the Tariff regulations, the fixed charges payable to the generator is proportional to the availability. ie; the fixed charges paid depends on the actual declared availability of the generating Station. Hon'ble Commission vide MYT order dated 08.07.2019 approved fixed charges for the financial year 2020-21 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 and 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
- (x) In the order dated 08.07.2019, the variable charges of various stations for the control period including 2020-21 were calculated by this Hon'ble Commission 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 2019-20 approved in the MYT order. In addition to the above, as mentioned 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.
- i. Further, in the case of lignite-based stations, NLC has issued the Lignite transfer price guidelines 2019-24 on 17.09.2019 having effect from October 2019. As per the revised guidelines, the basic price of pooled lignite is revised from Rs. 1950/ton to Rs. 2050/ton with

effect from 01.10.2019. Further, security charges, ground water charges and recovery of lignite price due to surrender of power of the linked power plants etc are billed in addition to basic price from 01.10.2019 onwards. Hence energy charges of NLC stations has increased from the third quarter of FY-2019-20 onwards. As the lignite transfer price for 2019-24 was finalised by NLCIL without due consultation with KSEBL, payment of monthly bills from Oct.2019 to July 2020 were released under protest. As NLC did not have the jurisdiction to issue guidelines, KSEBL raised dispute against the same before Hon'ble CERC. Hon'ble CERC was pleased to issue stay on the guidelines issued by NLC at the time of hearing and directed NLC to continue the billing at the rates prevailing corresponding to the tariff period 2009-2014. KSEBL has been admitting bills at the lignite transfer price of Rs 2132.239 per MT based on the MoC guidelines issued vide order No 28012/1/2014-CA-II dated 2.1.2015 from the month of August 2020 onwards.

- ii. Thus, the actual per unit variable cost of power purchase from various sources will vary from the approved level and this matter is well considered by the KSERC Tariff Regulations, by issuing regulations for claiming fuel surcharge. KSEBL filed quarterly fuel surcharge petitions during 2020-21 along with the reasons for variations in monthly fuel surcharge.
- **iii.** 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 2019-20 vide order dated 08.07.2019.
- iv. All the above factors contribute to variation in the per unit power purchase cost of FY 2020-21 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. Further KSEBL humbly requests before the Hon'ble Commission to kindly allow the revisions in charges on the issuance of Tariff orders for central generating stations as and when it materialises.
- b) An amount of Rs 1340721 towards Farakka station under Eastern was remitted during the year on account of the revision of IT charges of ER stations Farakka I.
- c) Power Purchase from wind and small IPPs within the State: KSEBL had purchased 374.47 MU for Rs.117.28 Cr against the approved quantum of 280.7 MU for Rs 103.78 Cr. The details of approval are furnished in Appendix II of this petition.
 - i. The purchase of power from Independent Power Producers as well as the net injection to the grid during FY 2020-21 by captive SHP/solar/co-generation power producers such as Maniyar, Kuthungal, PCBL and solar prosumers is given in table below.

Table-I	Table-D18: Power Purchase from Wind and other small IPPs											
	KSERC a	approval	Audited	Accounts	TU requi	rement	Diffe	rence				
Station	(MU)	(Rs Cr)	(MU)	(Rs Cr)	(MU)*	(Rs Cr)	(MU)	Rs Cr)				
Wind- Ramakkalmedu	27.87	8.75	19.53	17.27	19.53	17.27	-50.62	-4.75				
Wind-Koundikkal	12.56	3.94	9.20		9.20							
Wind- Agali	29.72	9.33	26.31		26.31							
Wind Ahalya	20.98	10.97	18.51	9.68	18.51	9.68	-2.47	-1.29				
INOX	30.84	12.61	35.76	14.63	35.76	14.63	4.92	2.02				
Kosamattom	0	0	1.22	0.63	1.22	0.63	1.22	0.63				
Wind Sub total	121.97	45.61	110.53	42.21	110.53	42.21	-11.44	-3.40				
Ullunkal(EDCL)	17.79	4.34	15.45	4.07	15.45	4.07	-2.34	-0.27				
Iruttukanam Stage-I & II(Viyyat)	24.69	6.673	22.17	6.12	22.17	6.12	-2.52	-0.56				
Karikkayam HEP(AHPL)	37.56	15.624	36.35	16.23	36.35	16.23	-1.21	0.61				
Meenvallom(PSHCL)	8.44	4.12	6.29	3.07	6.29	3.07	-2.15	-1.05				
Kallar of Idukki District	0.08	0.04	0.00	-	-	-	-0.08	-0.04				
Panchayat												
Mankulam of Grama Panchayat	0	0	0.00	-	-	-	0.00	0.00				
Minar Renewable energy	0	0	12.21	6.50	12.21	6.50	12.21	6.50				
project Ltd												
Deviar micro hydro project			0.02	0.10	0.02	0.10	0.02	0.10				
SHEP subtotal	88.65	30.84	92.50	36.09	92.50	36.09	3.85	5.25				
Solar					-	-	0.00	0.00				
Solar IREDA	70.08	27.33	73.05	27.98	73.05	27.98	2.97	0.65				
Solar IPP ANERT			2.86	3.11	2.86	3.11	2.86	3.11				
THDCIL			17.24		17.24	-	17.24	0.00				
Grid connected average pooled			41.00	6.26	41.00	6.26	41.00	6.26				
power purchase cost-solar												
prosumers												
Solar subtotal	70.08	27.33	134.15	37.34	134.15	37.34	64.07	10.01				
Captive consumers other than			37.29		37.29	-	37.29	0.00				
solar prosumers net injection												
to grid												
Total	280.7	103.78	374.47	115.65	374.47	115.65	93.77	11.87				

Payment for energy supplied by M/s THDCIL was made in 2021-22 as there was a dispute with regard to the billed energy.

- ii. **Wind IPPs**: Hon'ble Commission approved 121.97 MU from various wind IPPs for a total cost of 45.61 Cr against which, KSEBL purchased 110.53 MU for a total cost of Rs 43.84 Cr as shown in table above.
- iii. 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 and injected 1.61 MU during FY 2019-20 at a total cost of Rs 0.495 Cr. It may please be noted that KSEBL initialled draft PPA with M/s Kosamattom Pvt Ltd on 27.10.2018 @ interim tariff of Rs 3.07 per unit and submitted the same before Hon'ble Commission for approval. Subsequently Hon'ble 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 Ramakkelmedu is approved 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. Honorable Commission vide order dated 27.10.2020 approved the draft PPA of the generator with certain modifications @ Rs 3.93 per unit and KSEBL entered PPA with M/s Kosamattom Finance limited on 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 power purchase cost Rs 0.629 Cr is inclusive of previous year expenses of Rs 0.153 Cr towards the revised energy charges from December 2018 to February 2020.

- iv. Small Hydro IPPs: Hon'ble Commission vide order dated 08.07.2019 approved 88.65 MU from various small hydel IPPs @ of Rs 30.84 Cr. KSEBL has procured 92.50 MU at a cost of Rs 36.09 Cr. Hon'ble Commission vide order dated 14 .09.2020 approved interim tariff at the rate of 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 M/s Deviar Micropower Ltd..
- v. Solar IPPs: Hon'ble Commission approved 70.08 MU from Kasargod solar park (IREDA) for a total power purchase cost of Rs 27.33 Cr. KSEBL has purchased 73.05 MU from IREDA at a cost of Rs 27.98 Cr. In addition, 2.86 MU was procured from solar Project Kuzhalmannam of Anert. The draft PPA with M/s Anert was signed on 04.12.2009 and submitted before Hon'ble Commission for approval. As per the order of Hon'ble Commission dated 28.08.2021 and 08.10.2021 KSEBL has initialled modified PPA with M/s ANERT and submitted the same before Hon'ble Commission for approval on 30.11.2021 @ Rs 2.69 per unit as ceiling rate. KSEBL remitted Rs 3.11 Cr towards the power purchase cost from 19.12.2016 onwards (11.55 MU) and no provisions has been made in the audited accounts of corresponding years as PPA was not entered at that time.

Further 50 MW solar project by THDCIL Paivalika was commissioned on 31.12.2020 and KSEBL started scheduling energy from January 2021 onwards. KSEBL procured 17.24 MU during this year. The bills for the same was settled only on 2021-22 and hence not provided in audited accounts.

- vi. CPPs: There was a net injection of 37.29 MU by CPPs such as Maniyar, Kuthungal, major Manorama etc during the financial year 2020-21. However, this is considered only for energy loss calculation purpose.
- vii. Solar prosumers: A net injection of about 41 MU has been made by various solar prosumers and the power purchase cost accounted during 2020-21 is Rs 6.26 Cr. at APPC rate.

viii. Thermal IPPs

Power purchase from RGCCPP, Kayamkulam: Hon'ble Commission, vide order dated 08.07.2019, did not approve any schedule from RGCCPP for the year 2020-21 and did not approve the AFC of RGCCPP in the ARR of KSEBL from 2019-20 onwards and had directed KSEBL

to negotiate for bringing down the AFC. As per the direction of Hon'ble Commission, KSEBL and NTPC Ltd. held several rounds of discussions and in the meeting held between NTPC and KSEBL on 12-11-2020, wherein both NTPC and KSEBL agreed on Rs. 100 crore 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 Hon'ble Commission vide Petition for approval of the settlement reached in compliance with the direction of the Commission contained in the Order dated 08-07-2019, between KSEB Ltd and NTPC Ltd and approved by Government of Kerala in respect of the PPA of Rajiv Gandhi Combined Cycle Power Project (RGCCPP), Kayamkulam, for the years from 2019-20 till the end of the current PPA period (i.e. till 28-2-2025) under Section 86 of the Electricity Act 2003, dated 11.01.2021 and Hon'ble Commission vide order dated 15.03.2021 was pleased to approve the fixed charges for the PPA period. As part of the settlement agreement Honorable Commission directed KSEBL to allow necessary schedule to RGCCPP, Kayamkulam for exhausting the stock of Naphtha available with RGCCPP/ BPCL as per the terms of Agreement. Based on the same KSEBL scheduled 100.30 MU during March 2021. The auxiliary consumption of the station supplied by KSEBL during non-operative periods is 7.77 MU, thus there is a net injection of 92,53 MU for a total power purchase cost of Rs 149.66 Cr for the year 2020-21. Considering the above Hon'ble Commission kindly approve Rs 149.66 Cr as per the accounts of KSEBL for the year 2020-21.

ix. Total power purchase from IPPs inside the State is summarized as below:

	Table-D19: Power Purchase from IPPs											
	KSERC a	pproval	Audited Accounts Truing up requirement		Difference							
Station	Energy (MU)	Cost (Rs Cr)	Energy (MU)	Cost (Rs Cr)	Energy (MU)	Cost (Rs Cr)	Energy (MU)	Cost (Rs Cr)				
RGCCPP	0.00	0.00	92.53	149.66	92.53	149.66	92.53	149.66				
Wind & SHEP	210.62	76.45	203.03	79.94	203.03	79.94	-7.59	3.49				
Solar	70.08	27.33	93.15	31.09	93.15	31.09	23.07	3.76				
Grid connected solar prosumers	0.00	0.00	41.00	6.26	41.00	6.26	41.00	6.26				
CPPs/PCBL	0.00	0.00	37.29	0.00	37.29	0.00	37.29	0.00				
Subtotal	280.70	103.78	467.00	266.94	467.00	266.94	186.30	163.16				

d) Power Purchase from IPPs outside state through approved firm contracts: Since the power demand of the State cannot be met fully from resources within the state, KSEBL had, with the approval of Hon'ble Commission, entered into agreements with various generators outside the State. Hon'ble Commission had approved 8994.76 MU for a total amount of 3518.12 Cr from various generators inclusive of power contracted through DBFOO basis against which KSEBL had purchased 8392.856 MU for a total cost of 3517.35 Cr from various contracts. The details of cost of power purchase through long term contracts as per audited accounts are given in table below.

Table-D20: Power Purchase thru various LTA as per audited accounts approved for FY -21									
	KSERC ap	proval	A	Actual					
Source	Energy* (MU)	Cost (Rs Cr)	Energy* (MU)	Cost (Rs Cr)					
Maithon Power Ltd-I	1105.73	418.03	970.15	411.08					
Maithon Power Ltd-II	1105.73	418.03	969.96	411.26					
DVC Mejia	705.50	274.74	647.87	281.36					
DVC RTPS	348.10	137.38	217.20	121.57					
Jindal Power Ltd-Bid I	1,497.96	551.58	1470.83	528.90					
Jhabua Power Ltd-PSA I	861.33	332.22	854.13	351.03					
Jindal Power Ltd-Bid II	1,123.47	462.05	1103.31	466.66					
Jhabua Power Ltd-Bid II	748.98	308.03	741.47	345.38					
JITPL	748.98	308.03	703.14	310.32					
BALCO	748.98	308.03	714.80	289.78					
Subtotal	8994.76	3518.12	8392.86	3517.35					
* Energy at ex bus									

i. <u>Power purchase from IPPs through long term contracts for which tariff is determined by CERC</u>

Hon'ble Commission approved 3265.06 MU for a total cost of Rs 1241.77 Cr for the year 2019-20 from the projects through long term contracts whose tariff is determined by CERC. KSEBL purchased 2955.09 MU for a total amount of Rs 1262.93 Cr against this. The details are given below.

Table-D21: Power Purchase thru various LTA as per audited accounts approved for FY -21									
	KSERC	approval		Actual					
Source	Energy* (MU)	Cost (Rs Cr)	Energy* (MU)	Cost (Rs Cr)					
Maithon Power Ltd-I	1105.73	418.03	970.15	411.08					
Maithon Power Ltd-II	1105.73	418.03	969.96	411.26					
DVC Mejia	705.50	274.74	647.87	281.36					
DVC RTPS	348.10	137.38	217.20	121.57					

The reasons for variation for power purchase cost in the case of power contracted through long Term contracts is given below.

a. Maithon Power Ltd: -

The actual power purchase cost of Maithon Power Ltd is more than the approved cost. The variation in fixed cost was due to the revision of AFC as per CERC order dated 01.10.2019. The revised fixed charges for the Tariff period 2014-19 are given in table below.

Table-D22 Revised Annual Fixed Charges (Rs Cr)							
Financial Year	Revised AFC vide order dated 01.10.2019						
2014-15	Rs 991.545						
2015-16	Rs 1063.1426						
2016-17	Rs 1078.6834						
2017-18	Rs 1065.5283						
2018-19	Rs 1112.8793						

Thus, the annual fixed charges increased to Rs 1112.88 Cr. from that considered while approving the fixed charges in MYT petition amounting to Rs 1042.65 Cr. for the year 2020-21. The actual fixed charges for the year 2020-21 have increased to Rs 157.95 Cr. for Maithon Power Ltd - I & Maithon Power Ltd - II from the approved cost of Rs 148.95Cr.

The variation in energy charges was due to the reasons mentioned in paragraph 4.6. Vide CERC Tariff regulations 2019, the auxiliary consumption increased from 5.75% to 6.25 %. In addition to the above, ash disposal charges amounting to Rs 5.43Crores and Rs 5.75 crores towards Maithon-I and Maithon II was admitted during 2020-21. Hon'ble Central Commission vide order dated 26.12.2017 and 08.04.2019 allowed the ash disposal expenses separately as additional O&M expenses over and above the annual fixed charges, as the same was not considered for computation of Interest on working capital.

There was an energy surrender of 127.02MU and 127.21 MU from Maithon I & II respectively during FY 2020-21 during low demand periods owing to the lock down due to Covid pandemic, The reasons for month wise reduction in availability and variation in fuel cost was already submitted before the Hon'ble Commission along with fuel surcharge petitions and its additional submission.

b. DVC Mejia and DVC RTPS

Revised gross station heat rate due to revised Tariff guidelines and usage of high cost coke grade coal resulted in increase in cost in these stations. The gross station heat rate increases from 2371.61 to 2374.1 and auxiliary consumption increases from 5.25% to 5.75% for DVC Mejia and gross station heat rate increases from 2339.78 to 23352.87 and auxiliary consumption increases from 5.25% to 5.75% for DVC RTPS which contributes to increase in energy charges. Further the variation in coal prices and transportation charges also contributes to variation in energy charges.

ii Power contracted through DBFOO

Hon'ble Commission approved power procurement of 5729.7 MU for a total cost of Rs 2286.26 Cr from projects under DBFOO basis for the financial year 2020-21. KSEBL procured 5499.72 MU for a total power purchase cost of Rs 2343.85 Cr.

In the case of approved contracts, Hon'ble Commission vide MYT order dated 08.07.2019 approved fixed charges for the financial year 2019-20 by deducting 2 % on the fixed charges for FY 2018-19. But as per PSA the base fixed charges for a particular year are obtained by applying a depreciation of 2 % on the base fixed charges of previous year. The base fixed charges so arrived is escalated with 30% of variation in whole price index of January of corresponding year from that of January 2014.

In the MYT order, the variable charges of FY 2019-20 are arrived by applying an escalation of 2 % on the variable charges for first half FY 2018-19. As per PSA, the variable charges are dependent on the landed cost of fuel, station heat rate, and gross calorific value of fuel. The variation in variable charges is due to the variation in landed cost of fuel (concessional coal

through coal linkage) and variations in calorific value of fuel. The details of purchase from projects under DBFOO basis and the corresponding cost of purchase is given in table below:

Table-D23: Power Purchase thru DBFOO contracts as per audited accounts approved for FY -21									
	KSERC a	pproval	Actual						
Source	Energy* (MU)	Cost (Rs Cr)	Energy* (MU)	Cost (Rs Cr)					
Jindal Power Ltd-Bid I	1,497.96	551.58	1,470.83	528.90					
Jhabua Power Ltd-PSA I	861.33	332.22	854.13	351.03					
Jindal Power Ltd-Bid II	1,123.47	462.05	1,103.31	466.66					
Jhabua Power Ltd-Bid II	748.98	308.03	741.47	345.38					
JITPL	748.98	308.03	703.14	310.32					
BALCO	748.98	308.03	714.80	289.78					
Total	5,729.70	2,269.94	5,587.68	2,292.08					

It may please be noted that the above power purchase cost is inclusive of provision for reversal of previous years and the details of provision reversal and the actual power purchase cost admitted for the purchase of power from various stations contracted ton DBFOO basis are as below:

Table-D24: Power Purchase thru DBFOO contracts as per audited accounts approved for FY -21										
	KSERC ap	proval		Actual as per accounts						
Source	Energy* (MU)	Cost (Rs Cr)	Energy* (MU)	Amount corresponding to purchase of FY 2021 (Rs Cr)	Provision of previous years revised during the year (Rs Cr)	Cost as per Accounts (Rs Cr)	Amount admitted as per PSA (Rs Cr)			
Jindal Power Ltd-Bid I	1,497.96	551.58	1,470.83	534.18	-5.28	528.90	534.18			
Jhabua Power Ltd-PSA I	861.33	332.22	854.13	351.03		351.03	317.40			
Jindal Power Ltd-Bid II	1,123.47	462.05	1,103.31	471.43	-4.77	466.66	471.43			
Jhabua Power Ltd-Bid II	748.98	308.03	741.47	345.38		345.38	327.44			
JITPL	748.98	308.03	703.14	311.32	-1.00	310.32	310.28			
BALCO	748.98	308.03	714.80	291.57	-1.79	289.78	291.57			
Total	5,729.70	2,269.94	5,587.68	2,304.91	-12.83	2,292.07	2,252.30			
Provis	ion of previou	s years revi	sed during t	he year (Rs Cr)			_			
	up to 20	17-18	2018-19	2019-20	Total					
	Rs (Cr	Rs Cr	Rs Cr	Rs Cr					
Jindal Power Ltd-Bid I	-1.39	98	-2.663	-1.219	-5.280					
Jindal Power Ltd-Bid II	-1.043		-2.286	-1.437	-4.766					
JITPL		-1.003			-1.003					
BALCO		-1.785			-1.785					

In the case of M/s Jhabua Power Ltd, Hon'ble Commission may kindly note the following:

The actual power purchase cost for Jhabua Power Ltd (115 MW under Bid I) amounts to Rs 351.03 Cr against the approved cost of Rs 332.22 Cr and Rs 345.38 Cr against 308.03 Cr for Jhabua Power Ltd II under PSA II.

It may kindly be noted that certain claims towards fixed charges and variable charges was not admitted by KSEBL during FY-2019-20. This is mainly due to difference in value of station heat rate taken by the utility and generator for the computation of fixed charges and fuel charges and due to the difference in methodology taken by KSEBL and generator for the calculation of fuel charges. M/s Jhabua Power Ltd has filed a petition before Hon'ble CERC on the matter since this Hon'ble Commission decided that it does not have jurisdiction in the matter. Further KSEBL is deducting the SRLDC fees and charges from the monthly bill of M/s Jhabua power Ltd

as per clause 5.7 of PSA which was not agreeable to M/s Jhabua Power Ltd. Also, M/s Jhabua Power Ltd does not account the STOA, MTOA credits passed on by M/s PGCIL in their monthly bills, but has not disputed the PoC bill claim. As a result, Rs 51.576 Cr (Rs 33.64 Cr and Rs 17.93 Cr) towards fixed and variable charges for 2020-21 had not been admitted for the variation of fixed charges and variable charges due to the above difference in methodology of computation but was provided in accounts.

KSEBL has not paid these charges during 2020-21 and therefore not claiming Rs 51.576 Cr (Rs 33.64 Cr.+ Rs 17.93 Cr.) in the truing up petition for FY-21. It is requested that Hon'ble Commission may kindly consider truing up of these claims, if any portion legally materialise on a later date.

(i) Thus, the actual cost admitted by KSEBL for these stations are given below

Table D25 Power purchase Cost of Jhabua Power Ltd (Rs Cr)								
Source	Power purchase cost for FY-21 as per accounts	Amount unadmitted	Amount admitted as per PSA					
	Α	В	С					
	Rs Cr.	Rs Cr.	Rs Cr					
Jhabua Power Ltd-Bid I	351.03	33.63	317.40					
Jhabua Power Ltd-Bid II	345.38	17.94	327.44					
Total	698.1	51.57	644.84					

In the case of power contracted from generators under DBFOO for which rate is not approved by Hon'ble Commission, the following points may kindly be noted.

Hon'ble Commission 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, as the final approvals from GoI and State Government was still awaited.

While approving the fuel surcharge petition for the year 2019-20, Hon'ble Commission has not admitted the fuel price variation in respect of three IPP stations viz Jindal India Thermal Power Ltd (100 MW), Jhabua Power Ltd (100 MW) and Jindal Power Ltd (150 MW), which were contracted by KSEBL based on tenders invited under DBFOO basis in 2014. Hon'ble Commission has considered drawal of power from these stations at a cost equivalent to that being paid to M/s. BALCO, for the provisional estimation of cost of power while approving the ARR & ERC for the control period, 2018-2022.

This Hon'ble Commission has further ordered that approval of power purchase from the stations mentioned above shall be given only after getting approval from Government of India as well as from Government of Kerala on the entire power purchase under DBFOO. It was also mentioned in the order that actual tariff paid by KSEBL for procuring power from these three stations were much higher and reiterated that, during truing up of accounts for the respective financial years, the excess amount incurred for procuring power from these three generators shall not be considered, unless KSEBL gets the approval for power purchase from Government

of India for deviations from the guidelines and on getting the approval of Government of Kerala on the entire power purchase under DBFOO.

It is submitted that aggrieved by the above orders, KSEBL filed separate review petitions against two fuel surcharge orders dated 14.02.2020 and 27.04.2020 before this Hon'ble Commission on 30.03.2020 and 04.06.2020 respectively for allowing pass through of the additional fuel cost incurred thereunder. But Hon'ble Commission rejected the prayers of KSEBL on both the petitions as per order dated 14.08.2020 and directed KSEBL to file separate petition.

With due respect to the orders of this Hon'ble Commission, from August 2020 onwards, KSEBL has limited payment towards power purchase from the above mentioned three stations limiting to the rate of M/s BALCO at Kerala periphery KSEBL has filed separate petition before this Hon'ble Commission seeking final and conclusive order in the matter of the drawal of power contracted against the PSAs of the three generating stations on 09.11.2020. Public hearing on the same was scheduled on 09.02.2021 but was adjourned by Hon'ble Commission.

It may please be noted that Hon'ble Commission 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 from August 2020 onwards only. As KSEBL had already remitted the power purchase cost of these stations for the period from April to July 2020, KSEBL humbly requests before the Honorable Commission to approve the actual expenses claimed in this petition given in table below. Further KSEBL humbly requests before the Hon'ble Commission to pass on the amount payable as per final orders in this matter, as and when the same materializes.

Adoption of BALCO rates for approval of power purchase cost of these 3 generators were ordered for the first time only during the proceedings on the fuel surcharge petition for 2019-20 dated 14th February 2020 which was confirmed through orders on review petition dated 14.08.2020. As KSEBL had already remitted the power purchase cost of these stations for the period from April to July 2020, KSEBL humbly requests before the Hon'ble Commission to approve the actual expenses claimed in this petition given in table below.

The actual amount paid during FY 2020-21 for bid II contracts are given in table below.

Table D	Table D 26 Amount paid under for the three stations under Bid II contracts										
Source	Fnergy*	Amount corresponding to purchase of FY 2021	=	Cost as per	Amount paid after limiting the rate to BALCO		Total amount paid				
	MU	Rs Cr	Rs Cr	Rs Cr	Rs Cr	Rs Cr	Rs Cr				
Jindal Power Ltd-Bid II	1,103.31	471.43	-4.77	466.66	463.11	-4.77	458.34				
Jhabua Power Ltd-Bid II	741.47	345.38	0	345.38	309.39	0	309.39				
JITPL	703.14	311.32	-1.00	310.32	292.50	-1.00	291.50				

In view of the above submission, the claim of KSEBL for truing up is furnished in table below, which may kindly be approved.

	Table D 27 True up claim of KSEBL (Rs Cr)						
Source	Amount corresponding to purchase of FY 2021	As per accounts	admitted	Amount released by limiting to BALCO rate	Inrovision	True up claim	
Jindal Power Ltd-Bid I	534.18	528.9	534.18	534.18	-5.28	528.9	
Jhabua Power Ltd-PSA I	351.03	351.03	317.4	317.4		317.4	
Jindal Power Ltd-Bid II	471.43	466.66	471.43	463.11	-4.77	458.34	
Jhabua Power Ltd-Bid II	345.38	345.38	327.44	309.39		309.39	
JITPL	311.32	310.32	310.32	292.50	-1.00	291.5	
BALCO	291.57	289.78	291.57	291.57	-1.785	289.78	
Total	2,304.91	2,292.07	2,252.34	2,208.15	-10.79	2,195.31	

<u>Power Purchase 200MW wind power with the Solar Energy Corporation of India Limited on long-term Basis</u>

KSEBL 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. Honorable Commission vide 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) or from the date of full commissioning of the projects, whichever is earlier, at the tariff as below. (a) @Rs 2.83/ kWh from the Scheduled Commissioning Date (SCD) until the commissioning of the cumulative awarded capacity/ cumulative capacity and 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. Honorable Commission vide order dated 28.10.2021 approved the trading margin of Rs 0.07/kWh in the Power Sale Agreement for 200MW wind power with Solar Energy Corporation of India Limited on long term basis. KSEBL procured 5.97 MU during the year 2020-21 for a power purchase cost of 1.63 Cr .

e) Power purchase considered under short term contracts

In the MYT petition, KSEB Ltd has proposed to procure 91.80 MU of power from short term market to meet the peak deficit anticipated in the summer months. Hon'ble 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."

It may kindly be noted that during 2020-21 there was reduction in energy procurement from Central Generating Stations by 2194 MU, energy procurement from long term contracts was also less by 601 MU This resulted in a total reduction in energy availability by 2870.23 MU over the approved quantum. Further purchase of renewable energy amounting to 1425,27 MU approved by the Hon'ble Commission was not materialised. The hydro generation was increased in order to meet the short fall, peak demand and exigencies, KSEBL purchased 167.02 MU through short term markets,94.71 MU at Kerala periphery through energy exchanges through Day ahead markets and term ahead markets and 139.53 MU through deviation settlement mechanism and availed 122.28 MU through banking arrangements.

(a) In order to overcome the anticipated power and energy shortages in the summer months, KSEB Ltd decided to tie-up 50% of the shortage through SWAP/ DEEP portal and the balance 50% through Day ahead market in Power Exchanges as required based on market trends. KSEB arranged banking transactions which enable to meet 50% of the expected power deficit during February and March 2020, and part of the power deficit in the month of April-2020. However, no arrangement for banking transactions was available for meeting the expected power shortage in the month of May-2020. KSEB Ltd entered into short-term power procurement agreement with the following traders, selected through DEEP portal for meeting the balance power deficit of the State during the months of April-2020 and May- 2020.KSEBL filed a petition before Honorable Commission on 20.01.2020 and Honorable Commission vide order dated 13.03.2020 was pleased to Grant approval to enter into short-term power procurement agreement with the following traders, selected through DEEP portal for meeting the power deficit of the State during the months of April-2020 and May-2020, subject to the terms and conditions stipulated below

(i) With the trader M/s Adani Enterprises Ltd (AEL)

,	771417 4110 4144401 11170 7 144411 = 11101 11							
	Period	Duration (Hrs)	Quantum (MW) on firm basis	Rate at Delivery Point i.e. Kerala Periphery	Source of Power			
	01.04.2020 to 30.04.2020	00:00:0 0 to 24:00	100	Rs. 3.72/-(Rupees Three and Seventy Two paise Only) per kWh	Raipur Energen			
	01.05.2020 to 31.05.2020	00:00:0 0 to 24:00	150	Rs. 3.76/-(Rupees Three and Seventy Six paise Only) per kWh	Ltd, Chhattisgar h in the Western			
	01.05.2020 to 31.05.2020	19:00 to 23:00	50	Rs. 4.25/- (Rupees Four and twenty five paise Only) per kWh	Region.			

(ii) With the trader M/s DB Power Ltd (DBPL)

Period	Duration (Hrs)	Quantum (MW) on firm basis	Rate at Delivery Point i.e. Kerala Periphery	Source of Power
01.04.2020 to 30.04.2020	19:00 to 23:00	50	Rs. 4.24/-(Rupees Four and Twenty Four paise Only) per kWh	DB Power Ltd, Chhattisgar
01.05.2020 to 31.05.2020	19:00 to 23:00	50	Rs. 4.24/-(Rupees Four and Twenty Four paise Only) per kWh	h in the Western Region.

The following table shows the details of energy purchased through short term contracts during 2020-21. .

Table D 28 Power purchase through short term contracts								
Particulars	E	nergy* (MU)	Cost					
Particulars	at ex bus	at Kerala periphery	(Rs Cr)					
DEEP from GMR CHATISG thru AEL	160.46	156.88	59.10					
DEEP from DB Power	10.37	10.14	4.30					
Total	170.83	167.02	63.40					

(b) Power purchase from Energy exchanges: KSEBL procured 94.71 Cr MU at Kerala periphery at a cost of Rs 31.02 Cr from power exchanges. The details are as follows:

Table D 29: Power purchase through exchanges								
Source	Energy* (MU)	Cost (Rs Cr)						
IEX	94.60	30.53						
PXIL	0.11	0.03						
Other charges associated with power exchange		0.46						
Sub total	94.71	31.02						
* Energy at Kerala periphery								

(c) Power availed through swap arrangement: - In addition to the above KSEBL had entered into banking arrangements with various utilities for availing supply of power through swap contracts.

KSEBL entered banking arrangement with M/s PTC India Ltd and M/s BSES Yamuna Power Ltd, from February 2020 to April 2020, which was approved by Hon'ble Commission vide order dated 14.01.2020. Further, unit 2 at Idukki HEP tripped on 20.01.2020 due to flashing of 11 kV bushing of excitation transformer and unit 6 of Idukki power station tripped on 01.02.2020 due to the flashing of lightning arrestor- voltage transformer. Due to the above forced outage, there was an additional shortage of 260 MW during peak and an energy shortage of around 40.3 MU during March 2020. In order to meet shortage due to this KSEBL entered banking arrangements with BRPL through Manikaran power Ltd for the month of March 2020 for procuring 50 MW RTC and 100 MW from 14.00hrs to 24.00 hours. KSEBL filed petition before Hon'ble Commission on 30.03.2020 seeking approval for the banking transactions with BRPL for the month of March 2020.

KSEBL availed 55.90 MU for the month of March 2020, through banking transaction with BRPL. Hon'ble Commission vide order dated 29.07.2020 has approved the same.

The summary of the banking arrangements including its supply period, trading margin, return period, quantum of power to be returned etc are given below.

	Tab	le 30 D	etails of c	ontracts o	of pow	er procur	ement	through b	anking arı	rangement	t for FY 2020-21						
SI			Supp	oly						Return							
	Trader	Utility	Per	Period		Duration	Duration Utility		Pei	riod	Return duration hrs						
IVO	ITauei	Othicy	From	То	MW	Hrs	Othicy	Ketuiii %	From	То	Return duration ins						
1	PTC				50	RTC	KSEBL	102%									
			01.02.20	29.02.20	50	0-6	KSEBL	102%									
		TPDDL		29.02.20	100	20-24	KSEBL	102%									
		IPDUL	01.03.20	31.03.20	50	RTC	KSEBL	102%			0.4.0.47.40.20.0.22.20.						
					100	0-6	KSEBL	102%	16.06.20	20.00.20	0-4 & 17-18.30 & 22.30 to						
					50	18-20	KSEBL	102%	16.06.20	30.09.20	24.00 (uniformly distributed)						
					100	20-24	KSEBL	102%			uistributeu)						
2	PTC	TPDDL	01.04.20	30.04.20	50	RTC	KSEBL	102%									
					100	0-6	KSEBL	102%									
					25	18-23	KSEBL	102%									
3	BYPL	BYPL	16.02.20	29.02.20	75	RTC	KSEBL	103%	16.06.20	30.09.20	0-3 & 13-17 & 22-24.						
3	DIPL	DIPL	01.03.20	31.03.20	75	RTC	KSEBL	103%	16.06.20	30.09.20	(Uniformly distributed)						
	Manikaran					RTC	KSEBL	104%			04.00 to 18.00 (uniformly						
4	Nanikaran Power Ltd	BRPL	01.03.20	31.03.20		14.00 to	KSEBL	104%	01.07.20	31.08.20	distributed)						
	rower Lta					24.00	KSLBL	10476									
											00.00 to 5.00 hrs: - 126						
								0	01.03.21	1.03.21 30.04.21	1 50	RTC	KSEBL		16.06.21	21 30.06.21	MW;
				01.03.21	30.04.21	30	NTC					22.00 to 24.00 hrs: - 100					
											MW						
						14.00 to					00.00 to 5.00 hrs: - 180 MW;						
			01.03.21	31.03.21	100	24.00			01.07.21	31.07.21	22.00 to 24.00 hrs: - 140						
						24.00					MW						
5	PTC	TPDDL						102%			00.00 to 5.00 hrs: - 177.9						
											MW;						
							KSEBL		01.08.21	31.08.21	22.00 to 24.00 hrs: - 140						
											MW						
											00.00 to 5.00 hrs: - 100						
									01 09 21	30 09 21	MW;						
									01.09.21	30.09.21	22.00 to 24.00 hrs: - 100						
											MW						

The details of approval by Hon'ble Commission for the various contracts is given in table below

			Sup	ply	Quantum	Return		
Tr	rader	Utility	Per	riod	MW	Per	riod	
			From	То	IVIVV	From	То	Approval
		TPDDL 01.02.20 29.02.20 50 16.06.20 30.09.20 Order dated			50			
١.	PTC		Order dated 14.01.2020 on OP No					
'	PIC	IPDDL			100	16.06.20	30.09.20	62/2019
			01.03.20	31.03.20	50			

		Sup	pply	0	Ret	urn				
Trader	Utility	Period		Quantum MW	Per	riod				
		From	То	IVIVV	From	То	Approval			
				100						
				50						
				100						
PTC	TPDDL 01.04.20 30.04.20		50							
				100						
				25						
BYPL	BYPL	16.02.20	29.02.20	75	16.06.20	30.09.20	Order dated 14.01.2020 on OP No.			
DIFL		01.03.20	31.03.20	75	16.06.20	30.09.20	62/2019			
Manikaran Power Ltd	BRPL	01.03.20	31.03.20		01.07.20	31.08.20	Order dated 29.07.2020 on OP 15/2020			
		01.03.21	30.04.21	50	16.06.2021	30.06.2021				
PTC	TPDDL	01.03.21	31.03.21	100	01.07.2021	31.07.2021				
PIC	IPUUL				01.08.2021	31.08.2021	Order dated 16.02.2021 in OP. No.			
					01.09.2021	30.09.2021	06/2021			

KSEBL has received 122.28 MU at Kerala periphery through swap arrangement. The details are as follows.

Table 31 Power received through banking arrangement for 2020-21								
Utility	Trader	Period	Energy received ex bus (MU)	Energy received at Kerala periphery (MU)				
TPDDL	PTCIL	01.04.20 to 30.04.20	57.75	56.43				
TPDDL	PTCIL	01.03.21to 31.03.21	68.2	65.85				
Total 125.95 122.28								

4.6.5 Power returned through banking arrangement (SWAP): -

KSEBL returned 334.82 MU during 2020-21 through banking arrangement (swap). The table given below shows the details of power returned to utilities outside the state through banking arrangement.

	Table 32 Energy returned to utilities outside State									
Utility	Trader	Return Period	Energy at Kerala periphery (MU)	Energy at delivery point (MU)	Loss					
BYPL	BYPL	16.06.2020 to 30.09.2020	84.45	83.43	1.02					
BRPL	Manikaran Power Ltd	July-August 2020	60.25	59.48796	0.76					
TPDDL	PTCIL	16.06.2020 to 30.09.2020	190.13	187.83303	2.29					
		Sub total	334.82	330.75	4.07					

A total expenditure of Rs 2.57Cr (0.96 Cr towards previous year expenses of banking arrangements between HPPC and APPCPL) has been incurred on these banking arrangements.

4.6.6 Deviation settlement mechanism: KSEBL has received a net energy of 139.43 MU from Southern grid through deviation settlement mechanism (DSM) at a cost of Rs. 14.19 Cr.

In view of the details furnished above, it may kindly be seen that the shortfall in energy availability from approved sources had been effectively met through procurement of power from various sources. Details of approval obtained from the Hon'ble Commission are furnished in **Appendix D2**. The details of purchases through long-term, short-term contracts are given as **Appendix D3**. The summary of power Purchase from power exchanges and power transfer through deviation settlement mechanism against quantum approved towards short term contracts for FY 2020-21 is furnished below:

Table D 33: Details of power purchase against approval for short term procurement									
Source		Approval			Actual	Difference			
	Energy	Cost (Rs	Rate	Energy	Cost (Rs	Rate	Energy	Cost	
	(MU)	Cr)	Rs/unit)	(MU)	Cr)	Rs/unit)	(MU)	(Rs Cr)	
Short Term				167.02	63.40	3.796			
IEX/PXIL				94.71	31.02	3.275			
Deviation Settlement Mechanism				139.43	14.19	1.018			
SWAP				122.28	2.57				
Total	0	0	0	523.43	111.18	2.124	523.43	111.18	

4.6.7 Energy sale outside the State: - Hon'ble Commission approved sale of surplus power of 1231.36 MU for a total revenue of Rs 615.68 Cr. KSEBL sold 261.43 MU of power through exchanges during 2020-21 for a total revenue of 102.50 Cr as given in table below. The details of energy sale through exchanges are given in table below:

	Table	D34 Energy sale o/s State through exchar	iges
SI No	Source	Energy at KSEB periphery (MU)	Cost (Rs. Cr)
1	IEX TAM	0.00	
2	IEX DAM	179.00	
	IEX RTM	64.65	
3	IEX Total	243.65	
4	PXIL TAM	0.11	
5	PXIL DAM	17.67	
	PXIL RTM	0.00	
6	PXIL Total	17.78	
	Total	261.43	2.40

The expenditure associated with sale through power exchanges amounts to Rs 2.403 Cr.

Thus, KSEBL sold 261.43 MU for a total amount of Rs 102.50 Cr. @ Rs 3.92 per unit against the approved quantum of 1231.36 MU for Rs 615.68 Cr. It may kindly be noted that KSEB Ltd could realise a higher rate from sales through short term market than the rate derived while procuring power through short term market (Rs 2.71 per unit).

4.6.7.1 Inter-state Transmission charges paid to PGCIL: Hon'ble Commission, vide order dated 08.07.2019, approved interstate transmission charges of Rs 557.24 Cr for 2020-21. Honorable CERC has issued the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 on 4.05.2020 with effect from November 2020. As per the new regulations the transmission charges for Kerala increases considerably by about 80 %. Actual transmission charges incurred by KSEBL during 2020-21, as per audited accounts, were Rs. 618.78 Cr. Actuals may kindly be approved.

The total power purchase cost as per annual accounts is Rs 8057.95 Cr.. As stated in above paragraphs Rs 95.71 Cr towards the unadmitted claims/withheld amount towards Jhabua Power Ltd(115 MW), Jindal Power Ltd(100 MW), Jhabua Power Ltd-II(100 MW), Jindal India Thermal Power Ltd is not claiming in this petition. Hence Hon'ble Commission may kindly true up the total power purchase cost amounting to Rs 7962.23 Cr as detailed in **Appendix D4**, summary of which is provided in table below.

Table D 35 True up claim of Power Purchase cost for the year 2020-21							
Particulars	Amount (Rs						
	Cr)						
Power Purchase as per accounts	8057.95						
Less provision of Jhabua Power Ltd 115 MW towards unadmitted claims	33.63						
Less provision for Jhabua Power Ltd 100 MW towards unadmitted claims and disallowance vide order dated 26.08.2020	35.99						
Less provision for Jindal Power Ltd 100 MW towards disallowance vide order dated 26.08.2021	8.32						
Less provision for JITPL100 MW towards unadmitted claims and disallowance vide order dated 26.08.2021	18.82						
Power Purchase claimed in the truing up petition	7,961.19						

4.7 O&M Expenses:

- **4.7.1** Actual O&M expenses for SBU D for the year 2020-21 has been Rs. 4986.64 Cr (net of capitalization) as detailed in Form D3.4.
- **4.7.2 Cost Drivers**: Tariff regulation, 2018 considers the following cost drivers for determination of normative O&M expenses. The growth of the drivers is given in the Table D26 below.

Item	FY12	FY13	FY14	FY15	FY16	FY17	FY-18	FY-19	FY-20	FY-21
Consumers (Nos)	10457637	10806890	11192890	11430895	11668031	11994816	12276321	12552206	12826185	13142910
Dist Transformers (Nos)	62329	64972	67546	71199	73460	75759	77724	79876	81470	83399
HT Lines (KM)	51328	52907	53579	57309	59476.66	61398.43	62855	64393.5	64808.748	66512.499
Energy Sales (MU)	15981	16838	17454	18426	19325.07	20087.55	20998	22369.59	22728.34	22413.03

4.7.3 The parameters of FY-19 are taken for computing normative O&M expenses. The normative values of employee cost and A&G expenses is given in table below:

Ta	ble D 36: Normative O& M expenses for 2	2020-21
No	No Parameters	
1	No. of consumers (Rs. Lakh/1000)	5.27
2	Dist Transformers (Rs. Lakh/DTr)	0.70
3 Length of HT line (Rs. Lakh/km)		0.87
4	4 Energy sales (Rs/unit)	
5	5 No. of consumers 1	
6	6 No. of Dist Transformers (Nos)	
7	7 HT Line (Ckt-Km)	
8 Energy sales in MU 22728		22728.34
9	Employee, A&G Cost (Rs Cr)	2287.36

- **4.7.4** 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 normative R&M expense is calculated as follows:

Table D 37: Normativ	e R&M expenses (Rs Cr.)			
Particulars	Amount (Rs Cr)			
Opening GFA Excluding Land value (Rs Cr.)	10914.82			
Less land		20.26		
R& M @ 3% on opening GFA-A		326.84		
Addition of assets during the year		1641.84		
R&M at pro rata basis for	assets added during the	•		
		Pro rata % based		
	Pro rata GFA	on works in	Pro rata R&M	
	addition	2018-19	expenses	
April	60.75	3.70	1.67	
May	128.06	7.80	3.20	
June	139.56	8.50	3.14	
July	91.94	5.60	1.84	
August	108.20	6.59	1.89	
September	91.94	5.60	1.38	
October	54.84	3.34	0.69	
November	68.63	4.18	0.69	
December	136.11	8.29	1.02	
January	195.38	11.90	0.98	
February	328.04	19.98	0.82	
March	238.40	14.52	0.00	
Total	1641.84	-		
R&M expenses for assets added during FY-19 -B			17.31	
Total R&M expenses (A+B)			344.15	

4.7.5 Hon'ble Commission may kindly approve expenses in connection with Covid 19 (Rs.16.98 Cr) over and above norms as detailed in chapter 5. Thus, O&M expenses sought for true up amounts to Rs.2648.49 Cr. (Rs. 2287.36 Cr+ Rs.344.15 Cr+ Rs.16.98 Cr). A comparison of approved normative and actual O&M expenses is given in table below

No	Particulars	Approved	As per accounts	Normative	True up claim	Remarks
1	Employee Cost & A&G		4780.13	2287.36	2287.36	See Form D3.4 (a)
1	Expenses	2316.28				3ee FOI III D3.4 (a)
2	R&M Expenses	342.46	206.51	344.15	344.15	See Form D3.4 (c)
3	Expenses in connection				16.98	
3	with Covid 19					
3	Total	2658.75	4986.64	2631.51	2648.49	See Form D 3.4

4.8 Expenses towards Pay Revision

Pay revision provision (Rs.446.53 Cr) may kindly be approved over and above norms as detailed in chapter 5.

4.9 Depreciation:

Hon'ble Commission had approved the depreciation of SBU-D for FY 20-21 at Rs 121.53 Cr. Actual Depreciation for the Distribution assets as per accounts for the year has been Rs.581.39 Cr as detailed in **Form D3.5 (2).**

Hon'ble Commission may kindly note that depreciation as per accounts has been worked out in line with IND AS and claw back depreciation was determined and credited to other income. But, as per MYT Regulation for the control period, 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. Accordingly, allowable depreciation for SBU D has been worked out at **Rs.179.06 Cr** as detailed in Chapter 5. Hon'ble Commission may kindly approve the same.

4.10 Interest and Finance charges Hon Commission had approved the interest and finance charges of SBU-D for the year 2020-21 at Rs.1372.67 Cr. However, as per the audited accounts, the actual expenses incurred under interest and finance charges were Rs.1365.97 Cr (after capitalized portion of interest). The details are furnished below.

	Table D38: Comparison of I&FC for 2020-21 (Rs. Cr)					
No	Particulars	Approved	Accounts			
1	Interest on outstanding Loans		436.25			
2	Less: Interest capitalized		82.08			
3	Net interest	281.40	354.17			
4	Interest on Security Deposit	218.49	149.07			
5	Interest on GPF	172.60	139.13			
6	Other Interest		2.17			
7	Interest on Master Trust Bond	578.40	589.38			
8	Carrying cost on revenue gap till 2019-20	121.78				
9	Interest on working capital 132.0		132.05			
10	Grand Total	1372.67	1365.97			

4.9.2 KSEBL has executed capital works to the tune of Rs 1537.86 Cr and added fixed assets of Rs 1802.98 Cr under SBU D during the year as detailed in Chapter 5. Physical addition to fixed assets is summarized below:

Table – D39 : Details of Capital Works during 2020-21				
Particulars	Achievement			
Service Connections (Nos)	372116			
HT Line construction (km)	2233.83			
LT Line construction (km)	3650.2			
Transformer installation (Nos)	2372			
Line conversion (km)	2130.23			
HT re-conductoring (conductor km)	1138			
LT re-conductoring (conductor km)	31845			
Faulty meter replacement (Nos)	440687			

- 4.9.3 The normative loan at the beginning of the year (01.04.2020) has been determined as per Regulation by considering GFA, Approved depreciation, Consumer contribution and grants and Equity. Based on the methodology adopted by the Hon'ble Commission, normative loan as on 01.04.2020, addition, repayment and closing normative loan as on 31.03.2021, interest on normative loan along with SBU wise segregation are determined and furnished in chapter 5. Based on the computation, KSEBL is entitled to Rs. 370.42 Cr as interest on normative loan for the year 2020-21, which may kindly be approved.
- 4.9.4 Interest on security deposit: Hon'ble Commission approved interest on SD for the year at Rs.218.49 Cr. The Actual Security Deposit balance as per accounts was Rs.3205.97 Cr at the beginning of the year (01-04-2020) on which the interest at 4.65 % is provided in accounts for FY 2020-21 (Rs 149.07 Cr) on accrual basis. Actual disbursement in the FY 2020-21 amounted to Rs.193.01 Cr (actual disbursement against provision made at 6.50% for FY 2019-20 amounting to Rs 196.29 Cr) as per provisions in Supply Code, 2014. Hon Commission may please approve the actual disbursement in 2020-21 amounting to Rs.193.01 Cr under SBUD.
- **4.9.5 Interest on working capital**: The Normative Working Capital for SBU-D, as per Regulation 32, includes O&M Cost for one month, cost of maintenance spares as one twelfth of average of the book value of stores for that financial year, receivables for two months excluding security deposits. KSEB Ltd has computed the Interest on Working Capital in their petition at a rate of 10.15% (8.15% + 2%) as per Regulation 32(2). The parameters adopted for computation of Interest on Working capital for the control period are furnished below.

Table D40 Parameters for estimation of working		
Opening GFA (Rs.Cr.)		9271.04
One twelfth of average of Inventory (Rs Cr.)		59.62
O&M Cost (Rs.Cr.)	2442.44	
Pay revision provision	204.56	
Additional contribution to Master Trust	167.10	2814.10
Revenue for the year 2019-20		14037.64

4.9.6 Based on the above, net working capital computed is negative as calculated below. Therefore, no claim is made towards interest on working capital.

Table D 41 Interest on working capital (Rs Cr)	
O&M Exp for 1 month	250.26
Maintenance spares @ One twelfth of average of opening and closing balance of Inventory	59.62
Revenue (2 months)	2309.24
Total	2619.121
Less: Security deposit	3207.24
Net Working Capital	588.12

Since the Working Capital requirement is less than the security deposit held at the beginning of the year, KSEB Ltd is not claiming any interest on working capital for 2020-21. Hon'ble Commission may kindly note that revenue collection during the year was badly affected due to the Covid 19 pandemic.

- 4.9.7 Carrying cost on approved revenue gap: Hon'ble Commission approved carrying cost of Rs. 121.78 Cr for the year 2020-21 after deducting average GPF balance from the approved gap to determine the revenue gap for which carrying cost is eligible. Actual average interest on loans during 2020-21 had been 9.90 %. It is humbly submitted that carrying cost towards revenue gap approved till 2017-18 and sought for truing up in 2018-19 and 2019-20 along with revenue gap for 2020-21 is considered for claiming carrying cost for the year 2020-21 as detailed in chapter 5. Hon'ble Commission may kindly approve Rs. 603.75 Cr towards carrying cost for 2020-21 for SBU D.
- 4.9.8 **Interest on PF:** Hon'ble Commission approved Rs 172.60 Cr towards interest on PF for 2020-21. But as per the audited accounts, the actual interest on PF was Rs.139.13 Cr, which is less by Rs. 33.47 Cr. Therefore Rs.139.13 Cr is sought for true up as detailed in chapter 5, which may kindly be approved.
- 4.9.9 **Interest on Master Trust Bonds:** 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 KSEBL. The total liability as on 31.10.2013 was estimated at Rs.12418.72 Cr and necessary funding arrangements put in place through issue of 2 series of Bonds. Hon Commission recognized the unfunded pension liabilities as above and approved recovery of

interest on KSEBL share of Bonds as per Tariff Regulations, 2014. Thus, Hon'ble Commission approved Rs.578.40 Cr towards interest on Master Trust bonds against share of SBU D. Actual share of expenses for SBU D has been Rs.589.38 Cr as detailed in chapter 5, which may kindly be approved.

4.9.10 In view of the above submission, Hon'ble Commission may kindly approve interest and finance charges as summarized below:

Table D 42: Comparison of I& F Charges-Approved, Actual and TU requirement for 2020-21 (Rs Cr)				
Item	Approval	Actual	TU requirement	Difference over approval
Interest on Loan	281.40	436.25	370.42	-89.02
Security Deposit Interest	218.49	149.07	193.01	25.48
Master Trust Bond Interest	578.40	589.38	589.38	-10.98
Overdraft interest		132.05		0.00
PF interest	172.60	139.13	139.13	33.47
Other interests		2.17	2.17	-2.17
Carrying cost on revenue gap	121.78		603.75	-481.97
Total	1372.67	1448.05	1897.85	-525.19
Less: Interest capitalized		82.08		
I&FC net of capitalization	1372.67	1365.97	1897.85	-525.19

4.10 Additional contribution to Master Trust: Hon'ble Commission was pleased to provisionally approve Rs.167.10 Cr towards additional contribution to Master Trust under SBU-D. KSEBL seeks truing up of Rs.167.10 Cr also as detailed in chapter 5.

4.11 Return on Equity:

Hon'ble Commission vide order dated 08.07.2019 approved Return on equity at Rs 253.50 Cr, which, the Hon'ble Commission may kindly true up.

4.11 Other expenses and exceptional items:

As detailed in chapter 5, a sum of Rs. 163.21 Cr and Rs. 17.53 Cr is sought for true up, under other expenses and exceptional items, which may kindly be trued up.

- 4.12 **Non-tariff income and other income:** Hon'ble Commission approved Rs.571.23 Cr under non-tariff income. The share of non-tariff income of SBU D as per accounts amounting to Rs. 698.49 Cr is detailed in Form D 2.4. However, as detailed in chapter 5, a sum of Rs. 824.03 Cr is sought for true up, which may kindly be approved.
- 4.13 **Tariff income:** Hon'ble Commission approved revenue from sale of power as Rs 13874.14 Cr and net revenue as Rs 13841.64 Cr after deducting Rs 32.50 Cr as power factor incentive. Further, approved Rs 615.68 Cr towards revenue from surplus energy sales outside the State. The rebate /subsidy extended to consumers due to Covid pandemic, in line with Government orders, are detailed in chapter 5.

4.14 Thus, the revenue from tariff during the year 2020-21 has been Rs. 13701.56 Cr as disclosed in Form D 2.1. Hon'ble Commission may kindly note that reconciliation of revenue sale as per this submission and as per audited accounts is furnished in chapter 5. A summary of the revenue from sale of power inside the State as well as outside State is given below.

	Table – D43: Revenue from Sale of Power within the State					
No	Category	Energy	sales	Reve	nue	
		MU	%	Rs Cr	%	
1	Domestic	12699.640	57.33	6206.67	45.13	
2	Commercial	2982.468	13.46	2929.97	21.30	
3	Public lighting	376.944	1.70	179.53	1.31	
4	Irrigation & Dewatering	403.238	1.82	114.54	0.83	
5	Industrial LT	1086.675	4.91	801.40	5.83	
6	Railway Traction	150.937	0.68	101.70	1.10	
7	Bulk Supply	496.368	2.24	322.68	2.36	
9	HT	3214.780	14.51	2527.31	18.38	
10	EHT	740.540	3.34	517.76	3.76	
11	Total sales (within state)	22151.600	100.00	13701.56	100.00	
12	Interstate sale	261.430		104.63		
13	Total	22413.030		13806.19		

4.15 Hon'ble Commission while approving the revenue from sale of power had deducted Rs 32.50 Cr. as power factor incentive against which the actual is Rs 25.76 Cr, (booked under A&G expenses) as explained in detail in chapter 5. Accordingly, actual power factor incentive to the tune of Rs.25.76 Cr is deducted from the revenue from SoP. The revenue from sale of Power includes fixed charges/demand charges, energy charges, the subsidy allowed by the Government in the case of domestic consumers with monthly consumption up to 120 units and LT Agricultural consumers and fuel surcharge. It may be seen that 57,53% of total consumption was domestic which contribute 45.13 %of revenue. Actual revenue was less by Rs. 676.89 Cr from approval. A comparison of approved vs actual sale is given in table below.

	Table – D44: Revenue comparison Approved Vs Actuals						
No	Category	En	Energy sales (MU)			venue (Rs. C	Cr)
		Approved	Actual	Deviation	Approved	Actual*	Deviation
1	Domestic	11906.400	12699.640	793.240	4951.42	6206.67	1255.25
2	Industrial	1146.030	1086.670	-59.360	812.76	801.40	-11.36
3	Agriculture	377.800	403.240	25.440	90.31	114.54	24.23
4	Commercial	3660.720	2982.470	-678.250	3374.03	2929.97	-444.06
5	Public Lighting	422.930	376.940	-45.990	195.51	179.53	-15.98
6	HT & EHT Total	5473.400	3955.330	-1518.070	3849.30	3045.07	-804.23
7	Railway Traction	307.700	150.940	-156.760	188.24	101.70	-86.54
8	Bulk Supply	662.290	496.370	-165.920	412.60	322.68	-89.92
9	Total sales (within state)	23957.270	22151.600	-1805.670	13874.14	13701.56	-172.58
10	Interstate sale	1231.360	261.430	-969.930	615.68	104.63	-511.05
11	Total	25188.630	22413.025	-2775.600	14489.82	13806.19	-683.63
12	Less Power Factor incentive				32.50	25.76	6.74
13	Revenue from Sale of power	25188.630	22413.025	-2775.600	14457.32	13780.43	676.89

- 4.16 Hon'ble Commission may kindly true up revenue from sale of power (including external sale) as above.
- 4.17 Hon'ble Commission had amortized a portion of past approved revenue gap of Rs.850 Cr. It may kindly be seen that revenue surplus actually does not materialize for amortizing any portion of revenue gap approved in the past.
- 4.18 Summary of ARR & ERC of SBU D for the year 2020-21 is furnished below:

TABLE – D45: ARR & ERC OF DISTRIBUTION BUSINESS UNIT (Rs Cr)				
Particulars	Approved	Actual	True up	Difference
Cost of Generation (SBU-G)	586.34	772.31	530.65	55.69
Cost of Power Purchase	8800.94	8057.93	7961.19	839.75
Cost of Intra-State Transmission (SBU-T)	1162.47	1329.45	980.07	182.4
Interest & Finance Charges	1250.89	1365.97	1294.10	-43.21
Carrying cost of revenue gap	121.78		603.75	-481.97
Depreciation	121.53	581.39	179.06	-57.53
O&M Expenses	2658.75	4986.64	2648.49	10.26
Pay revision provision			446.53	-446.53
Return on equity (14%)	253.5		253.50	0
Other Expenses		163.21	163.21	-163.21
Exceptional items		17.53	17.53	-17.53
Sharing of gains on account of higher T&D loss reduction			101.17	-101.17
Recovery of previous gap	850			850
Interest on un funded actuarial liability	167.10		167.10	0
Total ARR	15973.31	17274.43	15346.36	626.95
Tariff Income incl fuel surcharge	13874.14	14316.00	13701.56	172.58
Less Power factor incentive	32.5		25.76	6.74
Revenue from external sale	615.68	104.63	104.63	511.05
Non-Tariff Income	571.23	698.49	824.03	-252.8
Total ERC	15028.55	15119.12	14604.46	424.09
Net Revenue Gap (-)/ Surplus (+)	-944.75	-2155.31	-741.90	-202.85

- 4.19 As shown above the total revenue gap for the year 2020-21 is Rs.708.53 Cr as against the approved revenue gap of Rs 944.75 Cr.
- 4.19 Appendices described in paragraphs above are attached here under. The forms are attached thereafter. The next chapter contains explanations relating to various expenses and income in general.

Appendix-D1				
Power Availability for 2020-21				
Month	Gross Availability of electricity for Supply			
April	101.29%			
May	106.81%			
June	102.37%			
July	108.37%			
August	101.51%			
September	100.74%			
October	106.72%			
November	104.08%			
December	100.30%			
January	102.33%			
February	100.30%			
March	100.83%			
Average 102.97%				

Appendix –D2: Details of lap	oroval of lon	g term /short term contracts for procuring p	ower during	2020-21
Source	Contracted Capacity (MW)	Commission Approval Letter/0rder	Period of contract	Approved Tariff
		Long Term contracts		
Maithon Power	150	No.2158/C.Engg/Maithon/2013/1398 dated 26.12.2013	25 years	Approved under
Maithon Power	150	Order dated 08 - 07- 2015	25 years	Section
DVC Mejia	100	N 500/05 /DVG/0044/040 / V	25 years	62 of
DVC RTPS	50	No.500/C.Engg/DVC/2014/348 dated 28.03.2014 & Order dated 21.01.2016	25 years	Electricity Act 2003
Jindal Power Ltd-PSA I (DBFOO)	200	Order dated 30.8.2016	25 years	
Jhabua Power Ltd-PSA-I (DBFOO)	115	Order dated 22.12.2016	25 years	
Jindal Power Ltd-PSA I (DBFOO)*	150	Letter dated 22.12.2017	25 years	
Jhabua Power Ltd-PSA-I (DBFOO)*	100	Letter dated 22.12.2017	25 years	Approved
JITPL*	100	Letter dated 22.12.2017	25 years	under
BALCO	100	Order dated 30.8.2016	25 years	Section 63 of
SECI Wind	200	Order dated 19.09.2020 on OP 53/19	25 years	Electricity
THDCIL-Solar	50	Order dated 29.10.2021 on OP No 33/2021	25 years	Act 2003.
		Order dated 14 .09.2020 on OP		
Deviar micro hydo HEP	0.05	56/2019 approved interim tariff		
DEEP from GMRCHATISG				
thru AEL	100			
DEEP from DB Power	100	Order dated 13.03.2020	2 months	

^{*}Rate yet to be approved

Appendix – D3 : Actual F	Rate of Power i	rom external I	PPs, traders and e	energy exchanges,D	SM,swap
Name of IPP/trader	Energy at exbus(MU)	Energy at Kerala end (MU)	Power Purchase cost as per audited accounts	True up claim of power purchase cost (Rs Cr)	Rate at exbus (Rs/unit)
Long Term contracts					
Maithon Power Ltd-I	970.15	939.38	411.08	411.08	4.237
Maithon Power Ltd-II	969.96	939.19	411.26	411.26	4.240
DVC Mejia	647.87	627.31	281.36	281.36	4.343
DVC RTPS	217.20	210.05	121.57	121.57	5.597
Jindal Power Ltd-Bid I*	1470.83	1416.14	528.90	528.90	3.596
Jhabua Power Ltd-Bid I	854.13	822.37	351.03	317.40	3.716
Jindal Power Ltd-Bid II*	1103.31	1062.30	466.66	458.34	4.154
Jhabua Power Ltd-Bid II	741.47	713.90	345.38	309.39	4.173
JITPL	703.14	679.71	310.32	291.50	4.146
BALCO	714.80	688.33	289.78	289.78	4.054
Purchase of power thru SECI	5.97	5.97	1.63	1.630	
Subtotal	8398.83	8104.65	3517.35	3,422.22	4.075
Short term contract					
DEEP from GMRCHATISG thru AEL	160.46	156.88	59.10	59.10	3.683
DEEP from DB Power	10.37	10.14	4.30	4.30	4.148
Total	170.83	167.02	63.40	63.40	3.711
IEX/PXIL	98.19	94.71	31.02	31.02	3.160
Deviation Settlement Mechanism	139.43	139.43	14.19	14.19	1.018
Swap Purchase	125.95	122.28	2.57	2.57	
Total	8933.22	8628.08	3628.53	3533.40	3.955

CENTRAL GENERATING STATIONS STPS 8 1 1808.01 584.02 1544.50 500.45 500.45 500.45 71.70		Appendix – D4: Source wise	e details of Po	ower Purcha	se for 2020-2	1	
CENTRAL GENERATING STATIONS RSTPS 8 1808.01 584.02 1544.50 500.45 500.45 8517 1808.01 584.02 377.05 117.81 1	No	Source	Energy		Energy	Power purchase	claim (Rs Cr)
ASTPS B.	1	CENTRAL GENERATING STATIONS				0000 (110 01)	
RSTPSIII			1808.01	584.02	1544.50	500.45	500.45
Simhadri TPS Stg II		RSTPS III	453.27	146.02	377.05	117.81	117.81
Simhadri TPS Stg II		Talcher Stage-II	3172.9	776.79	3051.88	813.00	813.00
NLC Stage-II 397.35 135.66 298.29 138.36 138.36 NLC Stage-II 567.42 195.14 237.80 91.62 91.62 NLC I Expansion 429.02 148.99 395.21 152.24 152.24 152.24 152.24 NLC II Expansion 282.78 140.83 289.19 154.10 154.10 154.10 MAPS 123.59 35.06 70.53 22.11 21.11 154.10 154.			584.87	257.79	376.92	212.88	212.88
NLC 1 Expansion			397.35	135.66	298.29	138.36	138.36
NIC II Expansion		i	567.42	195.14	237.80	91.62	91.62
MAPS		NLC 1 Expansion	429.02	148.99	395.21	152.24	152.24
KAIGA		NLC II Expansion	282.78	140.83	289.19	154.10	154.10
Kudankulam		MAPS	123.59	35.06	70.53	21.11	21.11
Vallur		KAIGA	486.76	184.11	531.29	183.14	183.14
NTPL		Kudankulam	1538.37	657.17	1503.14	616.71	616.71
Kudgi		Vallur	347.05	170	114.90	100.26	100.26
Bhavini		NTPL	501.99	240.44	364.90	186.73	186.73
NNTPS		Kudgi	742.2	408.38	256.74	209.73	209.73
Eastern region		Bhavini	271.21	115.86	0.00	0.00	0.00
Total energy at exbus		NNTPS	0	0	99.65	43.02	43.02
PGCIL losses A30.94 A34.74 O Sub Total CGS at Kerala periphery 11275.85 4196.26 9167.26 3541.29 3541.29		Eastern region	0	0	0.00	0.13	0.13
Sub Total CGS at Kerala periphery 11275.85 4196.26 9167.26 3541.29 3541.29		Total energy at exbus	11706.79	4196.26	9512.00	3541.29	3541.29
NOTECONS NOTECONS NOTE		PGCIL losses	430.94		344.74		0 0
RGCCPP, Kayamkulam		Sub Total CGS at Kerala periphery	11275.85	4196.26	9167.26	3541.29	3541.29
Wind-Ramakkalmedu 27.87 8.75 19.53 18.91 0.00	2	INDEPENDENT POWER PRODUCERS					_
Wind-Koundikkal 12.56 3.94 9.20 18.91 0.00 0			0.00			149.6	6 149.66
Wind-Agali 29.72 9.33 26.31 0.00			27.87			3	18.91
Wind Ahalya 20.98 10.97 18.51 9.68 9.66 INOX 30.84 12.61 35.76 14.63 14.63 14.63		Wind-Koundikkal		3.94	9.20	18.91	0.00
INOX 30.84 12.61 35.76 14.63 14.65 14.65 Kosamattom 0 0 0 1.22 0.63 0.65						-	0.00
Mod Sub total 121.97 45.61 110.53 43.84 43.84 43.84 121.97 43.41 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 17.79 4.34 15.45 4.07 4.07 17.79 4.34 15.45 4.07 4.07 17.79 4.34 15.45 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 17.79 17.79 4.34 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4.07 4.07 4.07 17.79 4.34 15.45 4.07 4		,				-	-
Wind Sub total 121.97 45.61 110.53 43.84 43.84 Ullunkal(EDCL) 17.79 4.34 15.45 4.07 4.07 4.07 17.0						-	1
Ullunkal(EDCL)			_	_		+	+
Iruttukanam Stage-I & II(Viyyat)						1	
Karikkayam HEP(AHPL) 37.56 15.624 36.35 16.23 16.23 Meenvallom(PSHCL) 8.44 4.12 6.29 3.07 3.07 Kallar of Idukki District Panchayat 0.08 0.04 0.00 0.00 0.00 Mankulam of Grama Panchayat 0 0 0 0.00 0.00 0.00 Minar Renewable energy project Ltd 0 0 12.21 6.50 6.50 Deviar micro 0 0 0.02 0.10 0.10 SHEP subtotal 88.65 30.84 92.50 36.09 36.09 SHEP subtotal 88.65 30.84 92.50 36.09 36.09 Solar Approved Energy MU Energy MU Energy Furchase cost (Rs Cr) Solar 0 0 0.00 0.00 0.00 Solar		` '					+
Meenvallom(PSHCL)							_
Kallar of Idukki District Panchayat 0.08 0.04 0.00 0.00 0.00							
Mankulam of Grama Panchayat							
Minar Renewable energy project Ltd		·					
Deviar micro		,	-				
No SHEP subtotal 88.65 30.84 92.50 36.09 36.09 No Approved Energy (MU) Approved Cost (Rs Cr) Actual Power purchase cost (Rs Cr) True up purchase cost (Rs Cr) Solar 70.080 27.330 73.047 27.977 27.977 Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000		5,1 ,	_				
No Source Approved Energy (MU) Approved Cost (Rs Cr) Actual Energy Purchase cost (Rs Cr) Actual Power purchase cost (Rs Cr) True up claim (Rs Cr) Solar 50lar IREDA 70.080 27.330 73.047 27.977 27.977 Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000			_	_			
No Source Approved Energy (MU) Approved Cost (Rs Cr) Approved Energy (MU) Power purchase cost (Rs Cr) True up claim (Rs Cr) Solar To.080 27.330 73.047 27.977 27.977 Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000		SHEP subtotal	88.65	30.84	92.50		9 36.09
Solar 0 Solar IREDA 70.080 27.330 73.047 27.977 27.977 Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000	No	Source	Energy		Energy	Power purchase cost	
Solar IREDA 70.080 27.330 73.047 27.977 27.977 Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000		Solar			,		0
Solar IPP ANERT 0.000 0.000 2.860 3.108 3.108 THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000			70.080	27.330	73.047	27.977	27.977
THDCIL 0.000 0.000 17.240 0.000 0.000 Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000							
Grid connected -solar 0.000 0.000 40.998 6.258 6.258 Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000							
Solar subtotal 70.080 27.330 134.145 37.344 37.344 Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000							
Net CPP Energy injection 0.000 0.000 37.292 0.000 0.000							

3	Long Term Contracts outside the State					
	Maithon Power Ltd-I	1105.73	418.03	970.15	411.08	411.08
	Maithon Power Ltd-II	1105.73	418.03	969.96	411.26	411.26
	DVC Mejia	705.5	274.74	647.87	281.36	281.36
	DVC RTPS	348.1	137.38	217.20	121.57	121.57
	Jindal Power Ltd-Bid I*	1497.96	551.58	1470.83	528.90	528.90
	Jhabua Power Ltd-Bid I	861.33	332.22	854.13	351.03	317.40
	Jindal Power Ltd-Bid II*	1123.47	462.05	1103.31	466.66	458.34
	Jhabua Power Ltd-Bid II	748.98	308.03	741.47	345.38	309.39
	JITPL	748.98	308.03	703.14	310.32	291.50
	BALCO	748.98	308.03	714.80	289.78	289.78
	PGCIL losses	347.7		294.18		
	Sub Total	8647.06	3518.12	8098.67	3517.35	3420.59
4	Short term/Exchanges/swap/DSM/					
	DEEP from GMRCHATISG thru AEL			156.88	59.10	59.10
	DEEP from DB Power			10.14	4.30	4.30
	IEX/PXIL			94.71	31.02	31.02
	Deviation Settlement Mechanism			139.43	14.19	14.19
	Purchase thru banking arrangements			122.28	2.57	2.57
	Subtotal			523.43	111.18	111.18
5	RPO-Solar	740.5	222.15			
6	RPO-Non solar	691.04	200.4	5.97	1.630	1.630
	Transmission charges payable to PGCIL		557.24		618.78	618.78
	Total	21158.56	8797.95	18262.34	8055.54	7958.78
	Power returned through banking arrangements			-334.82		
	Sale through IEX			-243.65	2.40	2.40
	Sale through PXIL			-17.78	_	_
	Power Purchase	21158.56	8797.95	18262.34	8057.95	7961.19

ARR and Fariff Formats Distribution Business INDEX

1 Form D 1.1 Summary of Aggregate Revenue Requirement 2 Form D 2.1 #REF! 3 Form D 2.2 Income from Wheeling Charges 4 Form D 2.3 Income from sale of surplus power 5 Form D 2.4 Non-tariff Income 6 Form D 2.5 Subsidy provided by the State Govt under Section 65 of EA 7 Form D 2.6 #REF! 8 Form D 2.7 Consumer Contribution, Capital Subsidy and Grant 9 Form D 3.1 Power Purchase Expenses 10 Form D 3.2 Transmission Charges 11 Form D 3.3 Load Despatch Charges 12 Form D 3.4 Operations and Maintenance Expenses 13 Form D 3.4(a) Employee Expenses 14 Form D 3.4(b) Administrative & General Expenses 15 Form D 3.4(c) Repair & Maintenance Expenses 16 Form D 3.5 Fixed assets & depreciation	. 2003
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14 Form D 3.4(b) Administrative & General Expenses 15 Form D 3.4(c) Repair & Maintenance Expenses	
15 Form D 3.4(c) Repair & Maintenance Expenses	
16 Form D 3.5 Fixed assets & depreciation	
Form D 3.6(a) Calculation of Weighted Average Rate of Interest on Actual	l Loans
18 Form D 3.6(b) Calculation of Interest on Normative Loan	
19 Form D 3.6(c) Interest on Bonds to meet Terminal Liabilities	
20 Form D 3.7 Interest on Working Capital	
21 Form D 3.8 Return on Equity/Return on Net Fixed Assets	
22 Form D 3.9 Tax on R.O.E.	
23 Form D 4.1 Project-wise / Scheme-wise Capital Expenditure	
24 Form D 4.2 Consolidated report on additions to Fixed Assets during the	e year
25 Form D 4.3 General (Other debits, write offs or any other items)	-
26 Form D 5.1 #REF!	
27 Form D 5.2 #REF!	
28 Form D 5.3 #REF!	
29 Form D 6.1 #REF!	
30 Form D 6.2 Appropriation of Distribution loss	
31 Form D 7.1 Category-wise Sales	
32 Form D 7.2 Distribution Losses	
33 Form D 7.3 Collection Efficiency	
34 Form D 8 Deviation Analysis	
35 Form D 9 Consumer category-wise cross-subsidy	I

Other In	formation/Docum	ents
1	Form D P&L	Profit & Loss Account
2	Form KSEBL SBU- wise P&L	KSEB Limited SBU-wise Profit & Loss Account
3	Form Small Lic Distr P&L	Small Distribution Licensees - Distribution business Profit & Loss Account
4	Form D BS	Balance Sheet at the end of the year
5	Form D CF	Cash Flow for the year

^{6.} Corporate audited/unaudited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the relevant years.

Note: Spread sheet financial models (in CD) shall also be submitted along with the application.

		Form D 1.1					
		gregate Revenue Requ	irement			T	
	Name of Distribution Business/Licensee	KERALA STATE EL	ECTRICITY BOAR	RD LTD.			
	Licensed Area of Supply						
							(Rs Cr)
				Previous Y	/ear -2020-21	•	Remarks
S.No.	Particulars	Reference form no.	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
1	2	3	4	5	6	7	14
1	Cost of own power generation/power purchase	3.1	10549.75	10159.69		9471.91	
2	Transmission Charges	3.2					
3	NLDC/RLDC/SLDC Charges	3.3					
4	Operation & Maintenance Expenses	3.4					
4.1	Employee Expenses	3.4		4346.33			
4.2	Annual Contribution for Terminal Liabilities based on actuarial valuation		2658.75			2648.49	
4.3	Administration & General Expenses	3.4	2638.73	433.80		2648.49	
4.4	Repair & Maintenance Expenses	3.4		206.51			
5	Depreciation	3.5	121.53	578.77		179.06	
6	Interest and finance charges on long term loans	3.6	281.4	354.18		370.42	
7	Interest on Bonds to meet Terminal Liabilities	3.6	578.4			589.38	
8	Interest on Working Capital	3.7		132.05			
9	Interest on consumer security deposits and deposits from Users of the distribution system		218.49	149.08		193.01	
10	Exceptional items					17.53	
	Others			163.21		163.21	
	Amortisation of Intangible Assets			2.63			
	Other Interest and finance Charges		294.38	730.68		745.05	

				Previous \	/ear -2020-21		Remarks
S.No.	Particulars	Reference form no.	Approved in Tariff Order	Audited	Normative	Truing Up requirement	
	Recovery of past gap		850	0.00		0	
11	Provision for pay revision					446.53	
12	Additional contribution to Master Trust		167.1			167.1	
13	Claim on T&D loss					101.17	
14	Total Revenue Expenditure		15719.81	17256.90	0.00	15092.86	
15	Return on Equity / Net Fixed Assets	3.8	253.5			253.5	
16	Tax on ROE	3.9					
17	Aggregate Revenue Requirement (13+15)						
18	Less: Non Tariff Income	2.4	571.23	698.49		824.03	
19	Less: Income from wheeling charges	2.2					
20	Less: Income from Other Business (to be specified)						
21	Less: Receipt on account of Cross Subsidy Surcharge on wheeling charges						
22	Less: Receipt on account of additional surcharge on charge of wheeling						
23	Aggregate Revenue Requirement from Retail Tariff		15402.08	16558.41		14522.33	

Form D 2.1

Revenue from Sale of Power

Name of Distribution Business/Licensee Licensed Area of Supply

Name of Distribution Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

ensed Area of Supply _____

2020-21

_		2020-21														
S.No	Particulars	Number of consumers	Number of consumers billed	Connected Load of consumers	Units Sold (MU)	% of total Unit sold	Demand/ fixed charges@	Energy Charges @	Fuel Adjustment charges@	Total	Other charges if any@	DPS/LPS @	Sub-total	Misc. recoveries@ (Net provision for unbilled revenue)	Sub-total	Avg. realisatio n per KWh (Excludin g ED & Govt.levi es@)
				KW	MU					8+9+10			(13) to (19)		(11)+(20)+(21) +(22)	
1	2	3	4	5	6	7	8	9	10	11	18	19	20	22	23	24
A)	Revenue from sale of Electricity															
	to consumers (categories as per															
	Tariff for supply of Electricity)															\perp
1	LT Categories Domestic		10076070.00	18761.41	12699.64	57.33	650.23	5408.36	35.47	6094.06	0.05		0.05	121.27	6215.38	,
<u> </u>	Domestic		10076070.00	18/61.41	12099.04	37.33	030.23	3408.30	33.47	0094.00	0.03		0.03	121.27	0215.56	'
2	Commercial		2370483.00	4604.42	2982.47	13.46	661.75	2248.04	7.35	2917.14	0.31		0.31	12.52	2929.97	7
3	Public Lighting		50794.00	164.59	376.94	1.70	2.52	175.68	1.03	179.22	0.00		0.00	0.31	179.53	3
4	Irrigation and Dewatering		496022.00	979.65	403.24	1.82	58.67	382.60	2.45	443.72	0.00		0.00	-329.18	114.54	
	migation and Deviatering		130022.00	373.00	100.21	1.02	20.07	302.00	2.10	110,, 2	0.00		0.00	527.10	111,01	
6	Industrial LT		143013.00	1817.47	1086.67	4.91	187.89	528.88	1.63	718.40	0.01		0.01	83.00	801.40)
_	D 3		1 (00	447.40	150.04	0.60	21.60	70.20	0.20	100.00			0.00	0.56	101 50	
7	Railway Traction		16.00	116.10	150.94	0.68	31.68	70.28	0.30	102.26			0.00	-0.56	101.70	'
8	Miscellaneous							1.88		1.88			0.00	0.02	1.90	
	Miscenaricous							1.00		1.00			0.00	0.02	1.50	
Q	HT Categories		6462.00	1627.84	3214.78	14.51	553.82	1694.65	5.70	2254.16	8.39		8.39	264.76	2527.31	
F	THE CAREGOINES		0402.00	1027.01	0211.70	11.01	333.02	10) 1.03	5.70	2201.10	0.57		0.03	201.70	2027.01	
10	Extra High Tension (EHT)		39.00	314.30	740.54	3.34	103.65	350.65	1.19	455.49	43.26		43.26	19.01	517.77	,
10	Extra High Tension (E111)		33.00	311.30	7 10.01	5.51	103.03	330.03	1.17	100.17	13.20		10.20	17.01	017.77	
11	Bulk Consumers/ Licensees		11.00	135.82	496.37	2.24	45.95	274.93	0.72	321.60			0.00	-0.82	320.78	R
-	, , , , , , , , , , , , , , , , , , ,		11.00	155.62	170.07	2.21	15.75	271.93	0.72	021.00			0.00	0.02	020.70	
12	Revenue from sale of power															+
	Sale through power exchange							102.49		102.49			0.00		102.49	,
	Sale to other States							2.14		2.14			0.00		2.14	
	Sale through Traders							2.11		0.00	45.97		2.30		45.97	
	<u> </u>									2.00	.5.57				20.57	
13	Total of items not shown categoryw	vise														
a)	Reactive Energy Charges									0.00			0.00		0.00	
b)	Electricity Duty Recovery										944.97		944.97		944.97	7
c)	Other state Levies Recovery										16.68		16.68		16.68	3
	Total Duty & Levies															
d)	Wheeling charges Recoveries										2.89		2.89		2.89	
e)	Miscellaneous Charges from consum	iers														
1	UCM										0.00		0.00		0.00	

S.No	Particulars	Number of consumers	Number of consumers billed	Connected Load of consumers	Units Sold (MU)	% of total Unit sold	Demand/ fixed charges@	Energy Charges @	Fuel Adjustment charges@	Total	Other charges if any@	DPS/LPS @	Sub-total	Misc. recoveries@ (Net provision for unbilled revenue)	Sub-total	Avg. realisatio n per KWh (Excludin g ED & Govt.levi es@)
2	SC Fee, etc.										0.00		0.00		0.00	
3	Other Items										75.79				75.79	
4	TF/RF										6.38		6.38		6.38	
5	Other Levies On Fee										71.72				71.72	
6	LE/SC Minimum										0.05		0.05		0.05	
7	Meter rent										0.00		99.47		0.00	
- 8	Processing Fee for Allocation of Power										2.68		2.68		2.68	
g	STOA - Registration and Application f	ee									0.21		0.21		0.21	
10	STOA - Open Access charges										21.80		21.80		21.80	
11	Application fee®istration fee for gr	id connectiv	ity to solar panel	s							6.81		6.81		6.81	
12	Penal charge for making the meter ina	ccessible for	billing								0.00		0.00		0.00	
13	Energisation charges										0.33		0.33		0.33	
14	Power factor penalty										50.62		50.62		50.62	
14	Gross Revenue From Sale of Power		13142910.00	26327.55/ 2194.06	22151.60	100.00	2296.16	11240.56	55.85	13592.57	1298.92		1204.91	170.32	15061.81	
	Less: i) Electricity Duty Payable to Gov	t. (Contra)									944.97		944.97	0.00	944.97	
	ii)Other State Levies Payable to Govt.	(Contra)									16.68		16.68	0.00	16.68	
	iii) Board Cunsumption			ĺ							8.70		8.70	0.00	8.70	
15	Net Revenue from Sale of Power (28	A)					2296.16	11240.56	55.85	13592.57	328.56		234.55		14091.45	

					Form D 2.2					
				Income	inam Mila alima Cham					
NT ((D: (-1); B :	IZED AT A CTA	TE EL COTDICITA		rom Wheeling Charg	ges	1			
Name of	Distribution Business Licensed Area of Su		TE ELECTRICIT	BOARD LID.						
	Licensed Area of Su	Р				+				-
	Year (n-1)*	2020-21								(Rs Cr)
S.No	Open Access Consumer	Open Access Contracted Capacity (kW)	Fixed Charge (Rs/kW/month)	Energy Wheeled	Energy Charge (Rs/kWh)	Any Other Charge as approved by Commission (Please specify)	Revenue from Fixed Charge	Revenue from Energy Charge	Revenue from Other Charge	Total Revenue
	<u>1</u>	2	3	4	5	6	7	8	9	10=7+8+9
1										
2										
	Total									2.89

^{*} Note :1. To be furnished separately for each year commencing from (n-1)th year to (n+3)th year.

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014

2. In case of Income from Wheeling Charge for (n+1)th to (n+3)th year, it is mandatory for Distribution business/licensee to indicate the 'Total Revenue' (10), whereas others details may be furnished, if available

			Fo	rm D 2.3	}		
		(7.	Income from s				
		ness/Licensee:	KERALA STAT	E ELECT	RICITY BOAR	D LTD.	
Licensed Are	a of Supply						
Year (n-1)*		2020-21					(Rs Cr)
Month	Name of buyer	Transaction No.	Nature of transaction- Bilateral /Exchange	Volume	e of trading in	Sale Price	Income
				MU	Contracted MW	Rs/Unit	
1	2	3	4	5	6	7	8
April							0.35
							0.76
May		•••					
June							2.50
July		•••					0.31
August							3.07
September							7.33
October		•••					18.51
November							2.70
December							12.09
January		•••					17.20
February							15.49
-							24.34
March		•••					24.34
TOTAL						-	104.63

			Form D 2.4]
		1	Non-tariff Income	<u> </u>	
		Name of Distribution	n Business/Licensee		
		Licensed Area of Sup	oply		(Rs Cr)
S. No.	Particulars		Previous Year (n-1)		
				Remarks	
		Approved in Tariff Order	Audited	Truing Up requirement	
1	2	3	4	5 = 4 - 3	12
1	Interest on staff loans and advances		0.06		
2	Income from statutory investments		0.01		
3	Income from trading		0.00		
4	Income from rent of land or buildings		1.39		
5	Income from sale of scrap		39.37		
6	Income from staff welfare activities		0.00		
7	Rental from staff quarters		0.13		
8	Excess found on physical verification		0.06		
9	Interest on investments, fixed and call deposits and bank balances		3.81		
10	Interest on advances to suppliers/contractors		0.19		
11	Income from hire charges from contractors and others		0.01		
12	Income due to right of way granted for laying fibre optic cables/co-axial cables on distribution system		51.11		
13	Income from advertisements, etc.		0.00		
14	Miscellaneous receipts		91.24		
15	Commission for collection of electricity duty		0.00		
16	Interest on delayed or deferred payment of bills		0.00		
17	Rebate from Central Generating Stations		149.65		
18	Revenue from late payment surcharge	_	0.00		
19	Recovery for theft and pilferage of energy		10.12		
20	Meter/metering equipment/service line rentals	_	99.48		
21	Clawback of Grant		205.83		
22		FF4 66	328.88	004.00	
	Total	571.23	981.35	824.03	

			Form 1	D 2.5									
	Subsi	dy provided b	y the State Go	ovt under Section	on 65 of EA 2003								
	Name of Distribution Business/Licensee	KERALA STAT	E ELECTRICIT	Y BOARD LTD.									
	Licensed Area of Supply												
												(<i>F</i>	Amount in Rs Cr)
S.No.	Consumer Category				2020-21					Curren	t Year (n)*		
3.11		Tariff approved by Commission	Reference of Government directives	Relaxtion/ Subsidy committed by Government	Subsidy assessed	Reference of finance department order releasing subsidy amount	Subsidy actually received	Tariff as per Commission			Subsidy assessed	finance department order releasing subsidy	Subsidy actually received
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Domestic Category (LT - 1(a))				351.53		351.53						
2	Tariff Revision 2012 Subsidy from Govt. For providing free supply of electricity to patients surviving on life support system				1.47		1.47						
3	Subsidy receivable from Govt. for exempting hike for Agri. consumers in Tariff Revision 2012				26.15		26.15						
4	Subsidy receivable from Government for the rebate to the domestic consumers billed from 20th April 2020 to 19th June 2020				151.19		151.19						
	Total				530.33		530.33						

Note: Susbsidy Nett off done against the duty amount payable to the Government.

Form D 2.7								
Consumer Contribution, Capital Subsidy and Grant								
Name of Distribution Business/Licensee	KERALA STATE ELECTRICITY BOARD LTD.							
Licensed Area of Supply								
** *	(Rs. Cr)							

					(RS. Cr)
S. No.	Particulars		2020-21		Remarks
		Approved in Tariff Order	Actually received	Balance Receivable	•
1	2	3	4	5 = 4 - 3	12
1	Consumers Contribution for service connection lines and associated works		384.83		
2	Any other contribution by consumers under any scheme.				
a)					
b)					
c)					
	Sub-Total		384.83		
3	Capital Subsidies from appropriate Government towards cost of Capital Assets		108.33		
4	Receipts from appropriate Government under any scheme as Grants		209.71		
5	Any Other item(to be specified)				
	Total		702.86		
	TOTAL				

				F	orm D 3.1												
					Power Pu	rchase Expenses											
		Name of Di	istribution	Business/	Licensee	KERALA STATI	E ELECTRICI	TY BOARD	LTD.								
		Licensed A	rea of Supp	oly													
			Year (n-1)	1		2020-21											
S.	Source of Power	Installed	Utility	Utility	Total Energy	External Losses	Energy	Losses	Energy	Total	Capacity	Variable Cost	Total	Incentive (Rs	Any Other	Total Cost of	Avg cost of
No.		Capacity	share (%)	-	Sent Out (ESO)		Received at	within the	received by	Annual	Charges	per unit		Crore)	Charges (Please		energy
	,	1 ,	,	(MW)	from the station		State	State (%)	licensee (%)	Fixed	paid/	including Fuel	Charges	ĺ	specify the type		
					(MU)		boundary			charges (Rs	payable by	Price	(Rs Crore)		of charges)	Crore)	(Rs/kWh)
							(MU)			Crore)	Utility (Rs	Adjustment(Rs/					
1	2	3	4	-	6	7	8	0	10	11	Crore) 12	kWh) 13	14	15	16	17	18
1	Central Generating	3	4	3	0			9	10	11	12	13	14	15	10	1/	10
1 -																	
	stations																
2	stations RSTPS &	2100	12	245	1544.50	56.05	1488.45				121.77	2.36	363.82	0.00	14.85	500.45	
2		2100 500	12 12	245 61	1544.50 377.05	56.05 13.83	1488.45 363.22				121.77 30.80	2.36 2.30	363.82 86.67	0.00	14.85 0.34	500.45 117.81	
2	RSTPS I & II																
2	RSTPS I & II	500	12	61	377.05	13.83	363.22				30.80	2.30	86.67	0.00	0.34	117.81	
2	RSTPS I & II RSTPS III Talcher Stage-II	500 2000	12 21	61 427	377.05 3051.88	13.83 110.18	363.22 2941.71				30.80 212.48	2.30 1.92	86.67 585.77	0.00 1.26	0.34 13.50	117.81 813.00	
2	RSTPS I & II RSTPS III Talcher Stage-II Simhadri TPS Stg II	500 2000 1000	12 21 9	61 427 86	377.05 3051.88 376.92	13.83 110.18 13.76	363.22 2941.71 363.16				30.80 212.48 90.66	2.30 1.92 3.10	86.67 585.77 116.73	0.00 1.26 0.00	0.34 13.50 5.49	117.81 813.00 212.88	
2	RSTPS I & II RSTPS III Talcher Stage-II Simhadri TPS Stg II NLC Stage-I	500 2000 1000 630	12 21 9 10	61 427 86 63	377.05 3051.88 376.92 298.29	13.83 110.18 13.76 10.84	363.22 2941.71 363.16 287.46				30.80 212.48 90.66 26.64	2.30 1.92 3.10 2.87	86.67 585.77 116.73 85.50	0.00 1.26 0.00 0.00	0.34 13.50 5.49 26.22	117.81 813.00 212.88 138.36	
2	RSTPS I & II RSTPS III Talcher Stage-II Simhadri TPS Stg II NLC Stage-I	500 2000 1000 630 840	12 21 9 10 11	61 427 86 63 90	377.05 3051.88 376.92 298.29 237.80	13.83 110.18 13.76 10.84 8.58	363.22 2941.71 363.16 287.46 229.22				30.80 212.48 90.66 26.64 20.24	2.30 1.92 3.10 2.87 2.57	86.67 585.77 116.73 85.50 61.09	0.00 1.26 0.00 0.00 -0.85	0.34 13.50 5.49 26.22 11.13	117.81 813.00 212.88 138.36 91.62	
2	RSTPS I & II RSTPS III Talcher Stage-II Simhadri TPS Stg II NLC Stage-I NLC Stage-II NLC Stage-II NLC 1 Expansion	500 2000 1000 630 840 420	12 21 9 10 11 16	61 427 86 63 90 68	377.05 3051.88 376.92 298.29 237.80 395.21	13.83 110.18 13.76 10.84 8.58 14.31	363.22 2941.71 363.16 287.46 229.22 380.90				30.80 212.48 90.66 26.64 20.24 42.78	2.30 1.92 3.10 2.87 2.57 2.52	86.67 585.77 116.73 85.50 61.09 99.76	0.00 1.26 0.00 0.00 -0.85	0.34 13.50 5.49 26.22 11.13 9.59	117.81 813.00 212.88 138.36 91.62 152.24	

FormD 3.2		
Transmission Charges		
Name of Distribution Business/Licensee	KERALA STATE ELECTRICITY BOARD LTD).
Licensed Area of Supply		
Transmission Charges		
Year(n-1)*		

S. No.	Name of Transmission/Distribution Network Provider	Contracted Capacity (MW)	Transmission Tariff <units></units>	Transmission Charges (Rs. Crore)	Sources of power for which Network is used
1	2	3	4	5	6
Total					
Total					

^{*} Note: To be furnished separately for each year commencing from (n-1)th year to (n+3)th year.

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014

Form D 3.3

Load Despatch Charges

NLDC/ RLDC/ SLDC Charges Year(n-1)*

S. No.	Particular	Contracted Capacity	Annual fee	Any other fee	Total
	1 41 11 11 11	(MW)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)
1	2	3	4	5	6
	NLDC Charges				
	RLDC Charges				
	<specify region=""></specify>				
	SLDC Charges				
Total	Total				

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014

^{*} Note: To be furnished separately for each year commencing from (n-1)th year to (n+3)th year.

- 1	D5.4						
- 1	Form D 3.4						
10111 15 5.4							

Operations and Maintenance Expenses

Name of Distribution Business/Licensee Licensed Area of Supply KERALA STATE ELECTRICITY BOARD LTD.

1 Employee Expenses

	Particulars	Reference	Pre	evious Year (n-1) - 2020)-21	Remarks
S. No.			Approved in Tariff Order	Audited	Truing Up requirement	
1	2	3	4	5	6 = 5 - 4	13
1	Number of Consumers ('000)				12826185.00	
	Norms (Rs. Lakh/'000 consumers)				5.27	
2	Distribution Transformers (no.)				81470.00	
	Norms (Rs. Lakh/Distribution Transformer)				0.70	
3	HT line (km)				64808.75	
	Norms (Rs. Lakh/km of HT line)				0.87	
4	Sales (kWh)				22728.34	
	Norms (Rs./unit of sales)				0.21	
5	Employee Expense & A &G expenses(as per norms)					
6	Employee Expense (actuals)	3.4(a)		4346.33		

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014

2 Administrative and General Expenses

			Pre	evious Year (n-1) - 2020	-21	
S. No.	Particulars	Reference	Approved in Tariff Order	Audited/ Normative	Truing Up requirement	Remarks
1	2	3	4	5	6 = 5 - 4	13
1	Number of Consumers ('000)					
	Norms (Rs. Lakh/'000 consumers)					
2	Distribution Transformers (no.)					
	Norms (Rs. Lakh/Distribution Transformer)					
3	HT line (km)					
	Norms (Rs. Lakh/km of HT line)					
4	Sales (kWh)					
	Norms (Rs./unit of sales)					
4	A&G Expense (as per norms)					•
5	A&G Expense (actuals)	3.4(b)		433.80		

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC Tariff Regulations, 2014

3 Repair and Maintenance Expense

		D (Pre	1-21		
S. No.	Particulars	Reference	Approved in Tariff Order	Audited/ Normative	Truing Up requirement	Remarks
1	2	3	4	5	6 = 5 - 4	13
1	Opening GFA (Rs. Crore)			10914.82	10914.82	
	Norms (% of opening GFA)				3%	
2	R&M Expense (as per norms)				344.15	
3	R&M Expense (actuals)	3.4(c)		224.04		

Note: nth year = FY 2014-15, n+1th year = FY 2020-21, and so on, for the first filing under the KSERC Tariff Regulations, 2014

B Name of Distribution Business/Licensee Licensed Area of Supply

(CSEZ, Technopark, KPUPL, RPIL, KDHPCL, CPT, Thrissur Corporation, and Infopark)

1 O&M Expenses

			Pre			
S. No.	Particulars	Reference	Approved in Tariff Order	Audited/ Normative	Normative Truing Up requirement	
1	2	3	4	5	6 = 5 - 4	13
1	Employee Expenses (as per norms)			4346.33		
2	R&M Expenses (as per norms)			206.51		
3	A&G Expenses (as per norms)			433.80		
4	O&M Expense (as per norms) (1+2+3)			4986.64		
2	O&M Expense (actuals)	3.4(a),3.4(b), 3.4(c)	2658.75	4986.64	2648.49	

Form D 3.4(a)
Employee Expenses

Name of Licensee

KERALA STATE ELECTRICITY BOARD LTD.

				Rs. Crore
S. No.	Particulars	Reference	Previous Year (n-1) 2020- 21 Audited	Remarks
1	2	3	4	11
1	Basic Salary		3875.23	
2	Dearness Allowance (DA)		576.77	
3	House Rent Allowance		40.26	
4	Conveyance Allowance		0.00	
5	Leave Travel Allowance		0.02	
6	Earned Leave Encashment		139.92	
7	Other Allowances		24.55	
8	Medical Reimbursement		9.76	
9	Overtime Payment		0.01	
10	Bonus/Ex-Gratia Payments		8.50	
11	Interim Relief / Wage Revision		0.00	
12	Staff welfare expenses		4.23	
13	VRS Expenses/Retrenchment Compensation		0.00	
14	Commission to Directors		0.00	
15	Training Expenses		0.00	
16	Payment under Workmen's Compensation Act		0.23	
17	Net Employee Costs		4679.48	
18	Terminal Benefits		0.25	
18.1	Provident Fund Contribution		0.00	
18.2	Provision for PF Fund		0.00	
18.3	Pension Payments		0.00	
18.4	Gratuity Payment		0.00	
18.5	Annual Contribution for Terminal Liabilities based or	n actuarial valuation	0.00	
18.6	Contribution of KSEB Ltd towards National Pension 9	Scheme	21.09	
19	Others		0.27	
20	Gross Employee Expenses	İ	4701.10	
21	Less: Expenses Capitalised		354.77	
22	Net Employee Expenses		4346.33	

Form D 3.4(b)

Administrative & General Expenses

Name of Licensee

KERALA STATE ELECTRICITY BOARD LTD.

Rs. Crore

				Rs. Crore	
S. No.	Particulars	Reference	Previous Year (n-1) 2020-21	Remarks	
			Audited		
1	2	3	4	11	
1	Rent Rates & Taxes		11.69		
2	Insurance		1.85		
3	Telephone & Postage, etc.		10.15		
4	Legal charges		1.06		
5	Audit Fees		0.77		
6	Consultancy charges		0.17		
7	Other Professional charges		0.59		
8	Conveyance		56.23		
9	Vehicle Running Expenses Truck / Delivery Van		0.57		
10	Vehicle Hiring Expenses Truck / Delivery Van		3.90		
11	Electricity charges		0.00		
12	Water charges		0.69		
13	Entertainment		0.38		
14	Fees & subscription		0.07		
15	Printing & Stationery		5.14		
16	Advertisements, exhibition publicity		0.27		
17	Contribution/Donations		2.02		
18	Training expenses		0.73		
19	Miscellaneous Expenses		4.16		
20	DSM activities		0.00		
21	SRPC expenses		0.18		
22	Sports and related activities		0.08		
23	Freight		0.28		
24	Purchase Related Advertisement Expenses		0.99		
25	Bank Charges		3.57		
26	Office Expenses		116.32		
27	License Fee and other related fee		1.28		
28	Cost of services procured		0.00		
29	Outsourcing of metering and billing system		0.00		
30	V-sat, Internet and related charges		8.32		
31	Security arrangements		0.00		
32	Books & periodicals		0.03		
33	Computer Stationery		0.00		
34	Others		7.43		
	Others- Other Purchase related Expenses		1.45		
	Others - Power Factor Incentive given		32.29		
	to consumers				
	Others - Expenditure inconeection with distribution of LED		33.18		
35	Gross A&G Expenses		305.84		
36	Ele. Duty u/s 3(I), KED Act		129.08		
37	Less: Expenses Capitalised		1.12		
38	Net A&G Expenses		433.80		

Form D 3.4(c)

Repair & Maintenance Expenses

Name of Licensee

KERALA STATE ELECTRICITY BOARD LTD.

Rs. Crore

		1			Ns. Clufe
S. No.	Particulars	Reference -	Previous Year (n-1)	Remarks	
3.110.	Tariculars	Reference	Normal	Flood	Kemarks
1	2	3	4		10
1	Plant & Machinery		4.27	0.54	
2	Buildings		2.45	0.00	
3	Civil Works		0.55	0.00	
4	Hydraulic Works			0.00	
5	Lines & Cable Networks		196.12	16.99	
6	Vehicles		0.62		
7	Furniture & Fixtures		0.22		
8	Office Equipment		2.26		
9	Gross R&M Expenses		206.51	17.53	
10	Less: Expenses Capitalised				
11	Net R&M Expenses		206.51	17.53	

Form D 3.5

Name of Distribution Business/Licensee Licensed Area of Supply

Fixed assets & depreciation
KERALA STATE ELECTRICITY BOARD LTD.

Year (n-1)*

(Figures in Rs Cr)

			Gross fixed assets (2020-21) Provision for depreciation							(Figures in Rs Cr)	1	
					Provision for o		Net					
S. No.	Asset Group (as per notification in respect of depreciation)	Rate of depreciation (%)	At the beginning of the year	Additions during the year	Decom. Liability for year	At the end of the year	Cumulative upto the begining of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year	Net fixed assets at the beginning of the year	Fixed+M22+M10: M20+M10:M22+M 10:M23+M10:M2+ M10:M20
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights	10.1	20.26	0.17	0.00	20.43	0.00	0.00		0.00	20.26	20.43
2	Other Civil works	10.4	6.85	0.91	0.00	7.76	2.83	0.24		3.07	4.02	4.69
3	HV Distribution system		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
a)	Distribution lines	1,06,01,602	85.38	18.73	0.02	104.13	20.67	1.65		22.32	64.71	81.81
b)	Sub-station equipments	10543	73.78	1.90	0.00	75.69	32.23	3.52		35.75	41.55	39.94
i)	Transformers	10541	658.10	14.17	0.01	672.29	391.11	32.14		423.25	266.99	249.04
ii)	Switchgears, Control gear & Protection	10561	0.11	0.00	0.00	0.11	0.09	0.00		0.10	0.01	0.01
iii)	Batteries	10563	0.48	0.33	0.00	0.80	0.14	0.03		0.17	0.34	0.64
iv)	Others		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
4	LT Distribution system		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
a)	Distribution lines	10.6	7957.35	1470.23	1.47	9429.05	3568.13	437.92		4006.05	4389.22	5423.00
b)	Sub-station equipments		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
i)	Transformers	10542	143.05	13.51	0.01	156.58	34.49	6.91		41.41	108.56	115.17
ii)	Switchgears, Control gear & Protection		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
iii)	Batteries		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
iv)	Others	10.5	125.26	10.95	0.01	136.22	65.10	4.96		70.06	60.16	66.16
5	Communication equipment	1,05,71,572	0.41	0.00	0.00	0.41	0.27	0.00		0.27	0.13	0.13
6	Meters	10631	1558.54	31.53	0.03	1590.10	882.13	66.96		949.09	676.42	641.01
7	Vehicles	10.7	8.39	0.00	0.00	8.39	7.21	0.25		7.46	1.18	0.93
8	Furniture & fixtures	10.8	36.72	10.23	0.00	46.95	18.33	2.28		20.61	18.39	26.34
9	Office Equipments	10.9	32.80	6.17	0.00	38.97	24.89	2.07		26.96	7.91	12.01
10	Assets of Partnership projects etc.		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
11	Capital spares of HV & LT transmisison		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
12	Assets taken over & pending final valuation		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
13	IT Equipments	10905	134.27	208.03	0.00	342.30	70.40	17.51		87.91	63.87	254.39
	Buildings	10.2	72.99	14.53	0.00	87.52	40.46	2.31		42.77	32.53	44.75
15	Any other items (Hydrualic Works)	10.3	0.08	0.03	0.00	0.11	0.04	0.00		0.04	0.04	0.07
16	Gross Asset (Total (1) to (15))		10914.82	1801.42	1.56	12717.80	5158.53	578.77	0.00	5737.29	5756.29	6980.51
17	Less: Consumer contribution	55.1	1482.07	384.83	134.29	1732.61					1482.07	1732.61
18	Less: Government grants	55.2&55.3	674.29	209.71	50.95	833.06					674.29	833.06
19	Less: Deposit Works		0			0.00						
20	Less: Capital Subsidies	55.4	233.69	108.33	23.43	318.59					233.69	318.59
21	Net Asset considered for depriciation (16-17-18-19	9-20)	8524.76			9833.55					3366.23	4096.26

	Form D 3.6 (a)						
	Calculation of Weighted Average Rate of	Interest on Ac	tual Loans				
	Name of Distribution Licensee		ELECTRICITY BO	OARD LTD.			
	Licensed Area of Supply			(Rs. Cr)			
S.No		Previous Year	Previous Year (n-1) 2020-21				
	Particulars (specify items)	Approved in Tariff Order	Audited	Remarks			
1	2	3	4	12			
1	Loan 1						
i.	Gross Loan -Opening						
ii.	Cumulative repayments of Loans upto previous year						
iii.	Net loan-Opening						
iv.	Add: Drawal(s) during the Year						
v.	Less: Repayment (s) of Loans during the year						
vi	Net loan - Closing						
vii	Average Net Loan						
viii	Rate of Interest on Loan on annual basis						
ix	Interest on loan						
х	Loan repayment effective from (date to be indicated)		ED				
			ACH				
2	Loan 2		ATT.				
i.	Gross Loan -Opening		SEPARATE SHEET ATTACHED				
ii.	Cumulative repayments of Loans upto previous year		SHI				
iii.	Net loan-Opening		ATE				
iv.	Add: Drawal(s) during the Year		PAR				
v.	Less: Repayment (s) of Loans during the year		SE				
vi	Net loan - Closing						
vii	Average Net Loan						
viii	Rate of Interest on Loan on annual basis						
ix	Interest on loan						
x	Loan repayment effective from (date to be indicated)						
2							
	Loan 3						
4	Total Loan						
i.	Gross Loan -Opening						
	Cumulative repayments of Loans upto previous year						
	Net loan-Opening		4243.38				
	Add: Drawal(s) during the Year		1154.46				
v.	Less: Repayment (s) of Loans during the year		825.97				
	Net loan - Closing		4571.87				
	Average Net Loan		4407.63				
	Interest on Loan		436.26				
	Weighted average Rate of Interest on Loans		9.90%				

Term Loan

SL NO	NAME OF THE FINANCIAL INSTITUTION	Gross Loan - Opening	Cumulative repayments of Loans upto previous year (IND Adj)2019-20	Net loan- Opening - 01/04/2020	Add: Drawal(s) during the Year	Less: Repaymen t (s) of Loans during the year	Net loan - Closing - 31/03/2021	CFL	Ind ADJ	Net loan - Closing - 31/03/2021	Average Net Loan	Rate of Interest on Loan on annual basis	Interest on loan
A	SECURED LOANS TERM LOANS												
1	Loan from REC for the DDG Scheme	0.14	0.00	0.14	0.00	0.14	0.00	0.00	0.00	0.00		-	0.00
2	Loan from R E C - RGGVY	10.59	1.96	12.55	0.00	1.96	10.59	1.96	0.00	8.63		10.5-11.75%	1.30
3	Loan from REC- Distriburion - Meter Scheme	13.69	14.94	28.63	0.00	16.18	12.45	12.45	0.00	0.00		9.92%	2.25
4	Loan from PFC R-APDRP	225.52	0.00	225.52	0.00	0.00	225.52	0.00	0.00	225.52		9.00%	40.88
5	Loan from PFC R-APDRP Part B	188.39	46.50	234.88	0.00	13.26	221.63	0.00	0.00	221.63		9.00%	7.76
6	Loan from SBI	410.07	47.34	457.41	250.93	55.80	652.54	72.46	0.00	580.09		7.95%	44.71
7	Loan from REC R-APDRP PART-B	437.97	65.16	503.13	0.00	70.60	432.54	65.16	0.00	367.37		9.92-10.16%	47.20
8	Special Loan Assistance from PFC	572.43	45.79	618.22	1.65	45.92	573.96	45.92	0.00	528.04		9.08%	69.77
9	Special Loan Assistance from REC	825.31	74.46	899.78	2.40	80.88	821.29	74.66	0.00	746.63		9.08-10.65%	91.85
10	Loan from REC-Distriburion - 23 Circle Scheme	939.70	124.17	1063.87	0.00	134.52	929.35	124.17	0.00	805.18		9.67-10.16%	101.90
	Kerala Financial Corporation				249.71	2.19	247.52	26.29	0.00	221.23		9.00%	11.19
	Medium Term Loan Kerala Financial Corporation				249.71	4.99	244.72	59.93	0.00	184.79		8.00%	1.66
	SUB-TOTAL	3623.81	420.33	4044.14	754.40	426.44	4372.10	483.00	0.00	3889.10			420.49
В	UNSECURED LOANS TERM LOANS												
-	From Banks							_	_				
3	Loans - Short term loan from Bank of Baroda	199.24		199.24	400.07	399.54	199.77	0.00	0.00	199.77		7.85%	15.77
	SUB-TOTAL	199.24	0.00	199.24	400.07	399.54	199.77		0.00	199.77			15.77
	TOTAL	3823.05	420.33	4243.38	1154.46	825.97	4571.87		0.00	4088.87			436.26

Form D 3.6 (b)

Calculation of Interest on Normative Loan

Name of Distribution Licensee Licensed Area of Supply KERALA STATE ELECTRICITY BOARD LTD.

(Rs. Cr)

S.No		Pre	Previous Year (n-1) - 2020-21					
	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement	Remarks			
1	2	3	4	5 = 4 - 3	12			
1	Gross Normative loan - Opening							
2	Cumulative repayment of Normative Loan upto previous year							
3	Net Normative loan - Opening		4243.38					
4	Increase/Decrease due to ACE/de-capitalization during the Year		1154.46					
5	Repayments of Normative Loan during the year		825.97					
6	Net Normative loan - Closing		4571.87					
7	Average Normative Loan		4407.63					
8	Weighted average Rate of Interest of actual Loans		9.90%					
9	Interest on Normative loan	281.4	436.26	370.42				

Form D 3.6 (c)

	Interest on	Bonds to meet Tern	ninal Liabilities		
	Name of Distribution Licensee	KERALA STATE ELE	CTRICITY BOARD LT	ΓD.	
	Licensed Area of Supply				
					(Rs. Cr)
S.No			Previous Year (n-1)		
	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement	Remarks
1	2	3	4	5 = 4 - 3	12
Α	Bond Series 1				
1	Value of Bond		6,922.40	6,922.40	
2	Rate of Interest on Bond		10%	10%	
3	Interest on Bond		692.24	692.24	
В	Bond Series 2				
4	Value of Bond		2,936.36	2,936.36	
5	Rate of Interest on Bond		9%	9%	
6	Interest on Bond	578.40	589.38	589.38	Share of SBU D
С					

		Form D 3.7						
		Interest on Working						
	Name of Distribution Business/Licensee	KERALA STATE EL	ECTRICITY BOARI	D LTD.				
	Licensed Area of Supply							
		Previous Year (n-1) – 2020-21						
Sl.No.	Particulars	Approved in Tariff Order	Audited	Normative	Truing Up requirement	Remarks		
1	2	3	4	5	6	13		
1	O&M expenses (as per norms)		4986.64					
2	Maintenance Spares (as per norms)							
3	Receivables (as per norms)		2526.70					
	Less:							
4	Security deposits except security deposts held in the form of Bank Guarantee from Users		3529.51					
	Less:							
5	Cost of Power Purchase (as per norms)		10113.35					
6	Total Working Capital		14097.18					
7	Interest Rate (as per norms)							
8	Interest on Working Capital (actual)	0.00	132.05	0.00	0.00			

	Return on E	Form D	T .			
I	Name of Distribution Business/Licensee	KERALA STAT	E ELECTRICI	TY BOARD L'	rd.	
	Licensed Area of Supply					
				Previou	ıs Year (n-1)	
0.37	Post 1	D (20	020-21	
S.No.	Particulars	Ref.	Approved in Tariff Order	Audited	Normative	Truing Up requirement
1	2	3	4	5	6	7
1 1	Equity at the beginning of the year		1810.74	1810.74	1810.74	1810.74
2 (Capitalisation					
3 1	Equity portion of capitalisation					
4 1	Equity at the end of the year			0.00	0.00	
]	Return Computation			1810.74	1810.74	
5 1	Return on Equity at the beginning of the year	14%*(1)	253.50			253.50
6 1	Return on Equity portion of capitalisation	14%*(3)/2				
7	Total Return on Equity	(5)+(6)	253.5	0.00	253.5	253.5
	In case equity invested in the regulated Business is not clearly identifiable					
-	Net Fixed Assets net of Consumer Contribution &Grants (at the beginning of the year)	(8)				
9 I	Rate of return	3%				
10	Total return on net fixed assets	3% * (8)				

				Form D 3.9							
			_								
	Tax on R.O.E. Name of Distribution Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.										
	Name of Distribution Business/Licensee Licensed Area of Supply		KERALA STAT	E ELECTRICITY	BOARD LTD.						
	Elcensed Area of Supply										
								(Rs Cr)			
S. No.	Particulars	Prev	rious Year (n-1)	2020-21	Current Year (n)	Ensuing Year (n+1)	Year (n+2)	Year (n+3)	Remarks		
		Approved in Tariff Order	Audited/ Normative	Truing Up requirement	Actual/ Estimated	Projected	Projected	Projected	ı		
1	2	3	4	5 = 4 - 3	6	7	8	9	10		
A)	Advance Tax assessed & deposited on										
a)	for Quarter I & deposited on 15 th June.										
b)	for Quarter II & deposited on 15 th Sept.										
c)	for Quarter III & deposited on 15 th Dec.										
d)	for Quarter IV & deposited on 15 th March.										
	Total(A)	0		0							

		Form D 4.1							
			1011111	, 1,1					
		Project-	wise / Scheme-wi	se Capital Expend	liture				
	Name of Distribution Business/Licensee		KERALA STATE	ELECTRICITY B	OARD LTD.				
	Licensed Area of Supply								
	Year (n-1)*	2020-21							
					(Rs Crore)				
S.	D 1 (1 (1) 1 (10)	0 1 11	Capital Expenditure Opening Balance as Exp. During the Interest During Transfer to fixed Closing						
No.	Description of the project/Scheme	. 0		0	Transfer to fixed	Closing	Remark		
1	2	on 3	year 4	Const.	Assets 6	Balance of WIP	12		
1	Deen Dayal Upadhyay Gram Jyothi Yojana (DDU GJY)	3.79	44.45	3	46.32	1.92	14		
2	Integrated Power Development Scheme (IPDS)	48.90	99.34		126.82	21.42			
	1 ,								
3	Kerala Power Improvement Scheme (KPIS)	0.00	0.00		0.00	0.00			
4	Rural Electrification Scheme	0.04	1.41		1.41	0.04			
5	Distribution Line Extension	0.99	180.43		178.57	2.86			
6	Distribution Service Connection	4.87	152.82		154.53	3.16			
7	Distribution System Improvement	17.69	728.49	75.66	730.04	16.14			
8	Electrification of Harijan Colonies	0.00	0.80		0.80	0.00			
9	Electrification of Tribal Colonies	0.00	0.21		0.21	0.00			
10	Punja Package	0.12	0.26		0.38	0.00			
11	System Improvement in other areas	0.07	7.53		7.60	0.00			
12	Distbn. Capacitor Installation Scheme	0.99	1.14		0.01	2.11			
13	Street Lights	2.59	37.30		39.55	0.34			
	Expenditure due to Natural Calamity	0.05	4.49		4.46	0.08			
14	RGGVY-Village electrification Infrastructure	0.00	0.14		0.14	0.00			
15	RGGVY-For effecting BPL Service Connection	0.00	0.01		0.01	0.00			
16	Part B Projects of R-APDRP	15.87	71.78		73.96	13.68			
17	MLA Asset Development Fund Scheme (MLA ADF)	0.00	0.00		0.00	0.00			
18	R- APDRP Scheme	407.93	69.77		219.75	257.94			
19	APDRP-Scheme	0.00	0.00		0.00	0.00			
20	CWIP - General	503.91	136.82		217.49	423.23			
21	Innovation fund	0.02	0.56		0.58	0.00			
22	Projects not Identified	1.29	0.12	6.42	0.36				
	riojects not identified	1.23	0.12	0.42	0.30	1.00			
	TOTAL	1009.12	1537.86	82.08	1802.99	744.00			

		Form D 4.2		
	Consolidated report on a	ditions to Fixed Asso	ts during the year	
	Name of Distribution Business/Licensee	dutions to Fixed Asse	KERALA STATE ELECTRIC	CITY BOARD LTD.
	Licensed Area of Supply			
	Year (n-1)*	2020-21		
			(Rs Cr)	
S.No.	Asset Description	Asset Code	Total Addition to Assets	Date of commissioning
1	2	3	4	5
01.	Land & Land Rights	10.1	0.17	
02.	Buildings	10.2	14.53	
03.	Hydraulic Works	10.3	0.03	
04.	Other Civil Works	10.4	0.91	
05.	Plant & Machinery	10.5	40.87	
06.	Lines, Cable, Network etc.	10.6	1520.49	
07.	Vehicles	10.7	0.00	
08.	Furniture & Fixtures	10.8	10.23	
09.	Office Equipments	10.9	214.20	
	TOTAL		1801.42	

		Form D 4.3				
	General (Other debit	e write offe or	any other item	e)		
		KERALA STATE EI				
	Licensed Area of Supply					
					(Rs. Cr)	
S.No.	Particulars (specify items)		2020-21		Remarks	
	Tarretains (openly none)			Truing Up requirement	Temark.	
1	2	3	4	5 = 4 - 3	12	
1	Material Cost Variance		(2.99)	(2.99)		
2	Research and Development Expenses		-	_		
3	Cost Of Trading/Manufacturing Activity		(0.08)	(0.08)		
4	Bad and Doubtful Debts Written off / Provided/demand withdrawal of consumers		76.98	76.98		
5	Miscellaneous Losses and Write Offs		4.81	4.81		
6	Sundry Expenses		-	-		
7	Loss/(compensation) on account of flood cyclone etc		0.11	0.11		
8	Rebate allowed for online payment consumers		8.69	8.69		
9	Rebate on fixed charges		72.00	72.00		
10	Discount to Consumers		3.69	3.69		
	Total		163.21	163.21		
	Less					
	Chargable to Capital Expenses					
	Net chargable to revenue		163.21	163.21		
	The charge to revenue		100.21	100.21		

	Form D 6.2	
	Appropriation of Distribution loss	
Name of Distribution Business/Licensee	KERALA STATE ELECTRICITY BOARD LTD.	
Licensed Area of Supply		

Year (n-1)*

		Previous Year (n-1)										
			(Actual/Audited)									
S.No.	Particulars	Energy Input Energy Sales		Enrergy sent to lower voltage	Distributi	on Loss						
		MKWh	MKWh	MKWh	Percent	MKWh						
1	2	3	4	5	6	7						
	Voltage-wise Apportionment of	Distribution losses										
1	33 kV											
2	11 kV											
3	LT											
	Overall Distribution Loss											

Form D 7.1							
	Category-wise Sales						
Name of Distribution Business/Licensee	KERALA STATE ELECTRICITY BOARD LTD.						
I insurand Associated							

Licensed Area of Supply

Year (n-1)*

(MU) S. Consumer Category & Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Total No. Consumption Slab 1 2 3 7 8 9 15 4 10 11 12 13 14 1238.53 1182.54 1037.60 981.50 1020.64 986.58 999.60 1028.36 1022.00 1016.99 1030.32 1151.14 12695.80 LT I 0.40 0.32 0.31 0.32 0.32 0.30 0.32 0.30 0.32 0.31 0.29 0.34 3.84 LT II 0.02 0.02 0.02 0.01 0.01 0.01 0.01 0.03 0.04 0.02 0.01 0.05 0.23 LT-3A 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 LT-3B 67.85 72.48 82.89 79.28 87.94 89.86 98.97 97.10 98.22 102.47 95.74 106.68 1079.48 LT-4A 0.62 0.55 0.55 0.51 0.52 0.52 0.56 0.60 0.60 0.67 0.68 0.83 7.20 LT-4B 40.38 41.34 17.72 11.38 10.11 16.86 16.16 23.08 26.68 37.71 40.85 45.81 328.08 LT-5A 5.05 5.14 5.57 5.99 5.77 5.86 6.26 6.82 7.08 7.35 6.81 7.47 75.16 LT-5B 13.77 13.07 11.15 11.12 11.00 11.09 11.85 12.79 13.64 14.88 15.08 17.31 156.75 LT-6A 9.08 8.80 8.37 8.14 7.95 8.04 8.40 8.99 8.60 9.95 9.72 11.55 107.59 LT-6B 20.54 20.26 18.96 17.39 17.13 16.31 17.29 18.12 18.75 19.64 19.63 22.70 226.69 LT-6C 1.71 1.65 1.40 1.40 1.42 1.37 1.43 1.44 1.51 1.68 1.64 1.86 18.50 LT-6D 0.17 0.23 0.16 0.19 0.16 0.17 0.19 0.19 0.24 0.25 0.23 0.28 2.46 LT-6E 83.33 79.13 74.53 75.93 76.69 74.86 77.92 76.81 78.53 81.85 77.78 86.14 943.49 LT-6F 5.69 5.43 5.20 5.17 5.03 5.09 5.54 5.72 5.78 6.04 5.84 7.17 67.71 LT-6G 87.44 93.46 88.89 87.53 92.71 97.11 105.08 114.79 124.30 134.89 134.56 153.33 1314.08 LT-7A 9.38 10.92 9.99 10.04 10.20 10.94 11.17 12.31 12.50 13.27 12.76 14.12 137.59 LT-7B 0.45 0.24 0.18 0.18 0.20 0.26 0.28 0.34 0.34 0.85 1.68 6.09 1.10 LT-7C 22.05 21.32 24.94 21.98 22.01 22.05 21.95 21.81 21.57 21.03 20.96 20.52 262.21 LT-8A

S. No.	Consumer Category & Consumption Slab	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
	LT-8B	9.89	8.56	8.58	9.02	8.69	9.03	9.28	9.82	9.84	10.74	10.05	11.22	114.73
	LT 9	0.12	0.09	0.08	0.06	0.08	0.07	0.09	0.08	0.11	0.10	0.13	0.11	1.11
	LTX	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.04	0.17
		1619.34	1566.19	1394.18	1327.14	1378.65	1356.31	1392.22	1439.32	1450.39	1480.94	1483.95	1660.32	17548.96
	EHT GENERAL (A)	1.07	1.15	1.05	1.08	1.07	1.04	1.10	1.08	1.09	1.13	1.06	1.26	13.18
	EHT GENERAL (B)	1.85	3.02	3.28	1.94	2.66	3.12	3.29	3.50	3.75	3.69	3.70	4.27	38.07
	EHT I (66 kV) INDUSTRIAL	3.09	7.15	7.72	8.61	8.24	8.88	9.58	10.59	11.32	18.20	17.90	22.70	133.96
	EHT II (110 kV) INDUSTRIAL	14.97	29.92	35.53	37.02	34.94	36.10	39.07	40.26	46.23	54.01	50.87	59.82	478.76
	EHT II (110 kV) RT	3.47	6.10	9.11	7.17	6.66	6.86	10.00	11.16	16.46	20.40	20.33	23.56	141.29
	EHT III (220 kV) INDUSTRIAL	2.49	2.75	1.83	5.19	2.21	2.03	6.44	7.40	3.15	8.76	12.07	22.25	76.57
	HT I (A) INDUSTRIAL	84.07	154.66	166.39	167.63	157.80	166.17	180.41	181.24	193.58	196.35	184.34	209.90	2042.55
	HT I (B) INDUSTRIAL	0.68	0.71	0.71	0.68	0.64	0.64	0.68	0.68	0.72	0.73	0.72	0.91	8.48
	HT II (A) GENERAL	12.40	14.34	13.79	12.61	13.27	13.13	14.18	14.41	14.57	15.83	15.43	18.48	172.43
	HT II (B) GENERAL	42.75	45.21	42.92	43.22	42.33	41.95	45.32	45.04	46.27	47.38	45.07	54.53	541.97
	HT III (A) AGRICULTURE	0.80	0.56	0.39	0.36	0.35	0.35	0.38	0.53	0.77	0.75	0.84	0.87	6.95
	HT III (B) AGRICULTURE	0.18	0.19	0.19	0.18	0.17	0.15	0.16	0.15	0.17	0.17	0.16	0.16	2.03
	HT IV (A) COMMERCIAL	10.35	13.98	15.85	15.14	16.70	16.60	18.17	19.56	21.35	22.48	21.40	26.05	217.63
	HT IV (B) COMMERCIAL	9.31	9.54	11.85	11.84	12.46	13.49	15.46	18.03	21.59	26.39	25.16	30.78	205.91
	HT V DOMESTIC	1.34	1.40	1.38	1.40	1.36	1.33	1.41	1.37	1.45	1.46	1.36	1.56	16.83
	HT VII TEMPORARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	KMRL(Kochi Metro Rail Ltd)	0.14	0.45	0.36	0.29	0.26	1.24	1.23	1.20	1.24	1.22	0.94	1.07	9.65
	KMRL(Kochi Metro Rail Ltd)-HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Licensee: CPT	2.18	2.71	2.66	2.79	2.86	2.81	3.10	3.10	3.41	3.17	2.93	3.49	35.23
	Licensee: CSEZ	1.85	4.00	4.07	4.11	3.96	4.26	4.22	4.72	4.89	4.62	4.13	4.60	49.43

S. No.	Consumer Category & Consumption Slab	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
	Licensee: KDHPCL	4.17	5.23	4.76	4.31	3.83	4.67	5.01	5.00	5.46	5.23	4.59	5.01	57.27
	Licensee: KPUPL	4.64	5.60	4.93	5.27	5.15	4.98	5.28	5.43	5.47	5.48	5.18	6.24	63.65
	Licensee: Karnataka Electricity Department	0.11	0.07	0.06	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.11	0.86
	Licensee: MES	5.91	6.19	5.80	5.62	5.24	5.14	5.41	5.20	5.44	5.54	5.15	6.06	66.71
	Licensee: RPL	0.33	1.45	1.95	2.15	2.30	2.91	3.08	2.91	2.90	3.24	3.10	3.39	29.72
	Licensee: Technopark	4.32	4.85	4.70	4.03	4.10	4.10	4.12	4.16	4.27	4.21	3.97	4.61	51.43
	Licensee: ThrissurCorporation	9.55	11.32	9.58	9.55	9.97	9.76	10.44	10.90		11.69	11.16	14.15	129.33
	Licensee:Infopark, Cherthala	0.67	0.88	0.81	0.78	0.76	0.77	0.76	0.77	0.84	0.88	0.81	0.98	9.69
	Licensee:SMART CITY	0.18	0.26	0.23	0.22	0.23	0.23	0.24	0.24	0.30	0.31	0.28	0.34	3.06
	HT & EHT Total	222.87	333.70	351.91	353.26	339.56	352.73	388.59	398.70	428.01	463.40	442.72	527.18	4602.63
	Total	1842.21	1899.89	1746.09	1680.40	1718.21	1709.04	1780.82	1838.02	1878.40	1944.34	1926.68	2187.50	22151.60

Form D 7.2	

Distribution Losses

Name of Distribution Business/Li Licensed Area of Supply KERALA STATE ELECTRICITY BOARD LTD.

Year(n-1)*

S. No.	Voltage Level	No of Feeders	Feeders metered	Energy Input	Energy Sent to lower network	Direct Sale	Total Output	Total Losses	Total Losses (% of Energy Input)	Total Technical Loss	Total technical Losses (% of Energy Input)	Total Commercial Loss	Total Commercial Losses (% of Energy Input)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Circle 1													
Circle 2													
Circle 3													

Form D 7.3

Collection Efficiency

Name of Distribution Business/Licensee
Licensed Area of Supply

(Rs. Crore)

S. No.	Particulars	Previous Year (n-1)	Remarks
3.110.	1 articulars	(Actuals/Audited)	Kemarks
1	2	3	8
	HT Category		
	Category-1		
	Category-n		
	LT Category		
	Category-1		
	Category-n		
	Total		

		For	m D 8				
			on Analysis			1	
	Name of Distribution Business/Licensee	KERALA STAT	E ELECTRICITY	Y BOARD LT	D.		
	Licensed Area of Supply						
Year (n	-1)	2020-21					
Ì							(Rs. Crore)
S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
1	Cost of own power generation/power purchase	10549.75	10113.35				
2	Transmission Charges						
3	NLDC/RLDC/SLDC Charges						
4	Operation & Maintenance Expenses	2658.75					
4.1	Employee Expenses		4346.33				
4.2	Administration & General Expenses		433.80				
4.3	Repair & Maintenance Expenses		224.04				
	Interest and finance charges on long term loans	281.4	354.18				
6	Depreciation	121.53	578.77				
7	Interest on Working Capital	0	132.05				
8	Interest on consumer security deposits and deposits from Users of the distribution system	218.49	149.08				
9	Exceptional items						
	Others		163.21				
	Amortisation of Intangible Assets		2.63				
	Other Interest and Finance Charges	872.78	730.68				
	Prior period expenditure		0.00				
10	Past gap	850					
11	Provisioning for Bad debts, if any						

		Fo	rm D 8			
		Deviati	on Analysis			
	Name of Distribution Business/Licensee	KERALA STAT	E ELECTRICITY	BOARD L	ГD.	
	Licensed Area of Supply					
		167.1		1		
A	Total Expenditure	15719.81	17228.11			
В	Return on Equity	253.5	0.00			
С	Tax on ROE					
D	Revenue					
1	Revenue from sale of electricity	14457.32	14091.45			
2	Other Income	571.23	981.35			

	Form D 9						
Consumer category-wise Cross-subsidy							
Name of Distribution Business/Licensee	KERALA STATE ELECTRICITY BOARD LTD.						
Licensed Area of Supply							
11 7							

(n+1)	th year
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S.No.	Particulars	- Average Cost of	Average B	illing Rate	Ratio of Averag Average Cost	Proposed percentage	
		Supply (Rs./unit)	As per latest Tariff Order	Proposed by Distribution Business/ Licensee	As per latest Tariff Order	Proposed by Distribution Business/ Licensee	increase in tariff (%)
1	2	3	4	5	6	7 = 5/3	8 = 5/4
	LT Categories						
1							
2							
3							
	High Tension (HT)						
2							
3							
4							
	Extra High Tension (EHT)						
23	EHT 66 kV						
24	EHT 110 kV						
25	EHT 220 kV						
26	Railway Traction						
27	Bulk Consumers/ Licensees						
	Kinesco Power Utilities Private Limited						
	Cochin Special Economic Zone						
	Rubber Park India Pvt Ltd						
	Technopark						
	Cochin Port Trust						
	Thrissur Municipal Corporation						
	Kanan Devan Hills Plantation Corporation Limited						
	Infopark						
	Military Engineering Services						
	Electricity Department Pondicherry						
	Electricity Department Karnataka						

Form D BS

Balance Sheet at the end of the year

Name of Distribution Business/Licensee KERALA STATE ELECTRICITY BOARD LTD.

Licensed Area of Supply

C No	Dantiardano	Dof	Previous Year	Previous Year	Remarks
S.No.	Particulars	Ref	2020-21	2019-20	Kemarks
1	2	3	4	5	6
	Sources of Funds:				
	(A) Capital Funds:				
	Share Capital (Govt. equity)		1810.74	1810.74	
	Reserves & Surplus		-15887.59	-13166.12	
	Total (A)		-14076.85	-11355.38	
	(B) Loan from State Government				
	Loan from others:				
	-Secured		2000 10	2622.01	
			3889.10	3623.81	
	-Unsecured		199.77	199.24	
	Total (B)		4088.87	3823.05	
	(C) Contribution, grants & subsidies towards cost of capital assets		2884.26	2390.06	
	Provident Fund		2079.39	2006.04	
	Terminal Benefit Fund		6801.90	5437.36	
	Borrowings for working capital				
	Other Non current Liabilities		14.38	12.81	
	Long term Provision		6195.45	6651.83	
	Grand total of sources of funds (A+B+C)		7987.39	8965.76	
	, ,		7567.33	8903.70	
	Application of Funds:				
	A) Fixed assets				
	a) Gross fixed assets		12717.80	10914.82	
	b) Less accumulated depreciation		5737.29	5158.52	
	c) Net Fixed assets((a)-(b))		6980.51	5756.29	
	d) Capital works in progress		744.00	1009.12	
	e) Assets not in use				
	f) Deferred costs				
	g) Intangible assets		11.34	13.97	
	h) Investments		2.23	4.00	
	Other Non current assets-Other Financial Assets		21.09	-92.21	
	Total (c) +(d)+(e)+(f)+(g)+(h)		7759.17	6691.17	
	B)Subsidy receivable from Government		7703.27	248.04	
	Contribution receivable from State Government towards pension		1791.00	2606.40	
	liability C) Net Current Assets		1,31.00	2000.10	
	(1) Current assets, loans and advances				
	a) Inventories*		577.37	679.06	
	b) Receivables against Sale of Power		2526.70	2567.48	
	c) Cash & bank balances d) Loans and advances		408.31 -149.15	242.05	
	e) Sundry receivables		5817.24	6414.53	
	Total (C) (1)		9180.47	9903.12	
	(2) Current liabilities & provisions		2520.54	2205.24	
	a) Security Deposits from Consumers b) Borrowings for working capital		3529.51 635.37	3205.21 940.06	
	c) Payments due on Cap. liabilities		033.37	340.00	
	d) Other current liabilities		6578.37	6337.69	
	Total (C) (2)		10743.25	10482.96	
	Net Current Assets (C(1)) - (C(2)) Grand Total of Application of funds (A)+(B)+(C)		-1562.78 7987.40	-579.84 8965.77	
	Craim Tomi of replacement of raines (11) (15)		1 307.40	0903.77	

0.00

0.00

Form D CF

Cash Flow for the year

Name of Distribution Business/Licensee

Licensed Area of Supply

	Licensed Area of Supply				
S.No.	Particulars	Ref	Previous Year	Previous Year	Remarks
5.NO.	Particulars	Ker	2020-21	2019-20	Kemarks
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants		-2721.45	-1103.68	
	Less : Income Tax Payment during the year				
	: Other Comprehensive Income		-566.14	-510.59	
	Total of (a)		-2155.30	-593.09	
	b. Add: Debits to revenue account not requiring cash Flow:				
	I) a) Depreciation		578.77	477.79	
	b) Depreciation on IND As Adj		0.00	0.00	
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets		2.63	2.63	
	iv) Investment Allowance Reserve				
	v) Others, if any		-454.81	5322.23	
	Total of (b)		126.59	5802.64	
	c. Less: Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)		0	0	
	Net Funds from Earnings (a)+(b)-(c)		-2028.72	5209.56	
2	Contributions, Grants & Subsidies to cost of Capital Assets		494.20	291.03	
3	Security Deposit from consumers		324.30	-154.64	
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3+4)		-1210.22	5345.95	
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories		-101.69	119.69	
	ii) Receivables against sale of power		-40.78	1279.47	
	iii) Loans and Advances		-149.15	-60.54	
	iv) Sundry receivables		-597.29	6347.35	
	Total of (a)		-888.91	7685.97	

S.No.	Particulars	Ref	Previous Year 2020-21	Previous Year 2019-20	Remarks
1	2	3	4	5	6
	(b) Increase/(Decrease) in Current liabilities				
	I)Borrowings for working Capital		-304.69	-185.11	
	ii) Other current liabilities		240.68	2848.70	
	iii) Others (Increase in Reserve + payment due on cap.liab)		-566.16	-664.46	
	Total of (b)		-630.18	1999.13	
	Net Increase/(Decrease) in working Capital (a)- (b)		-258.73	5686.84	
7	Net Funds from operations before subsidies and Grants (5-6)		-951.48	-340.88	
8	Receipts from revenue subsidies and Grants		1063.44	1570.61	
- 0	•				
	Total Net Funds from operations including subsidies & Grants (7+8)		111.95	1229.73	
II.	Net increase/ decrease in Capital liabilities				
	a). Fresh borrowings				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		1154.46	1938.79	
	Total of (a)		1154.46	1938.79	
	b) Repayments :				
	I) State Loans				
	ii) Foreign currency Loans / Credits				
	iii) Other borrowings		888.64	1130.20	
	Total of (b)		888.64	1130.20	
	Net Increase/(Decrease) in Capital liabilities (a) - (b)		265.82	808.58	
III.	Increase/(Decrease) in equity Capital		0.00	0.00	
IV.	Total Funds available for Capital Expenditure (I+II+III)		377.78	2038.31	
V	Funds utilised on Capital Expenditure				
	a)On projects		1537.87	1544.65	
	b)Advance to Suppliers & Contractors				
	c) Intangible Assets		0.00	11.02	
	d) Deferred Cost		0.00	-0.08	
	e) Long Term Loans and Advances		113.30	-113.68	
	Total of V (a+b+c+d)		1651.17	1441.91	
VI	Net Increase/(Decrease) in Government contribution				
VII	Net Increase/(Decrease) in Terminal benefit fund		1364.54	-783.91	
VIII	Net Increase/(Decrease) in Provident fund		73.35	143.85	
IX	Net Increase/(Decrease) in investments		-1.77	-1.65	
X	Net Increase/(Decrease) in cash/bank balance (IV - V- VI -IX)+ (VII+VIII)		166.26	-42.00	
XI	Add opening cash & Bank balance		242.05	284.05	
XII	Closing Cash & Bank balance (X+XI)		408.31	242.05	

	Form D P&L				
	Profit & Loss Account				
	Name of Distribution Business/Licensee	KERAL	A STATE ELECT	RICITY BOARD	LTD.
	Licensed Area of Supply				<u> </u>
S.No.	Particulars	Ref	Previous Year 2020-21	Previous Year 2019-20	Remarks
1	2	3	4	5	6
	LINCOME				
	a. Revenue from Sale of Power		14091.45	14279.84	
	b. Revenue Subsidies and Grants				
	c. Other Income		981.35	487.58	
	Total (a+b+c)		15072.80	14767.42	
	II. EXPENDITURE				
	a. Repairs and Maintenance.		206.51	217.25	
	b. Employee Cost		4701.10	2870.74	
	c. Administration and General Expenses		434.92	442.45	
	d.Depreciation		578.77	477.79	
	1). Amortisation of Intangible Assets		2.63	2.63	
	e.Interest and Finance charges		1448.06	1515.94	
	f. Subtotal (a+b+c+d+e)		7371.99	5526.79	
	g. Less Capitalised Expenses:				
	- Interest & Finance Charges		82.08	211.77	
	- Other Expenses		355.89	330.72	
	h. Other Debits		163.21	20.58	
	Change in Fair Valuation and other adjustments				
	I. Extra Ordinary Items		17.53	24.72	
	j. Purchase of power		10113.35	10330.90	
	k.Generation of Power				
	Total Expenditure (f-g+h+i+j+k)		17228.11	15360.51	
	III. Profit/(Loss) before Tax (I-II)		-2155.30	-593.09	
	IV. Provision for Income Tax				
	V.Net Prior period credits (Charges)				
	V.(a). Other Comprehensive Income		-566.14	-510.59	
	VI. Surplus (Deficit)		-2721.45	-1103.68	
	VII. Net Assets at the beginning of the year (Less consumer's Contribution)		3366.23	2573.34	
	VIII. Rate of Return (VI / VII)				

CHAPTER – 5: GENERAL EXPLANATION ON VARIOUS EXPENSES

5.1 Interest and finance charges: An amount of Rs 1927.79 Cr had been approved by the Hon'ble Commission under this head. The actual expense incurred was Rs.1726.36 Cr (net of capitalized interest Rs.162.86 Cr). A comparison summary of I & F charges under various heads, as approved by the Hon Commission and actually incurred as per audited accounts, are given below.

			Table 5.	1: Intere	sts and f	inance (harges (Rs Cr)				
		Арр	oroval			Ad	tual		Difference over approval			
Item	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total
Interest on Loan	116.32	263.65	281.40	661.37	129.77	164.67	436.25	730.69	-13.45	98.98	-154.85	-69.32
Less: Interest capitalized	0.00	0.00	0.00	0.00	43.88	36.90	82.08	162.86	-43.88	-36.90	-82.08	-162.85
Interest net of capitalization	116.32	263.65	281.40	661.37	85.89	127.77	354.17	567.83	30.43	135.88	-72.77	93.53
Security Deposit Interest	0.00	0.00	218.49	218.49	0.00	0.00	149.07	149.07	0.00	0.00	69.42	69.42
Master Trust Bond Interest	35.50	78.34	578.40	692.24	35.50	67.36	589.38	692.24	0.00	10.98	-10.98	0.00
WC/OD interest	6.84	20.48	0.00	27.32	7.29	15.02	132.05	154.36	-0.45	5.46	-132.05	-127.04
PF interest	10.60	23.39	172.60	206.59	5.27	16.29	139.13	160.69	5.33	7.10	33.47	45.90
Other charges	0	0	0	0	0	0	2.17	2.17	0.00	0.00	-2.17	-2.17
Carrying cost	0	0	121.78	121.78	0	0	0	0	0.00	0.00	121.78	121.78
Total I&FC	169.26	385.86	1372.67	1927.79	133.95	226.44	1365.97	1726.36	35.31	159.42	6.70	201.42

5.2 Interest on loans: The interest approved on short- and long-term loan amounted to Rs. 661.37 Cr but actually incurred Rs. 730.69 Cr and exceeded the sum approved by Rs.69.32 Cr. Difference is mainly because of the normative approach adopted by the Hon Commission to assess the normative loan. While approving ARR, Hon'ble Commission considered trued up normative loan for 2015-16 and thereafter provisionally assessed the normative loan for 2016-17 and 2017-18. Then, provisional GFA addition for 2018-19,2019-20 and 2020-21 were considered to ascertain the level of normative loan as on 31.03.2021. Actual average rate of interest during the year 2020-21 was 9.88 % against approved rate of 9.43%. Normative interest was approved at Rs.661.37 Cr as summarized below:

Та	Table 5.2: Normative loan as on 31.03.2021 and interest as per order dated 08.07.2019 (Rs Cr)									
Sl. No	Description	SBU G	SBU T	SBU D	Total					
1	Opening levels of normative Loan (as on 1-4-2020)	1036.89	2441.81	2683.01	6161.71					
2	Provisional Asset Addition for 2020-21	593.59	1427.76	811.69	2833.04					
3	Contribution & Grants	0.00	389.58	203.71	593.29					
4	Net Addition to Normative loan 2020-21 (2-3)	593.59	1038.18	607.98	2239.75					
5	Repayment for 2020-21 (Depreciation)	174.35	222.92	121.53	518.80					
6	Closing provisional Normative Loan 31.03.2021	1456.13	3257.07	3169.46	7882.66					
7	Average normative loan	1246.51	2849.43	2926.23	7022.19					
8	Rate of interest	9.33%	9.25%	9.62%						
9	Interest charges	116.32	263.65	281.40	661.37					

5.3 However, the actual outstanding loan as on 31.03.2021 was Rs.7784.47 Cr as against the assessed normative loan of Rs.7882.66 Cr by the Hon'ble Commission. Actual loan was less than the assessed levels by Rs. 98.19 Cr, whereas the actual opening loan as on 31.03.2020 was more than the approved normative loan by Rs. 847.24 Cr. This has contributed to the increase of actual interest over approval. Source wise borrowings, repayments and interests are given in **Appendix-1**. SBU wise details are furnished in **Appendix 1A, 1B and 1C** respectively for SBU G, SBU T and SBU D. Summary of loan details are furnished below:

	Table 5.3: Summary of loans, interest and average rate of interest (Rs. Cr)										
SBU	Opening (01/04/20)	Add: additions during the Year	Less: Repayments during the year	Closing (31/03/21)	Average loan	Interest on loan	Average interest rate (%)				
SBU G	1275.61	426.77	349.52	1352.86	1314.24	129.77	9.87				
SBU T	1489.95	763.59	393.80	1859.74	1674.85	164.67	9.83				
SBU D	4243.38	1154.46	825.97	4571.87	4407.62	436.26	9.90				
Total	7008.95	2344.82	1569.29	7784.47	7396.71	730.69	9.88				

5.4 **Basis of apportionment loans among SBUs in accounts.** The basis adopted in apportioning loan among SBUs in accounts are tabulated below:

	Table-5.4: Basis of apportionment of Loans and Interests (2017-18)							
No	Institution	Basis						
Α	SECURED LOANS-TERM LOANS							
1	LIC	GFA+CWIP						
2	REC ON VARIOUS SCHEMES	GFA+CWIP						
3	REC R-APDRP PART-B	DISTRIBUTION						
4	R E C – RGGVY	DISTRIBUTION						
5	REC – Medium Term Loan	GFA+CWIP						
6	PFC-Pallivasal	GENERATION						
7	PFC R-APDRP	DISTRIBUTION						
8	SOUTH INDIAN BANK-Barapole	GENERATION						
9	PFC GEL KAKKAYAM	GENERATION						
10	REC-Distribution-23 circle scheme	DISTRIBUTION						
11	REC-Distribution-Meter scheme	DISTRIBUTION						
12	REC-Thottiyar	GENERATION						
13	REC-Transmission-Kattakkada-Pothencode	TRANSMISSION						
14	REC-Transmission-Group 1	TRANSMISSION						
15	Special loan assistance REC	GFA+CWIP						
16	DRIP	GENERATION						
17	R E C-DDG Scheme	DISTRIBUTION						
18	RIDF of NABARD-Upper Kallar & Banasurasagar	GENERATION						
19	Special loan assistance -PFC	GFA+CWIP						
20	PFC GEL Perunthenaruvi	GENERATION						
В	UNSECURED LOANS TERM LOANS							
1	State Bank of India	GFA+CWIP						
2	Vijaya Bank	GFA+CWIP						
3	South Indian Bank	GFA+CWIP						
4	Bank of India	GFA+CWIP						
5	REC	GFA+CWIP						
6	Union bank of India	GFA+CWIP						
7	Canara Bank	GFA+CWIP						
8	Andhra Bank	GFA+CWIP						

5.5 Hon'ble Commission may kindly note that since short term loans could be obtained at comparatively lower rate than long term loans, KSEBL had earlier availed short-term loans for meeting capital liabilities in the past. Considering the risk involved in financing capital project

through short term loans, KSEBL started availing long and medium-term loans for this purpose by restricting STL borrowings to the possible extent. STL as on 31.03.2021 has been Rs. 400 Cr (the same level as on 31.03.2020). A summary of Short-Term loans is given in **Appendix-2**. Thus, interest on STL for the year 2020-21 had been Rs.31.58 Cr compared to Rs. 31.82 Cr of previous year. The details are given in **Appendix-3**. Overdrafts & Demand loans as on 31.03.2021 amounted to Rs. 1272.23 Cr (Rs.1930.23 Cr in 2019-20) with an interest to the tune of Rs.154.36 Cr. Thus, Long term and STL registered an increase of Rs.775.52 Cr and OD balance came down by Rs. 658 Cr during the year. There was an increase in receipt from KIIFB and DRIP to the tune of Rs.536.07 Cr (Note No. 21 of Audited accounts) due to which the overall borrowings recorded an increase of Rs.653.59 Cr in comparison with 2019-20.

5.6 During 2020-21, KSEBL executed capital works to the tune of Rs.2902.36 Cr during the year and completed works capitalized to the tune of Rs 2143.64 Cr. Project wise details of CWIP are furnished in **Appendix 4**. A summary of capital works is furnished below:

	Table 5.5: Summary of capitalization during 2020-21 (Rs. Cr)										
SI. No	SBU	CWIP as on 01/04/2020	Works executed during the year	GFA Addition	CWIP as on 31/03/2021						
1	Generation	1,584.50	261.81	124.00	1,722.31						
2	Transmission	1,156.44	1219.61	679.64	1,696.42						
3	Distribution	1,009.12	1537.86	1802.98	744.00						
4	GRAND TOTAL	3,750.06	3019.29	2606.63	4,162.72						

- 5.7 It is respectfully submitted that Hon'ble Commission has determined normative loan as on 01.04.2015 (at the beginning of the 3-year control period from 2015-16 to 2017-18). Aggrieved by the determination of normative loan balance as on 01.04.2015 (Rs.2276.22 Cr) by the Hon'ble Commission in the truing up order for 2016-16, KSEBL sought review for an additional claim of Rs.467.60 Cr, which was turned down as per order dated 16.05.2019. Considering the long-lasting financial implication, KSEBL has filed an appeal before the Hon'ble APTEL (Appeal No.27 of 2019). Hon'ble Commission, took similar view in the truing up order for 2016-17 also and KSEBL appealed against the decision as per Appeal No. 31 of 2019), both the appeals are pending disposal before the Hon'ble APTEL.
- 5.8 In the truing up order for 2017-18 also, the claim of KSEBL on this count was not admitted. KSEBL retains the claim in true up for 2020-21 also as had been done for the earlier years.
- 5.9 Hon'ble Commission, as per order dated 25.06.2021 in OA 9/2020, has decided the truing up for 2017-18, in which normative loan has been approved at Rs.2984.65 Cr.
- 5.10 As per audited accounts for 2018-19, addition to fixed assets amounts to Rs.1672.81 Cr and Capital subsidies and Grants received during the year was 523.18 Cr. As per truing up petition for 2018-19, GFA addition eligible as per Tariff Regulation, 2018 amounts to Rs.1653.53 Cr. Approval

of the Hon'ble Commission was sought for GFA addition eligible for depreciation at Rs.1125.76 Cr and additional normative loan Rs. 1130.35 Cr.

- 5.11 GFA addition as per accounts during 2019-20 was Rs.2143.64 Cr. KSEBL, as per truing up petition for 2019-20 has sought approval of normative loan amounting to Rs. 1445.39 Cr and GFA addition eligible for depreciation at Rs. 1435.38 Cr.
- 5.12 Hon'ble Commission is yet to decide the truing up for 2018-19 and 2019-20. Therefore, Normative loan at the beginning of the year 2020-21 has been considered at Rs. 5237.89 Cr as summarized below:

	Table 5.6 Computation of Normative loa	n as on 01.0	4.2020		
Sl. No	Description	SBU G	SBU T	SBU D	Total
1	Closing balance of Normative loan as per True up order for 2017-18 (OA 09/2020 dated 25.06.2021)	627.78	917.23	1439.64	2984.67
2	2 Add: Disputed claim pending before APTEL		131.21	201.16	467.60
3	Normative loan for GFA addition 2018-19	90.52	290.26	749.57	1130.35
4	Less Normative repayment 2018-19	124.73	160.32	97.17	382.22
5= (1+2+3-4)	Opening normative loan as on 01.04.2019	728.80	1178.38	2293.20	4200.40
6	Additional normative loan for 2019-20	114.17	222.49	1108.73	1445.39
7	Normative repayment 2019-20	125.93	162.70	119.27	407.90
8= (5+6-7)	Closing normative loan 31.03.2020	717.04	1238.17	3282.66	5237.89

Additional capitalization during 2020-21 and normative loan thereon.

5.13 GFA addition during 2020-21 was Rs. 2606.63 Cr. The asset class wise details of fixed assets addition under the strategic business units of SBU G, SBU T and SBU D during 2020-21 is furnished below:

	Table 5.7 SBU wise -Asset class wis	se GFA addition	on for 2020-2	1 (Rs Cr)	
Sl.No	Description	SBU G	SBU T	SBU D	Total
1	Land	48.76	222.59	0.17	271.52
2	Building	7.59	26.2	14.53	48.32
3	Hydraulic works	2.92	0.21	0.03	3.16
4	Other Civil works	0.00	24.11	0.91	25.02
5	Plant & Machinery	63.54	182.03	72.39	317.96
6	Lines, cable networks etc.	0.26	222.35	1488.96	1711.57
7	Vehicle	0.08	0.32	0.00	0.40
8	Furniture & Fixtures	0.16	0.56	10.23	10.95
9	Office equipment	0.6	0.84	214.2	215.64
10	Decommissioning liability	0.08	0.43	1.56	2.07
11	Total	124.00	679.64	1802.98	2606.63

5.14 SBU wise details of GFA addition with explanation is furnished below:

SBU GENERATION:

- 5.15.1 GFA worth Rs.45.72 Cr represent part capitalization within the meaning of Tariff Regulations. Asset category wise details of part capitalized assets are furnished in **Appendix 4A**.
- 5.15.2 Hon'ble Commission did not approve decommissioning liability in GFA addition, accounted by virtue of IND AS provisions, during the course of truing up for the year 2016-17. Therefore, decommissioning liability of SBU G amounting to Rs.0.08 Cr is not considered in GFA addition during the year for truing up purpose.
- 5.15.3 After excluding part capitalized assets during 2020-21 and de commissioning liability from the GFA addition the asset addition eligible as per Tariff Regulation amounted to Rs.78.20 Cr as detailed in Table below.
- 5.15.4 Item wise break up of GFA of SBU G are summarized below:

	Table 5.8: GFA addition fo	or 2020-21 e	eligible as p	er Tariff F	Regulation for	SBU G (Rs. Cr)	
		Gross fixed assets for 2020-21 as per Accounts		Part capitalization	Decommissioning liability	Addition net of adjustments	
No.	Particulars	Year beginning	Additions	Year End			
1	Land & land rights	1504.65	48.76	1553.41	1.32		47.44
2	Hydraulic works	1401.39	2.92	1404.32	0.00		2.92
3	Building & Civil works of Power plant	615.41	7.59	623.00	0.20		7.39
4	Plant & machinery including substation equipment	13528.31	63.54	13591.85	44.12		19.42
5	Line, cable network etc	8.37	0.26	8.64	0.06		0.21
6	Vehicles	10.19	0.08	10.27	0.00		0.08
7	Furniture & fixtures	6.20	0.16	6.36	0.01		0.15
8	Office Equipment	11.91	0.60	12.51	0.01		0.59
9	Decommissioning liability		0.08	0.08		0.08	0.00
	Total (1) to (9)	17086.45	124.00	17210.44	45.72	0.08	78.20
	True up claim for 2018-19			0			78.20
	Enhancement in value due to revaluation	11988.98		11988.98			
	Net of enhancement in value	5097.47	124.00	5221.46			

5.15.5 Hon'ble Commission may kindly note that no capital subsidy and grants were received during 2020-21. Hon'ble Commission may be pleased to approve GFA addition under SBU G for Rs.78.20 for the year 2020-21 for the purpose of normative loan and 30.76 Cr (Excluding land value of Rs.47.44 Cr) for depreciation.

SBU Transmission:

- 5.16.1 As per audited accounts, GFA addition during the year has been Rs.679.64 Cr. Details are furnished in Appendix 4. Out of the GFA addition during the year, assets worth Rs.106.54 Cr represent part capitalization within the meaning of Tariff Regulations. Asset category wise break up in respect of part capitalized assets are furnished in **Appendix 4B.**
- 5.16.2 KSEBL, as per truing up petition for 2016-17 to 2019-20, has excluded part capitalized projects in respect of SBU T as envisaged in the Tariff Regulations. Out of the projects part capitalized in earlier years, projects amounting to Rs. 0.22 Cr, Rs. 0.82 Cr, Rs. 2.63 Cr and Rs. 9.96 Cr (aggregating to Rs. 13.63 Cr) respectively from 2016-17 to 2019-20 were commissioned in 2020-21. Details are furnished as per **Appendix 4C to 4F.** Project wise GFA addition details are furnished in **Appendix 4G.**
- 5.16.3 Thus, part capitalized assets and decommissioning liability during the year were deducted from the GFA addition as per accounts. Thereafter, part commissioned assets in earlier years but commissioned in 2020-21 were considered to arrive at the asset addition eligible as per Tariff Regulation. This amounted to Rs.586.30 Cr {Rs.679.64 Cr-(Rs.106.54 Cr+ Rs.0.43 Cr) +(Rs. 0.22 Cr+ Rs. 0.82 Cr+ Rs. 2.63 Cr+ Rs. 9.96 Cr)} as detailed in Table below:

	Table 5.9 GFA	A addition	for 2020)-21 eligi	ble as per Tai	riff Regu	ılations	(SBU T)	Rs Cr)		
No	Assets Group	Gross fixed assets		Adjustments		Part capitalized in earlier years but commissioned during 2020-21					
		01.04.20	Addition	31.03.21	Part capitalized	DC liability	2016- 17	2017- 18	2018- 19	2019- 20	Addition as per Regulation
1	Land & land rights	280.28	222.59	502.87	1.79		0.00	0.81	2.37	0.28	224.26
2	Buildings	381.77	26.20	407.97	3.55		0.00	0.00	0.00	0.74	23.38
3	Hydraulic Works	11.08	0.21	11.29	0.10		0.00	0.00	0.00	0.00	0.11
4	Other Civil works	473.78	24.11	497.89	7.68		0.00	0.00	0.00	0.19	16.62
5	Plant & Machinery	2585.27	182.03	2767.30	66.32		0.01	0.00	0.25	2.36	118.33
6	Lines, cable networks etc.	2159.64	222.35	2381.99	27.06		0.21	0.01	0.01	6.38	201.90
7	Vehicle	7.82	0.32	8.14	0.00		0.00	0.00	0.00	0.00	0.32
8	Furniture and Fixtures	7.09	0.56	7.65	0.03		0.00	0.00	0.00	0.01	0.54
9	Office Equipment	15.29	0.84	16.13	0.00		0.00	0.00	0.00	0.00	0.84
10	Decommissioning liability	0.69	0.43	1.12		0.43	_		_	_	0.00
11	Gross Asset (Total (1) to (14))	5922.70	679.64	6602.35	106.5	0.43	0.22	0.82	2.63	9.96	586.30

5.16.4 Hon'ble Commission may kindly approve GFA addition of Rs.586.30 Cr for 2020-21. Consumer contribution, grants and subsidies received during the year amounted to Rs.69.66 Cr as detailed Appendix 5. GFA addition to the tune of Rs. 516.65 Cr (Rs.586.30 Cr-Rs.69.66 Cr) may kindly be approved as GFA addition eligible for normative loan and Rs.292.38 Cr (excluding land value Rs.224.26 Cr) as GFA eligible for depreciation.

GFA addition for SBU D:

5.17.1 As per audited accounts, CWIP at the beginning of the year was Rs.1009.12 Cr. Additional capital expenses incurred and assets capitalized during the year to the tune of Rs.1537.86 Cr and Rs.1802.98 Cr respectively as detailed below:

	Table 5.10: Scheme wise capital expenditure and	GFA addition under S	BU D for 2	020-21 (Rs. C	r)
Project Code	Brief Description of Project	Cost as on 01/04/2020	Incurred during the year	Capitalized during the year	Balance at the end of 31/03/2021
14.05	Deen Dayal Upadhyay Gram Jyothi Yojana (DDU GJY)	3.79	44.45	46.32	1.92
14.13	Integrated Power Development Scheme (IPDS)	48.90	99.34	126.82	21.42
14.5	Rural Electrification Scheme	0.04	1.41	1.41	0.04
14.51	Distribution Line Extension	0.99	180.43	178.57	2.86
14.52	Distribution Service Connection	4.87	152.82	154.53	3.16
14.53	Distribution System Improvement	17.69	728.49	730.04	16.14
14.54	Electrification of Harijan Colonies	-	0.80	0.80	-
14.55	Electrification of Tribal Colonies	-	0.21	0.21	-
14.57	Punja Package	0.12	0.26	0.38	1
14.58	System Improvement in other areas	0.07	7.53	7.60	ı
14.59	Distbn. Capacitor Installation Scheme	0.99	1.14	0.01	2.11
14.6	Street Lights	2.59	37.30	39.55	0.34
14.61	Expenditure due to Natural Calamity	0.05	4.49	4.46	0.08
14.62	RGGVY-Village electrification Infrastructure		0.14	0.14	1
14.63	RGGVY-For effecting BPL Service Connection	1	0.01	0.01	ı
14.67	Part B Projects of R-APDRP	15.87	71.78	73.96	13.68
14.82	R- APDRP Scheme	407.93	69.77	219.75	257.94
14.9	CWIP - General	503.91	136.82	217.49	423.23
14.91	Innovation fund	0.02	0.56	0.58	
14.99	Projects not Identified	1.29	0.12	0.36	1.06
	TOTAL	1,009.12	1,537.86	1,802.98	744.0

- 5.17.2 Decommissioning liability amounting to Rs. 1.56 Cr is included in the GFA addition for the year of Rs. 1802.98 Cr. Consumer contribution, grants and subsidies received during the year 2020-21 has been Rs.702.86 Cr, details of which are given in **Appendix 5**. After excluding contribution etc GFA addition eligible for normative loan amounts to Rs. 1098.56 Cr. (Rs.1802.98 Cr- (Rs.702.86 Cr+ Rs.1.56 Cr). GFA addition eligible for depreciation amounts to Rs. 1098.39 Cr after excluding land value of Rs.0.17 Cr (Form D3.5 of the petition).
- 5.18 Capitalization of expenses: It is respectfully submitted that KSEBL earmarks amounts meant for capitalization of various expenses incurred on capital works carried out during the year. Such amount earmarked for subsequent capitalization is deducted from the actual employee cost and interest on loan annually and directs the ARUs to include the same under CWIP itself. Expenses so earmarked for capitalization during subsequent years amounted to Rs.651.03 Cr. It may kindly be noted that expenses earmarked annually would continue to be disclosed under CWIP till completion of related works and transfer to GFA. Apportionment of expenses earmarked for capitalization among SBUs in 2020-21 is furnished below:

	Table5.11: Details of expenses capitalized in 2020-21 (Rs Cr)									
Sl. No	Description	SBU G	SBU T	SBU D	Total					
1	Interest and Finance charges	43.88	36.90	82.08	162.86					
2	Employee cost	40.19	91.73	354.77	486.68					
3	A&G expenses	0.32	0.04	1.12	1.49					
3	Total	84.40	128.67	437.97	651.03					

5.18.1 The accounting treatment followed in annual accounts towards capitalization of expenses differs from that adopted for Regulatory purposes. Regulatory approval of normative interest is granted only for the commissioned assets and no allowance is permissible for CWIP. Similarly, O&M expenses with regard to GFA are allowed on assets put to use at normative basis. The norms were derived based on net trued up expenses of previous years. Therefore, in the truing up petition, normative interest as well as normative O&M expenses are considered as a charge in ARR and no portion earmarked towards subsequent capitalization.

Contribution and Grants:

5.19 SBU wise break up of Capital subsidies and Grants received during the year as per accounts and claimed in true up are as follows:

Т	Table 5.12 SBU wise break up of Contribution & grants received during 2020-21 (Rs Cr)						
SL No.	PARTICULARS	GEN	TRANS	DIST	TOTAL		
1	Consumer contribution	0.00	18.53	384.83	403.36		
2	Subsidies	0.00	0.00	0.00	0.00		
3	Grants Recd. Towards Cost of Fixed Assets	0.00	41.07	209.71	250.78		
4	Others	0.00	10.07	108.33	118.39		
5	Gross Total	0.00	69.66	702.86	772.53		
6	Add: Concessional loan						
7	Add: Decommissioning liability	0.07	0.43	1.57	2.07		
8	Less: Subsidies & grants amortization	5.44	31.58	208.67	245.69		
9	As per Accounts	-5.37	38.51	495.76	528.91		

5.20 On the basis of the above submission, GFA addition eligible as per Tariff Regulation, 2018 amounts to Rs. 2465.95 Cr against Rs. 2606.62 Cr as per audited accounts. GFA addition eligible for depreciation amounts to Rs.1421.53 Cr and additional normative loan Rs. 1693.40 Cr. Details are furnished below:

Table	Table 5.13: Breakup of additional capitalization as per Accounts and as per KSERC Regulations					
Sl.No	Particulars	SBU G	SBU T	SBU D	TOTAL	
1	Addition as per Accounts	124.00	679.64	1802.98	2606.62	
2	Less: Decommissioning liability	0.08	0.43	1.56	2.07	
3	Less: Part capitalization	45.72	106.54	0.00	152.25	

4	Add: Part capitalization in 2016-17 but commissioned during 2010-21	0.00	0.22	0.00	0.22
5	Add: Part capitalization in 2017-18 but commissioned during 2020-21	0.00	0.82	0.00	0.82
6	Add: Part capitalization in 2018-19 but commissioned during 2020-21	0.00	2.63	0.00	2.63
7	Add: Part capitalization in 2019-20 but commissioned during 2020-21		9.96		9.96
8	GFA addition eligible as per Regulation	78.20	586.30	1801.42	2465.92
9	Less: Consumer contribution & grants	0.00	69.66	702.86	772.53
10	GFA addition eligible for normative loan as per Regulation	78.20	516.65	1098.56	1693.40
11	Less: Land value addition (excluding the portion under part capitalization)	47.44	224.26	0.17	271.87
12	GFA addition eligible for depreciation	30.76	292.38	1098.39	1421.53

5.21 Normative loan as on 31.03.2021 and normative interest for the year works out to Rs.6443.31 Cr and Rs.577.00 Cr respectively as detailed below may kindly be approved.

	Table 5.14 Computation of Normative loan as on 01.04.2021						
SI. No	Description	SBU G	SBU T	SBU D	Total		
1	Closing balance of Normative loan as per True up order for 2017-18 (OA 09/2020 dated 25.06.2021)	627.78	917.23	1439.64	2984.67		
2	Add: Disputed claim pending before APTEL	135.23	131.21	201.16	467.60		
3	Normative loan for GFA addition 2018-19	90.52	290.26	749.57	1130.35		
4	Less Normative repayment 2018-19	124.73	160.32	97.17	382.22		
5	Opening normative loan as on 01.04.2019	728.80	1178.38	2293.20	4200.40		
6	Additional normative loan for 2019-20	114.17	222.49	1108.73	1445.39		
7	Normative repayment 2019-20	125.93	162.70	119.27	407.90		
8= (5+6-7)	Closing normative loan 31.03.2020	717.04	1238.17	3282.66	5237.89		
9	Additional normative loan for 2020-21	78.20	516.65	1098.56	1693.40		
10	Normative repayment 2020-21	127.72	171.49	179.06	478.27		
11= (8+9-10)	Closing normative loan 31.03.2021	667.52	1583.33	4202.17	6453.02		
12= (8+11)/2	Average Normative loan for the year 2020-21	692.28	1410.75	3742.41	5845.46		
13	Weighted average interest rate for 2020-21 (%)	9.87	9.83	9.90	9.88		
14=12*13%	Normative interest for 2020-21	68.36	138.70	370.42	577.48		

5.22 Interest on Overdraft: A sum of Rs.154.36 Cr (Rs.189.25 Cr in 2019-20) was incurred during the year under this head. Expenses under this head could not be claimed as per Tariff Regulation, 2018. Hon'ble Commission was pleased to approve carrying cost on un bridged revenue gap from 2015-16 onwards. In view of the above, KSEBL is not seeking true up of interest paid on overdraft during the year 2020-21.

5.23 Carrying cost on approved revenue gap:

5.23.1 Hon'ble Commission had trued up revenue gap of Rs.6864.13 Cr till 2017-18 (excluding 2014-15, for which orders are yet to be issued). Based on the methodology adopted by the Hon'ble Commission in TU 16 & TU 17, average GPF balance of Rs.2386.84 Cr has been excluded from the approved gap to determine the revenue gap eligible for carrying cost. Actual average interest on loans during 2020-21 for SBU D had been 9.90 %. Accordingly, a sum of Rs.443.25 Cr is claimed as carrying cost for the year 2020-21 in respect of trued up revenue gap as detailed below:

	Table 5.15: Computation of carrying cost on approved revenue gap (R	s Cr)
1	Total un bridged revenue gap as on 31-03-2011	424.11
2	Revenue gap as per the orders on truing up for the year 2011-12	1386.97
3	Revenue gap as per the orders on truing up for the year 2012-13	3132.97
4	Remand order dated 09.05.17-2009-10	107.9
5	Remand order dated 19.05.17-2010-11	204.7
6	True up order 2013-14 dated 20.06.2017	195.5
7	RP 2/2017 dated 07.09.2017 on TU 2011-12	4.96
8	True up order 2015-16 dated 21.08.2018	202.97
9	True up order 2016-17 dated 14.09.2018	1031.06
10	RP 3/2019 on TU 2016-17	47.99
11	Gap as per additional submission FY 17- OA 64/2019 dt 12.10.2020	39.61
12	OA 9/2020 on True up 2017-18 dated 25.06.2021	84.13
13	RP 1/2021 TU 2016-17 dated 21.07.2021	1.26
14	Total trued up revenue gap (1 to 13)	6864.13
15	Less: Average PF balance for 2020-21 (2342.96+2430.72)/2	2386.84
16	Net revenue gap	4477.29
17	Carrying cost at average interest rate of 9.90 % on above	443.25

- 5.23.2 It is further submitted that the Hon'ble APTEL, as per judgment dated 08.04.2015 in appeal 160 of 2012 and batch has laid down the principle based on which carrying cost is to be allowed. The decision was reiterated in judgment dated 22.04.2015 in appeal 174 of 2013 as well. The same is reproduced below:
 - 42. We find that for carrying cost, the State Commission has considered the revenue gap to be applicable from the end of the year of the occurrence of the revenue gap up to the middle of the year in which the same is proposed to be recovered. This is not correct. The interest to be calculated for the period from the middle of the financial year in which the revenue gap had occurred up to the middle of the financial year in which the recovery has been proposed...This is because the expenditure is incurred throughout the year and its recovery is also spread out throughout the year. Admittedly, the revenue gap will be determined at the end of the financial year in which the expenditure is incurred. However under or over recovery is the resultant of the cost and revenue spread out throughout the year. Similarly, the revenue gap of the past year will be recovered throughout the financial year in which its recovery is allowed. Therefore interest on revenue gap as a result of true up for a financial year should be calculated from the mid of that year till the middle of the financial year in which such revenue gap is allowed to be recovered.

- 43. To explain this point let us assume that there is a revenue gap of 12 crores in the true up of FY 2010-11. If the cost and the revenue and the permitted expenditure had been properly balances, this gap of 12 crores would have been recovered throughout the 12 months of FY 2010-11. Now, this revenue gap is allowed to be recovered in tariff during FY 2013-14. The recovery of gap of Rs. 12 crores from the distribution licensee consumers will be spread over the 12 months period of 2013-14. Therefore carrying cost would be calculated from the middle of FY 2010-11 to middle of FY 2013-14 ie 3 years.
- 5.23.3 Hon'ble Commission may kindly note that the revenue deficit sought for True up for 2018-19 and 2019-20 amounted to Rs. 759.88 Cr and Rs. 553.10 Cr respectively. In view of the above judgment, Hon'ble Commission may kindly approve carrying cost for the revenue gap till 2019-20 (including the additional revenue gap that may be approved on the Review petition filed by KSEBL against Truing up for 2017-18) also in addition to the claim under Table 5.10. Carrying cost for this amount at average interest rate of 9.90 % amounts to Rs.129.99 Cr.
- 5.23.4 Revenue gap for the year 2020-21 sought for trued up is Rs. 678.02 Cr (excluding carrying cost on current year gap). In view of the APTEL order, Hon'ble Commission may kindly approve carrying cost for the revenue gap for 2020-21 from the middle of the year at Rs.30.51 Cr.
- 5.23.5 Hon'ble Commission may kindly note that KSEBL has managed the overall finances through borrowings and deferred liabilities like Master Trust payments, electricity duty etc. It may kindly be noted that such deferred liabilities are to be honoured with interest on a later date. Therefore, Hon'ble Commission may please approve Rs.603.75 Cr towards carrying cost for 2020-21 under SBU D as detailed below:

	Table 5.16: Computation of carrying cost on additional revenue gap				
1	On approved revenue gap till 2017-18	443.25			
2	On revenue gap sought for TU 2018-19 of Rs.759.88 Cr.	75.23			
3	On revenue gap sought for TU 2019-20 of Rs.553.10 Cr.	54.76			
4	On current year revenue gap Rs.678.02 Cr	30.51			
5	Total	603.75			

- 5.23.6 Hon'ble Commission, as per order dated 25.06.2021 in the matter of truing up for 2017-18, has ascertained Security deposit over the working capital requirement amounting to Rs.1019.70 Cr for SBU D. While approving carrying cost, Hon'ble Commission considered this amount (Rs 1019.70 Cr) as funds available for meeting approved and unbridged revenue gap. KSEBL would like to furnish the following for the kind consideration of the Hon'ble Commission:
 - (i) Arrears of electricity charges (payment due after normative due date) are not covered by security deposit and therefore, KSEBL has to raise working capital loans to meet the fall in revenue collection. Cost associated with it is not considered in ARR as per regulations. On the other hand, interest collected on arrears form part of ERC as other income. A sum of Rs. 147.51 Cr has been collected as late payment

surcharge during the year 2020-21. In addition, interest realized on KWA arrears till 31.09.2018 (taken over by the Government) amounting to Rs. 131.85 Cr has also been included under non-tariff income for 2020-21.

- (ii) For making prompt payment to generators to earn rebate, higher working capital is required. The cost associated for ensuring prompt payment i.e., for making payment before due date is not recognized in ARR. On the other hand, rebate earned is recognized in ERC as other income. KSEBL earned Rs.95.62 Cr as rebate on prompt payment of bills during 2020-21.
- (iii) In other words, while income from these two heads is included in the ERC, the cost for higher working capital to take care of these eventualities are not included in ARR. The security deposit in excess of working capital requirement, as per Tariff regulations, for 2020-21 amounts to Rs. 588.12 Cr as detailed in chapter 4.
- (iv) Arrears as on 31.03.2021 over the previous year has marginally come down by Rs. 55 Cr (as per note 7 &13 of audited accounts Rs.2191.20 Cr-Rs. 2246.30 Cr) mainly because of the release of KWA arrears by Government of Kerala to the tune of Rs. 663. Cr. Average monthly power purchase cost for the year (excluding rebate) has been Rs. 664 Cr. Hon'ble Commission may kindly note that the additional working capital requirement on account of arrears and additional working capital requirement to make prompt payment to generators exceeds the surplus security deposit of Rs.588.12 Cr.
- (v) In view of the above, Hon'ble Commission may kindly consider the cost associated with prompt payment to generators and holding accumulated arrears and may not consider surplus security deposit as funds available for meeting accumulated revenue gap and may be pleased to approve carrying cost as per Table above.

Interest on working capital

5.24 Hon'ble Commission may kindly approve Rs.6.22 Cr and Rs.17.46 Cr respectively for SBU G and SBU T as detailed in chapter 2&3 of this petition.

Interest on security deposit:

5.25 Hon'ble Commission approved interest on SD for the year at Rs.218.49 Cr. The Actual Security Deposit balance as per accounts was Rs.3205.97 Cr at the beginning of the year (01-04-2020) and Rs. 3207.24 Cr at the year end. Interest at 4.65 % on average SD is provided in accounts for FY 2020-21 (Rs 149.07 Cr) on accrual basis. Actual disbursement in the FY 2020-21 amounted to Rs.193.01 Cr (disbursement made against provision amounting to Rs 196.29 Cr created @ 6.50% on SD for FY 2019-20) as per provisions in Supply Code, 2014. Hon Commission may please approve the actual disbursement in 2020-21 amounting to Rs.193.01 Cr under SBUD.

Interest on PF:

5.26 Hon Commission approved Rs 206.59 Cr towards interest on PF. But as per the audited accounts, the actual interest paid on PF was Rs.160.69 Cr, which was less than approval by Rs.45.90 Cr mainly due to fall in interest rate. Hon'ble Commission had considered average PF balance for 2020-21 at Rs. 2582.33 Cr and applied interest @ 8%. However, actual average PF balance was Rs.2430.72 Cr. The actual rate of interest, however, was at 7.10 % during the year. The actual interest as per the audited accounts may kindly be approved among SBUs as given below:

Table 5.17: Interest on GPF (Rs Cr)					
Item SBU G SBU T SBU D Total					
Interest on GPF	5.27	16.29	139.13	160.69	

Interest on Master Trust Bonds:

- 5.27 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 KSEBL. Funding arrangements were put in place through issue of 2 series of Bonds for the total liability as on 31.10.2013 amounting to Rs.12418.72 Cr. Hon Commission recognized the unfunded pension liabilities as above and approved recovery of interest on KSEBL share of Bonds as per Tariff Regulations, 2018. Thus, Hon'ble Commission approved Rs.692.24 Cr towards interest on Master Trust bonds in the order. Even though KSEBL claimed Rs.372.90 Cr towards un funded actuarial liability till 31.03.2017 (Rs.3728.98 Cr), Hon'ble Commission provisionally approved Rs.200 Cr with the observation that it shall hold separate proceedings to determine funding requirement.
- 5.26.1 It is respectfully submitted that the Actuarial liability as on 31.03.2017 towards the unfunded pension liability, gratuity liability and leave surrender liability stood at Rs.16147.70 Cr ie Rs.3728.98 Cr increase in liability for the period from 01.11.2013 to 31.03.2017. As per the actuarial valuation as on 31.03.2018, 31.03.2019, 31.03.2020 and 31.03.2021, the liability on this count has been assessed at Rs. 17732.57 Cr, Rs.19327.73 Cr, Rs. 20359.73 Cr and Rs. 23121.42 Cr respectively. The increase for the year 2020-21 has been Rs.2761.70 Cr and the same was captured in audited accounts as follows:
 - (i) Liability pertaining to 2020-21 amounting to Rs.2099.90 Cr has been booked under employee cost for the year and
 - (ii) Remaining portion, pertaining to earlier years Rs.661.80 Cr under other comprehensive income in P&L account.
- 5.26.2 Kerala Service Rules as applicable in the Government are applicable to employees of KSEBL.
 The details of terminal benefits paid to retired employees in FY 2020-21 through Master
 Trust amounts to Rs.1737.05 Cr as detailed below:

5.26.3

Table 5.18: Amount paid to pensioners by Trust 2020-21					
Month	onth Rs. Cr Month				
Apr-20	103.27	Nov-20	203.80		
May-20	116.24	Dec-20	126.16		
Jun-20	118.65	Jan-21	123.39		
Jul-20	134.24	Feb-21	139.58		
Aug-20	263.66	Mar-21	142.75		
Sep-20	67.48	Total	1737.05		
Oct-20	197.83				

5.26.4 KSEBL, as per audited accounts, has not accounted pension and terminal liabilities under employee cost by virtue of operationalization of Master Trust. Instead, accounted 10% interest on Bonds issued to Master Trust amounting to Rs.692.24 Cr. Bifurcation of interest on bonds among SBUs are as detailed below:

Table 5.19: Interest on Master Trust Bonds (Rs Cr)						
Item SBU G SBU T SBU D Total						
Interest on Bonds	35.50	67.36	589.38	692.24		

- 5.26.5 It is respectfully submitted that there is no deviation between interest approved for the year as per the orders of the Hon'ble Commission 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, Hon'ble Commission adopted employee cost 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.
- 5.26.6 Tariff Regulations provide that, the annual pension contribution by KSEBL to the Master Trust based on the actuarial valuation is allowed to recover through tariff on annual basis. Statutory transfer scheme as well as tripartite agreement provides for the same. KSEBL has sought interest on un funded portion of actuarial liability in the MYT petition against which Hon'ble Commission provisionally approved Rs. 200 Cr with the following observation:

......Considering all these factors, the Commission is decided to hold a separate proceedings towards the determination of funds requirements of Master Trust. Till such time, the Commission provisionally allows Rs.200 crore as an additional funding for the Master Trust. Hence the figures shown as additional funding for the trust is only provisional and is subject to a prudency check before the same is finally allowed.

5.26.7 Actual pension and terminal benefit disbursement exceeded interest on bonds by Rs. 1044.81 Cr. (Rs.1737.05 Cr-Rs.692.24 Cr). It is humbly requested that the Hon'ble Commission may kindly true up an additional Rs.200 Cr as approved in MYT order for 2020-21, which may be subject to the final decision on the matter, in view of the fact that KSEBL has no other source to meet these expenses Therefore, Hon'ble Commission may be pleased to provisionally approve Rs.200 Cr as detailed below against the huge additional actuarial liability.

Table 5.20: Interest on Master Trust Bonds (Rs Cr)					
Item SBU G SBU T SBU D Total					
Interest on Bonds 10.26 22.64 167.10 200.00					

5.26.8 Hon'ble Commission may kindly note that the additional liability as per actuarial valuation for 2020-21 amounts to Rs.2099.90 Cr and the same has been included in the employee cost for the year as per accounts. Hon'ble Commission may be pleased to consider the cost for the year over Rs.200 Cr amounting to Rs. 1899.90 Cr with interest as and when the scheme is finalized.

Other charges:

5.27 Hon'ble Commission has not approved any amount towards other interest. Actual interest on other liabilities as per accounts amounts to Rs.2.17 Cr as detailed below:

Table 5.21: Details of Other interest and charges			
Item (Rs Cı			
Premium on swapping of loans PFC	1.48		
Interest to suppliers/ contractors	0.01		
Other bank charges	0.35		
Banking cash Transaction tax	0.01		
Others	0.32		
Total	2.17		

5.27.1 Actual expense during the year may kindly be approved in truing up as shown below:

Table 5.22: Other charges (Rs Cr)							
Item	SBU G	SBU T	SBU D	Total			
Premium on swapping of loans PFC			1.48	1.48			
Interest to suppliers/ contractors			0.01	0.01			
Other bank charges			0.35	0.35			
Banking cash Transaction tax			0.01	0.01			
Others			0.32	0.32			
Total			2.17	2.17			

5.28 In view of the above submission, Hon'ble Commission may kindly approve interest and finance charges as summarized below:

Table 5.23: Statement showing comparison of I&F Charges-Approved, Actual and TU requirement for 2020-21 (Rs Cr)										
		KSERC	As per Accounts				True up requirement			
No	Item	Approval	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total
1	Interest on Loan	661.37	129.77	164.67	436.25	730.69	68.36	138.70	370.42	577.48
	Security Deposit Interest	218.49	0.00	0.00	149.07	149.07			193.01	193.01
	Master Trust Bond Interest	692.24	35.50	67.36	589.38	692.24	35.50	67.36	589.38	692.24
1 4	Working capital/ OD interest	27.32	7.29	15.02	132.05	154.36	6.22	17.46		23.68
5	PF interest	206.59	5.27	16.29	139.13	160.69	5.27	16.29	139.13	160.69

6	Other interests	0.00	0.00	0.00	2.17	2.17	0.00	0.00	2.17	2.17
/	Carrying cost on revenue gap till last year	121.78	0.00	0.00	0.00	0.00			573.24	573.24
8	Carrying cost on current year revenue gap								30.51	30.51
9	Total	1927.79	177.83	263.34	1448.05	1889.22	115.35	239.81	1897.85	2253.01
10	Less: Interest capitalized		43.88	36.90	82.08	162.86				·
11	I&FC net of capitalization	1927.79	133.95	226.44	1365.97	1726.36	115.35	239.81	1897.85	2253.01

Depreciation:

- 5.29.1 Hon Commission may kindly note that the depreciation as per audited accounts Rs.1011.98 Cr has been worked out at the rates specified in Tariff Regulations, 2018. From this amount, claw back depreciation was determined at Rs.245.69 Cr and credited to Other Income under Note 29 of Annual accounts. Since depreciation is claimed as per Regulations after deducting applicable claw back, it is humbly requested that the income accounted under note 28 towards claw back as per accounts may not be considered in True up.
- 5.29.2 Taking guidance from the methodology adopted by the Hon'ble Commission for the computation of normative depreciation for 2017-18, normative depreciation for 2020-21 has been computed at Rs.478.27 Cr as detailed below:

	Table 5.24: Normative Depreciation for 2020-	21 (Rs Cr)			
	Particulars	SBU-G	SBU-T	SBU-D	KSEBL
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	7530.50	16817.38
2	Total asset addition approved As per order dt 25.06.2021 for 2017-18	71.42	388.82	699.45	1159.69
3= (1+2)	Approved GFA as on 31.03.2018	4729.74	5017.38	8229.95	17977.07
4	GFA addition claimed for depreciation as per submission dt 30.07.2021 (2018-19)	103.86	347.17	1202.5	1653.53
5	Asset addition for 2019-20 as per TU petition	116.27	384.17	1642.19	2142.63
6= (3+4+5)	GFA as on 31.03.2020 considered for depreciation	4949.87	5748.72	11074.64	21773.23
7	Assets >12 years old (GFA as on 1-4-2008)	3064.26	2774.43	2845.86	8684.55
8	Fully depreciated Assets (assets up to 1-4-1990)	258.2	101.72	309.49	669.41
9= (7-8)	Assets having life 12-30 yrs	2806.06	2672.71	2536.37	8015.14
10= (9*2.80%)	Value of land (Average 2.8% of GFA)	78.57	74.84	71.02	224.42
11	Grants and contributions (upto 1-4-2008)			2081.57	2081.57
12= (9-10-11)	Assets having life 12-30 yrs eligible for depreciation	2727.49	2597.87	383.78	5709.15
13= (12*1.42%)	Depreciation for Assets 12-30 years (@1.42%)	38.73	36.89	5.45	81.07
14= (6-7)	Assets < 12 years old (1-4-2008 to 31-3-2020)	1885.61	2974.29	8228.78	13088.68
15= (14*2.80%)	Value of land (Average 2.8% of GFA)	52.80	83.28	230.41	366.48
16	Grants and contributions (1-4-2008 to 31-3-2020)	116.91	418.53	5169.94	5705.38
17= (14-15-16)	Opening balance of Assets < 12 years old	1715.90	2472.48	2828.43	7016.81
18	Asset addition for 2020-21 as per this submission	30.76	292.38	1098.39	1421.53
19= (17+18)	Closing balance of Assets <12 years Old (1-4-2007 to 31-3-2020)	1746.66	2764.86	3926.82	8438.35
20= (17+19)/2	Average Value of Assets <12 Years old	1731.28	2618.67	3377.63	7727.58
21= (20*5.14%)	Depreciation for assets <12 years (@5.14%)	88.99	134.60	173.61	397.20
22= (13+21)	Total Depreciation for assets for 2020-21	127.72	171.49	179.06	478.27

5.30 Details of Consumer Contribution and grants as on 31.03.2021 as per accounts amounted to Rs.3577.15 Cr as detailed below:

Tab	Table-5.25: Details of consumer contribution and grants as on 31.03.2021 (Rs. Cr)								
No	Particulars	Amount	Amount						
1	Consumer contribution	2384.41							
2	Subsidies	164.45							
3	Grant	1399.21							
4	Local bodies etc	441.54							
5	De commissioning liability (IND AS)	26.26	4415.87						
6	Less: Clawed back								
7	2013-14	9.12							
8	2014-15	24.65							
9	2015-16	39.39							
10	2016-17	77.1							
11	2017-18	97.39							
12	2018-19	145.16							
13	2019-20	200.22	·						
14	2020-21	245.69	838.72						
15	Contribution and grants (Note 23) as per Accounts.		3577.15						

- 5.31 Hon'ble Commission may kindly note that decommissioning liability considered under this head does not involve cash flow. Therefore, actual receipt of Consumer Contribution and grants till 31.03.2021 amounted to Rs.4389.61 Cr (Rs.4415.87 Cr-Rs. 24.19 Cr). Additional contribution, grants etc received during the year amounts to Rs. 772.53 Cr. SBU wise break up of consumer contribution and grants as on 31.03.2020 as per accounts are furnished in **Appendix 5** hereto.
- 5.32 Gross Consumer Contribution and grants till 31.03.2020 as per accounts amounted to Rs.3048.25 Cr and after excluding decommissioning liability and claw back, actual receipt amounts to Rs.3617.09 Cr {3641.28-24.19)}. Details of actual receipt, adjustment, claw back and balance as per audited accounts are detailed below:

	Table-5.26: Details of consumer contribution and grants as on 31.03.2020 (Rs. Cr)								
No	Particulars	Amount	Amount						
1	Consumer contribution	1981.06							
2	Subsidies	164.45							
3	Grant	1148.44							
4	Local bodies etc	323.14							
5	De commissioning liability	24.19	3641.28						
6	Less: Clawed back								
7	2013-14	9.12							
8	2014-15	24.65							
9	2015-16	39.39							
10	2016-17	77.1							
11	2017-18	97.39							
12	2018-19	145.16							
13	2019-20	200.22	593.03						
14	Contribution and grants (Note 23) as per Accounts.		3048.25						

5.33 Hon'ble Commission may kindly note that actual receipt of Consumer Contribution and grants till 31.03.2020 as per accounts amounted to Rs.3617.09 Cr. Thus, additional receipt of contribution and grants during the year amounts to Rs.772.53 Cr (Rs. 4389.61 Cr- Rs.3617.09 Cr).

5.34 **Others Rs. 164.45 Cr:** The details of other expenses as per the audited accounts and item wise explanation are furnished below and detailed explanation of various items are provided there under.

	Table-5.27: Details of Other Expenses 2020-21 (Note 37 of Annual accounts) (Rs Cr)								
No	Particulars	SBU G	SBU T	SBU D	Total				
1	Research and Development Expenses	0.06	1	-	0.06				
2	Miscellaneous				0.00				
3	Miscellaneous Losses and write-offs	0.00	0.12	4.83	4.94				
4	Material cost variance	-0.00	1.05	-3.01	-1.96				
5	Loss on account of flood/ cyclone etc	-	0.01	0.11	0.12				
6	Rebate allowed for online payment consumers	-	-	8.69	8.69				
7	Rebate on fixed charges	-	-	72.00	72.00				
8	Discount to Consumers	-	-	3.69	3.69				
9	Bad and Doubtful Debts Written off / Provided for	-	-	76.98	76.98				
10	Cost Of Trading/Manufacturing Activity	0.01	-0.00	-0.08	-0.07				
11	Others Total (1 to 10)	0.07	1.17	163.21	164.45				

- 5.34.1 Miscellaneous losses and write-offs represent withdrawal of credits to revenue account. 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. Rebate on fixed charges denote rebate allowed to consumers due to Covid 19. Detailed explanation is furnished below for the kind consideration of the Hon'ble Commission:
- 5.34.2 KSEB Ltd, as per the direction of the State Government vide G.O. (RT) No.67 /2021/P.D. dated 01.06.2020, has allowed 25% rebate on fixed charge applicable to Industrial/Commercial consumers and Private Hospitals for the months of March, April and May-2020 and to defer the payment of balance fixed charge (75%) of these months, up to 15.12.2020, without levying interest during the deferred period.
- 5.34.3 Accordingly, rebates were allowed to these consumers during July-August, 2020. KSEBL Ltd had allowed Rs. 72 Cr (accounted under Note 37) towards 25% rebate on fixed charge of Industrial/ Commercial and Private Hospitals and deferred Rs. 229.86 Cr, being balance 75% of FC/DC up to 15.12.2020, without any interest. It is pertinent note that the Rebate allowed

by Central Generating Stations on fixed charge / transmission charge was only Rs. 54.90 Cr. during the first wave of Covid pandemic and the capacity charges deferred was 63.38 Cr (just for three months). Rebate received from CGS is disclosed under Note 28 A of the audited accounts.

- 5.34.4 Thus, it may kindly be seen that KSEBL had additionally incurred Rs.17.10 Cr (Rs. 72 Cr- Rs. 54.90 Cr) while allowing rebate as above. Hon'ble Commission, however, has allowed rebates for the period from 24.03.2020 to 31.05.2020 instead of from 01.03.2020 to 31.05.2020, as specified in the Government order.
- 5.34.5 Later on, Government vide G.O. (RT) No.14 /2021/P.D. dated 28.01.2021 has accorded sanction to allow an additional relief of 25% on fixed charge/demand charge applicable to cinema theatres for the months of March, April and May-2020 and to allow relief of 50% on fixed charge/demand charge applicable to cinema theatres for the months from June to December- 2020. It was also ordered to allow six equal monthly instalments to remit the balance dues after allowing reliefs as above. Accordingly, rebates were allowed to these consumers during January, 2021. Rebate to the tune of 3.28 Cr. was allowed among 484 Cinema theatres in the State during their closure period of 10 months ie from 03/2020 to 12/2020. Hon'ble Commission has approved the above said relief vide order dated 02.09.2021. Here in this case also allowed an additional relief of 25% on fixed charge/demand charge applicable to cinema theatres for the period from 24.03.2020 to 31.05.2020 instead of from 01.03.2020 to 31.05.2020.
- 5.34.6 It may kindly be noted that Tariff subsidy ordered by the Government towards rebate to the domestic consumers (billed from 20th April 2020 to 19th June 2020) amounted to Rs. 151.19 Cr has been booked under subsidy receivable from Government and netted off from the Electricity duty payable to Government by KSEBL.
- 5.34.7 It is respectfully submitted that the Government has issued above directions, in view of public interest, to KSEB Ltd to pass on the above relief smoothly, as per Article 55 of Article of Association of the Company. Further, Government of Kerala has issued direction u/s 108 of the Electricity Act, 2003 to the Hon'ble Commission, vide letter No. A1/179/2020/ P.D. dated 27.04.2021, to implement all the orders issued by the Govt. in respect of Covid relief allowed to various sectors and to take actions to allow pass through of the financial liability on receipt of the final figures.
- 5.34.8 Considering the direction of the State Govt., it is humbly requested before the Hon'ble Commission to allow pass through of entire financial liability on account of reliefs extended to various categories consumers.
- 5.34.9 In view of the above submission, Hon'ble Commission may kindly approve Rs. 72 Cr towards relief extended during 2020-21 and Rs. 54.90 Cr under rebate obtained from NTPC, PGCIL, NLC and NTCL (accounted under non-tariff income).

5.34.10 Hon'ble Commission may kindly true up Rs.164.45 Cr under other expenses as detailed below:

Table 5.28: Other expenses (Rs Cr)								
Item SBU G SBU T SBU D Total								
Other expenses	0.07	1.17	163.21	164.45				

5.35 **Exceptional items Rs.18.61 Cr:** 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 are furnished below, which may kindly be approved.

Table 5.29: Exceptional items (Rs Cr)								
Item SBU G SBU T SBU D Total								
Exceptional items	1.01	0.07	17.53	18.61				

5.36 **O&M Expenses:** Hon'ble Commission approved Rs.3265 Cr under this head on normative basis against which a sum of Rs.6007.61 Cr was actually incurred during the year 2020-21, exceeding approval by Rs.2742.61 Cr. as summarized below:

	Table 5.30: Details of O&M expenses 2020-21 (Rs Cr)											
			Appr	oval			KSEBL	Accounts				
No	Particulars	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total			
1	Employee cost					304.52	634.24	4701.10	5639.86			
2	Less: Capitalized					40.19	91.73	354.77	486.69			
3	Balance					264.33	542.51	4346.33	5153.17			
4	R&M expenses					22.45	31.62	206.51	260.58			
5	A&G expenses					44.25	116.18	434.92	595.35			
6	Less: Capitalized					0.32	0.04	1.12	1.48			
7	Balance					43.92	116.14	433.80	593.86			
8	Total O&M Expenses	153.37	452.88	2658.75	3265	330.70	690.27	4986.64	6007.61			

- 5.37 Hon'ble Commission may kindly note that the variation between amount approved and actual arose mainly towards actuarial liability (Rs. 2099.90 Cr), Pay revision provision over and above the sums provided during 2018-19 and 2019-20 (Rs.585 Cr) under employee cost, PF incentive (Rs.32.29 Cr), Section 3(1) duty (Rs.129.08 Cr) and other operative expenses (Rs.224.94 Cr), which were not factored in the base year expenses adopted for the determination of normative values. Component wise details of O&M expenses is briefly explained below:
- 5.37.1 **Employee cost:** It is respectfully submitted that gross employee cost (excluding actuarial liability) registered increase in 2020-21 primarily due to insufficient pay revision provision during 2018-19 and 2019-20. The table below reveals the yoy increase under employee cost

(from 2018-19 to 2020-21) in terms of gross employee cost. Detailed tabulation is furnished in **Appendix 6**.

	Table 5.31: Employee Cost for the period from 2018-19 to 2020-21 (Rs. Cr)										
Sl. No	Particulars	2018-19	2019-20	2020-21							
	Gross employee cost (before capitalization)										
1	-As per accounts	3354.63	3508.41	5658.96							
2	Less: Actuarial liability	498.37	435.64	2099.90							
3	Employee Cost for the year for TU	2856.26	3072.77	3559.06							
4	Increase over previous year		216.51	486.29							
5	YOY increase %		7.58	15.83							

5.37.2 **R&M expenses** R&M cost depends on the Gross Fixed Assets in use at the beginning of the financial year, age of the assets as well as inflation. SBU wise split up of R&M expenses as per accounts is furnished below:

Table 5.32: R&M expenses for 2020-21 (Rs Cr)									
R&M expenses	22.45	31.62	206.51	260.58					

- 5.37.3 As already submitted, expenses towards restoration of assets owing to natural calamities amounting to Rs.18.61 Cr has been incurred and disclosed under exceptional items. It may kindly be seen that KSEBL has been able to contain R&M expenses at optimum levels in spite of the ageing assets that are being maintained by KSEBL. Hon'ble Commission may kindly approve Rs. 18.61 Cr over and above the normative claim.
- 5.37.4 **A&G expenses** Hon'ble Commission may kindly note that A&G expenses as per accounts amounts to Rs.593.86 Cr. Detailed break up is available in Note 36 of the Annual Statement of Accounts. Expenses under this head contain predominantly, the following expenses:

	Table 5.33: Administrative & General Expenses 2020-21 (R	s Cr)			
1	Conveyance	66.58			
2	Other operative expenses	224.94			
3	Expenditure on Filament free Kerala				
4	Electricity Duty u/s 3(I), KED Act	129.08			
6	Power factor incentive to consumers	32.29			
8	Freight	13.44			
9	Rent, rates & taxes	13.71			
10	Printing, Stationery, Telephone etc	30.44			
11	Expenditure in connection with Covid 19	19.85			
12	All Other A&G expenses	31.83			
13	Gross A&G Expenses	595.35			
14	Less: Expenses Capitalized	1.49			
15	Net A&G Expenses	593.86			

5.37.5 Hon'ble Commission may kindly note that a sum of Rs.32.29 Cr has been disclosed under Power factor incentive as per audited accounts. In this regard, the following submission is made for the kind consideration of the Hon'ble Commission.

- 5.37.6 Power factor incentive and penalty were accounted in a single account based on the tariff category till 06/2017. After June 2017, the accounting for power factor incentive was accounted as debit to account head 76.196 (under A&G expenses group) and power factor penalty accounted as credit to account code 61.943 (under revenue from operation group-Misc. charges from consumers). But, during bill revision, posting of contra entries (to nullify the earlier entry) for incentive and penalty was erroneously done by accounting incentives as credit under penalty head (instead of crediting incentive) and bills with penalty were accounted as debit under power factor incentive head (instead of debiting power factor penalty). This has resulted in higher values under 2 account heads viz. Power factor incentive and Power factor penalty. It may kindly be noted that there will be no impact on Profit or loss of KSEBL, since the elimination of earlier entry got reflected in another head instead of the same head. The error happened only in respect of HT & EHT bills generated through Energize software. However, entries made for LT were not subject to the defect mentioned above since LT bills are generated and accounted by using a different software.
- 5.37.7 The impact of the above-mentioned anomaly during the year 2020-21, both power factor incentive and power factor penalty accounts were overstated by Rs.6.53 Cr. In view of the above submission, it is humbly requested before the Hon'ble Commission that the below mentioned actual amounts may be considered in the truing up proceedings for Power factor incentive and Power factor penalty.

Table 5.34 Details of PFI and PFP as per bills and accounts for the year 2020-21										
	As pe	r Bills	As per A	ccounts	Difference					
	PFP	PFI	PFP	PFI	PFP	PFI	Net diff			
Total	44.09	25.76	50.62	32.29	6.53	6.53		0		

- 5.37.8 Thus, Rs. 25.76 Cr and Rs.44.09 Cr may kindly be trued up under Power factor incentive and Power factor penalty respectively for the year 2020-21.
- 5.37.9 KSEBL respectfully submits that the Hon'ble Commission may permit exclusion of power factor incentive from A&G expenses and the same deducted from revenue from sale of power in this petition.
- 5.37.10 It may kindly be seen that an amount of Rs.33.19 Cr has been incurred for the filament free Kerala campaign in which LED lamps were supplied to consumers. An income of Rs. 48.43 Cr has been booked under Income from bulb, scrap, tender form etc (Note 28 A of audited accounts). Break up details are furnished in **Appendix 10.** It is humbly requested that the Hon'ble Commission may consider the cost of bulbs booked under A&G expenses as a reduction from sale proceeds of LED Bulbs while truing up.
- 5.37.11 KSEBL incurred an amount of Rs. 19.85 Cr towards expenses for combatting Covid 19 pandemic. Hon'ble Commission may kindly approve the same over and above O&M norms while truing up the accounts for 2020-21.

- 5.37.12 Expenses under this head are also susceptible to business and infrastructure growth. One of the major expense items booked under A&G expense is the section 3(1) duty payable by KSEB to the Government. The section 3(1) duty is a statutory levy. Hon'ble Commission has not been admitting section 3(1) duty as a revenue expenditure quoting the provisions in the "Kerala Electricity Duty Act- 1963" that "(3) The duty under this section on the sales of energy should be borne by the Licensee and shall not be passed on to the consumers". Accordingly, since the year 2003-04, Hon'ble Commission has not admitted duty as pass through in tariff. It is humbly submitted that KSEB had already taken up the matter with the Government to enable Section 3(1) duty as pass through in tariff and also filed a second appeal before the Hon'ble Supreme Court of India in the matter, which is pending disposal as of date.
- 5.37.13 Hon'ble Commission may kindly note that the variation between approval and actual were predominantly because of non-consideration of certain expenses for the determination of normative values.
- 5.37.14 Based on the Tariff Regulation, KSEBL is entitled to claim normative O&M expenses of Rs.3206.86 Cr for 2020-21 as explained in the respective chapters against Rs. 3265.00 Cr approved by the Hon'ble Commission, as summarized below.

	Table 5.35: Normative O&M expenses for 2020-21 (Rs. Cr)						
SI. No	Particulars SBU G SBU T SBU D Total						
1	True up claim as per Tariff Regulation	139.75	418.62	2648.49	3206.86		
2	Approved as per Order dated 08.07.2019	153.37	452.88	2658.75	3265		
3	Variance over approval	-13.62	-34.26	-10.26	-58.14		

5.37.15 Hon'ble Commission may kindly true up O&M expenses for the year at Rs.3206.86 Cr as detailed below:

	Table 5.36: Normative O&M expenses for 2020-21 (Rs. Cr)							
SI. No	SI. No Particulars SBU G SBU T SBU D Tot							
1	As per norms	138.81	416.69	2631.51	3187.01			
3	Expenditure in connection with Covid 19	0.94	1.93	16.98	19.85			
4	Total O&M expense	139.75	418.62	2648.49	3206.86			

Pay revision

5.38 Hon'ble Commission, in the Tariff Regulations, 2021, has stated that "Many stakeholders and Associations have raised their serious concern with regard to the number of employees actually available in KSEB Ltd vis-à-vis those numbers considered by the Commission while truing up of accounts of the previous years. During February 2021, KSEB Ltd has implemented the Pay Revision with effect from July/August 2018 for its Officers and staff. As per Hon'ble APTEL decision in OP 1/2013 and 19/2013 in the Order dated 10.11.2014, the effect of pay revision have to be allowed as part of employee cost. The final norms of KSEB

Ltd can be arrived at only after the truing up of the figures from the financial year 2018-19 is over and after the sub judice matter is resolved. The norms will be reworked accordingly."

5.38.1 It was also mentioned that the norms are derived provisionally and truing up petitions for 2019-20 and 2020-21 are yet to be filed by KSEBL. KSEBL provided Rs.176 Cr and Rs.250 Cr respectively during 2018-19 and 2019-20 towards pay revision. During the finalization of accounts for 2020-21, the impact of pay revision was assessed and a sum of Rs. 585 Cr has been booked under employee cost as detailed below.

Table 5.37: Pay revision expenses for 2020-21 (Rs Cr)						
Item	SBU G	SBU T	SBU D	Total		
Pay revision expenses	27.64	56.93	500.45	585.00		

5.38.2 It is respectfully submitted that the actual pay revision commitment from July/ August 2018 to February 2021 works out to Rs. 947.99 Cr as detailed below:

Table 5.38: Pay revision commitment from 2018-19 to 2020-21 (Rs Cr)								
Year Work men PTC Officers Total								
2018-19	164.44	0.66	60.61	225.71				
2019-20	263.48	1.02	82.16	346.66				
2020-21	290.18	1.06	84.38	375.62				
Total	718.09	2.75	227.15	947.99				

5.38.3 After excluding the provisions created for 2018-19 and 2019-20 aggregating to Rs. 426 Cr, remaining sum of Rs.521.99 Cr may kindly be approved in the truing up for 2020-21 over and above normative entitlement of O&M expenses. ARU wise details are furnished below:

Table 5.39: Pay revision expenses for 2020-21 (Rs Cr)						
Item SBU G SBU T SBU D						
Pay revision expenses	24.66	50.80	446.53	521.99		

5.39 **Return on Equity:** Return on equity is claimed @14% on the Government equity in KSEBL amounting (Rs.3499.05 Cr) to Rs.489.86 Cr. The function wise break up of equity is made on the basis of equity allocation among SBUs in the Trifurcated Balance sheet as detailed below:

Table5.40: Allocation of Equity and RoE (Rs. Cr)							
Particulars SBU G SBU T SBU D Total							
Equity Capital	831.27	857.05	1810.73	3499.05			
RoE @14% on above	116.38	119.99	253.50	489.87			

5.40 **Gains on achievement of T&D loss reduction target**: As per Tariff Regulations, 2018, KSEBL is entitled to retain part of the gains on account of achieving loss reduction in excess of approved target. Share of KSEBL amounts to Rs.101.17 Cr as detailed in chapter 4. Hon'ble Commission may kindly approve the same as tabulated below:

Table- 5.41 Gain attributable to KSEBL on over achievement of T&D loss reduction target.						
Particulars	Quantum	Unit				
Energy sales by KSEBL	22033.84	MU				
Energy input needed at 12.02% loss	25044.15	MU				
Energy input needed for 2020-21	24696.08	MU				
Energy savings	348.07	MU				
Power Purchase cost saved due to over achievement of loss	151.76	Cr.				
2/3 of savings	101.17	Cr.				

5.41 Non- Tariff Income and Other income: Hon'ble Commission approved Rs.650.33 Cr under Non-Tariff income & Other income for the year 2020-21. Actual income earned under this count as per accounts amounted to Rs.1363.20 Cr. It may kindly note that the disclosure in accounts and truing up petition with regard to non-tariff income differ as the revenue from operations are depicted in accounts against revenue from tariff in truing up petition. Therefore, certain components of income disclosed under revenue from operations (Note 28) in accounts amounting to Rs.247.34 Cr are classified under non-tariff income in this petition. Out of Rs.1363.20 Cr, remaining Rs.367.10 Cr is disclosed under Other operating income (Note 28 A) and Rs. 748.76 Cr under other income (Note 29) of audited accounts as detailed below.

Table- 5.42: Non-Tariff Income & Other income as per account Description	Rs. Cr	Rs. Cr
Note 28-Revenue from operations		
Charges from interstate trading of energy (RE Charges)	45.98	
Meter rent/ Service line rental	99.47	
Recovery of theft/malpractices	10.12	
Wheeling charges recovery	2.89	
Miscellaneous charges from consumers	88.88	247.34
Note 28 A Other Operating income		
Rebate received	150.52	
Interest on adv to suppliers / contractors	0.04	
Sale of bulb, scrap, tender form etc	119.45	
Miscellaneous receipts	97.09	367.10
Note 29 Other Income		
Interest on		
belated payment of charges	147.51	
Staff loans and advances	0.06	
Others	0.01	
Banks	8.51	
Clawback of grant	245.69	
Reversal of provision on doubtful debts	328.88	
Other receipts	18.10	748.76
Income as per audited accounts to be classified as non-Tariff income		1363.20

5.42 SBU wise break up is furnished in **Appendix 7**. Miscellaneous charges from consumers (Rs. 88.88 Cr) are detailed in **Appendix 8**. Miscellaneous receipts (Rs.97.06 Cr) are detailed in **Appendix 9**. Income from sale of bulb, scrap/tender form amounting to Rs.119.45 Cr as detailed in **Appendix 10**.

- 5.43 KSEBL had submitted in truing up petition for 2018-19 that KWA dues till 30.09.2018 were taken over by the Government of Kerala, (to be settled with interest in 4 annual instalments commencing from 2019-20 onwards) and interest income on this count may be recognized on actual receipt basis. It was prayed that the revenue recognized in books during 2018-19 may not be trued up. It is respectfully submitted that GoK has released 2 instalments due for 2019-20 and 2020-21 during the year 2020-21. In view of the submission made in TU 2018-19, Hon'ble Commission may kindly true up an amount of Rs.131.85 Cr towards interest income actually realized in 2020-21.
- 5.44 Income from sale of scrap/tender form amounting to Rs.119.45 Cr includes Rs.48.43 Cr towards sale proceeds of LED bulbs. Further, the cost of LED bulbs amounting to Rs. 33.19 Cr has been accounted under A&G expenses. Hon'ble Commission may kindly note that while approving Non-Tariff Income for earlier years, Hon Commission was pleased to exclude the LED purchase value from NTI while truing up. Similar adjustment was prayed for 2018-19 and 2019-20 true up also.
- 5.45 'Filament free Kerala' was one of the projects envisaged in 'Urja Kerala Mission' announced by the Government of Kerala. The project envisages replacement of entire incandescent lamps & CFLs of domestic consumers in the state by energy efficient LED bulbs. The project envisages distribution of 7 crore LED Bulbs and 3 crore 18W led Tubes. Under the project, branded 9W LED bulbs were made available to the domestic consumers at Rs.65 per bulb and the consumers were given liberty to pay in lump sum or in interest free instalments. In the first phase, 13.27 lakh consumers had registered for 1.07 crore bulbs and on 07.01.2021, the project was inaugurated at state level by the Hon'ble Chief Minister.
- 5.46 Details of income to be trued up on account of LED transaction are furnished below:

Table- 5.43: Details of income to be trued up in 2020-21			
Particulars	Rs Cr		
Sale proceeds of LED bulbs	48.43		
Cost of LED bulbs	33.19		
Income sought for trued up	15.24		

- 5.47 Hon'ble Commission may kindly true up Rs.15.24 Cr in 2020-21 after excluding purchase value booked under A&G expenses.
- 5.48 Rebate received Rs. 150.52 Cr is inclusive of the Covid rebate allowed by CGS amounting to Rs. 54.90 Cr.
- 5.49 It is respectfully submitted that the reversal of provision on doubtful debts amounting to Rs.328.88 Cr may not be considered for true up since such provisions are not approved by the Hon'ble Commission in the year of creation. It is the consistent stand of the Hon'ble

Commission that expenses can be allowed only upon actual write off and subject to prudence check. It is humbly submitted that the provision created in the books in earlier years in line with the accounting standards were not approved in the respective years.

- 5.50 As per the direction of the Government of Kerala, OTS scheme was granted to M/s Travancore Cochin Chemicals Ltd (M/s TCCL) to settle the arrears from May 1999 to October 2016 with Interest @ 6% aggregating to Rs. 174.14 Cr in lieu of 20 Acres of land in Eloor village, owned by M/s TCCL and under lease to M/s BSES Kerala Power Ltd. The fair value of land was yet to be published. As per IND AS 16, if the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up. In the settlement with M/s TCCL, KSEBL had given up its receivable from sale of power to the extent of Rs.174.61 Cr against the land transferred to KSEBL. In view of the above, Board of Directors of KSEBL resolved to adjust the current charge arrears of M/s TCCL amounting to Rs. 174.61 Cr against 20 Acres transferred to KSEBL by M/s TCCL as per IND AS 16. Land value has been booked under SBU T to the extent of Rs.174.61 Cr. Interest amounting to Rs. 48.32 Cr on account of arrear settlement of M/s Travancore Cochin Chemicals Ltd Interest on belated payment of charges (Note No. 29 of audited accounts).
- 5.51 In view of the above submission, Hon'ble Commission may kindly approve Rs.880.76 Cr against Rs.650.33 Cr approved as per order dated 08.07.2019 as detailed below:

	Table 5.44: Non-tariff income for 2020-21 (Rs. Cr)							
SI. No	Particulars	SBU G	SBU T	SBU D	Total			
1	Non-tariff Income as per Appendix 7	14.78	81.81	1266.60	1363.20			
2	Less: Items sought to be excluded in TU							
i	Claw back of grant-Considered separately	5.44	34.42	205.83	245.69			
ii	Cost of LED Bulbs booked under Power purchase			33.19	33.19			
iii	Accounting error under power factor penalty			6.53	6.53			
iv	Reversal of provision on doubtful debts			328.88	328.88			
٧	Total exclusions (I to iv)	5.44	34.42	574.43	614.29			
3	Add: Items sought to be considered in True up							
i	Interest on KWA arrears taken over by GoK			131.85	131.85			
4	NT Income sought for TU 2019-20 (1-3+5)	9.34	47.39	824.02	880.76			

5.52 **Revenue from Tariff:** Annual Statement of Accounts discloses Revenue from operation, which is inclusive of certain items that are considered under non-tariff income in the Regulatory accounts. Segregation of revenue from tariff and NTI for regulatory purpose is furnished below:

	Table 5.45: Revenue from tariff for 2020-21 (Rs. Cr)									
SI No		Particulars	Particulars SBU G SBU T SBU D Total							
		Revenue from operation-As per Accounts (Note No. 28) (A) & (B)			14420.63	14420.63				
	2	Less: Items considered under non-tariff income								
i		Misc receipts/ charges from interstate trading of energy			45.98	45.98				
ii		Meter rent			99.47	99.47				
iii		Recovery of theft/malpractices			10.12	10.12				

iv	Wheeling charge recoveries			2.89	2.89
V	Miscellaneous charges from consumers			88.88	88.88
vi	Rebate received			150.52	150.52
vii	Interest Advance to suppliers & contractors			0.04	0.04
viii	Income from sale of bulb, scrap, Tender form etc			119.45	119.45
ix	Miscellaneous receipts			97.09	97.09
3	Revenue from operation as per accounts considered under NTI- (I to ix)	0	0	614.44	614.44
4	Revenue from Tariff and external sale (C) = (1-3)			13806.19	13806.19
5	Less: Power factor incentive accounted under A&G expenses			32.29	32.29
6	Revenue from Tariff (excluding PFI) as per accounts (4-5)			13773.90	13773.90
7	Add: Accounting error under PFI			6.53	6.53
8= (6+7)	Revenue for truing up purpose			13780.43	13780.43
	Break up				
8	Revenue from sale within the State including fuel surcharge			13701.56	13701.56
9	Revenue from external sale			104.63	104.63
10	Less: Power factor incentive (actual)			25.76	25.76
11	Total (8+9-10)	0	0	13780.43	13780.43

5.53 Reconciliation of total income as per audited accounts and income considered in Truing up petition is furnished below:

	Tal	ole 5.46: Reconciliation of Income as per Accounts and True up for	2020-21 (Rs. 0	Cr)
SI No		Particulars	Amount	Amount
		AS PER AUDITED ACCOUNTS		
	1	Revenue from Operation as per Accounts (Note 28)		14420.63
	2	Other Income as per Accounts (Note 29)		748.76
3= (1+2)		Total income as per accounts		15169.39
		AS PER TU PETITION		
	4	Revenue from tariff & external sale (Table 5.46)		13780.43
	5	Non-Tariff Income in TU petition (Table 5.45)		880.76
6= (4+5)		Total revenue for TU		14661.19
7= (3-6)		Difference		508.20
		Break up		
а		Power factor Incentive	32.29	
b		Claw back of Grant	245.69	
С		LED purchase	33.19	
d		Reversal of provision on doubtful debts	328.88	640.05
d		Less: Interest on KWA arrears taken over by GoK		131.85
				508.20

5.54 Variation between audited accounts and truing up petition: Loss as per audited accounts for 2020-21 has been Rs.1822.35 Cr (excluding RoE). Revenue gap as per accounts (inclusive of RoE Rs.489.87 Cr) amounts to Rs.2312.22 Cr. The revenue gap sought to be trued up in this petition is Rs.708.53 Cr. The following table summarizes the variation between loss as per audited accounts and TU petition. Detailed information is furnished in Appendix 11.

	Table 5.47: Comparison of Accounts and TU	Petition (Rs	Cr)	
Sl.No	Particulars	As per Accounts	TU Petition	Difference
1	Interest & Finance charges	1726.36	2253.01	-526.65
2	Additional contribution to Master Trust	0.00	200.00	-200.00
3	Depreciation	1011.98	478.27	533.71
4	O&M Expenses	6007.61	3206.86	2800.75
	Pay revision provision	6007.61	521.99	-521.99
5	Power purchase & PGCIL charges	8057.93	7961.19	96.74
6	RoE	0.00	489.87	-489.87
7	Others	164.45	164.45	0.00
8	Generation of power	4.80	4.80	0.00
9	Exceptional items	18.61	18.61	0.00
10	Retaining gains out of T&D loss reduction beyond target	0.00	101.17	-101.17
13	Amortization and interest		2.87	-2.87
12	ARR (1 to 11)	16991.74	15403.09	1591.52
13	Revenue from tariff	14420.63	13780.43	640.20
14	Non-tariff income	748.76	880.76	-132.00
15	ERC	15169.39	14661.19	508.20
16	Revenue (gap)/Surplus	-1822.35	-741.90	-1080.45

- 5.55 Detailed explanation with regard to variation under power purchase, revenue from tariff and claim on T&D loss reduction are furnished in **chapter 4** of this petition.
- 5.56 **Comparison of approval and truing up sought:** The following table summarizes the variation between approval granted by the Hon'ble Commission as per order dated 08.07.2019 and truing up sought for the year 2020-21. Detailed information is furnished in **Appendix 12**.

	Table 5.48: Comparison of Approval and TU P	etition (Rs C	Cr)	
Sl.No	Particulars	As per MYT order	TU Petition	Difference
1	Fuel charges for generation	0	4.80	-4.80
2	POP & Interstate transmission	8800.94	7961.19	839.75
3	Interest & Finance charges	1927.79	2253.01	-325.22
4	Depreciation	518.80	478.27	40.53
5	O&M Expenses	3265.00	3206.86	58.14
6	Other expenses	0	164.45	-164.45
7	Retaining gains out of T&D loss reduction beyond target	0	101.17	-101.17
8	Interest on additional bond to Trust	200	200	0.00
9	RoE	489.87	489.87	0.00
10	Amortization of past gap	850		850.00
11	Amortization and interest		2.87	-2.87
12	Exceptional items		18.61	-18.61
13	Provision for pay revision		521.99	-521.99
14	ARR (1 to 11)	16052.4	15403.09	649.31
15	Revenue from tariff	14457.32	13780.43	676.89
16	Non-tariff income	650.33	880.76	-230.43
17	ERC	15107.65	14661.19	446.46
18	Revenue (gap)/Surplus	-944.75	-741.90	-202.85

5.57 The Next chapter summarises the expenses and revenues sought for true-up for the year and determines the Net Revenue Gap for the year.

APPENDICES

	Appendix 1: Details of capital liabilities (2020-21) (Rs Cr)											
SL NO	NAME OF THE FINANCIAL INSTITUTION	Net Loan - Opening	(IND Adj) 2019-20	Gross loan- Opening – 01/04/2020	Add: Drawal(s) during the Year	Less: Repayment (s) of Loans during the year	Gross loan – Closing – 31/03/2021	CFL	Net loan – Closing – 31/03/2021	Rate of Interest on Loan on annual basis	Interest on loan	
	A) SECURED LOANS											
1	Loan from REC-Distriburion - 23 Circle Scheme	939.70	124.17	1063.87	0.00	134.52	929.35	124.17	805.18	9.67-10.16%	101.90	
2	Loan from REC- Distriburion - Meter Scheme	13.69	14.94	28.63	0.00	16.18	12.45	12.45	0.00	9.92	2.25	
3	Loan from REC-Thottiyar Gene. Scheme	71.45	10.12	81.58	0.00	81.58	0.00	0.00	0.00	11.29-12.03%	8.88	
4	Loan from REC - Peringalkuthu. Scheme	72.95	0.00	72.95	8.92	0.00	81.87	0.00	81.87	10.06-10.16%	8.06	
5	Loan from REC – Bhoothathankettu Scheme	114.70	0.00	114.70	0.00	0.00	114.70	0.00	114.70	10.16	11.65	
6	Loan from R E C - RGGVY	10.59	1.96	12.55	0.00	1.96	10.59	1.96	8.63	10.5-11.75%	1.30	
7	Loan from SOUTH INDIAN BANK-Barapole SHEP	68.99	6.00	74.99	0.00	6.00	68.99	7.20	61.79	9.75	7.07	
8	Loan from REC R-APDRP PART-B	437.97	65.16	503.13	0.00	70.60	432.54	65.16	367.37	9.92-10.16%	47.20	
9	Loan from REC for the DDG Scheme	0.14	0.00	0.14	0.00	0.14	0.00	0.00	0.00	-	0.00	
10	Loan from RIDF of NABARD Banasurasagar SPVP	0.45	0.00	0.45	0.00	0.00	0.45	0.00	0.45	6.25	0.03	
11	Loan from RIDF of NABARD Upper Kallar SHEP	3.61	0.00	3.61	0.00	0.00	3.61	0.00	3.61	6.25	0.23	
12	Loan from PFC R-APDRP	225.52	0.00	225.52	0.00	0.00	225.52	0.00	225.52	9	40.88	
13	Loan from PFC R-APDRP Part B	188.39	46.50	234.88	0.00	13.26	221.63	0.00	221.63	9	7.76	
14	Loan from PFC GEL Kakkayam	17.83	1.37	19.21	0.00	1.37	17.84	1.37	16.47	10-10.25%	3.02	
15	Loan from PFC GEL Perumthenaruvi	32.05	2.56	34.61	0.00	2.57	32.04	2.56	29.48	10.25	2.21	
16	Loan from REC-TRAN-Group I	77.46	7.51	84.97	0.00	9.83	75.14	9.07	66.07	9.92-10.66%	8.45	
	Loan from REC-TRAN.Kattakkada -Pothencode											
17	Scheme	72.85	14.33	87.19	0.00	15.53	71.66	14.33	57.33	10.09-11.39%	9.32	
18	Loan from SBI	823.28	95.04	918.32	500.00	111.72	1306.60	145.08	1161.52	7.95	89.52	
19	Special Loan Assistance from PFC	1149.25	91.94	1241.19	14.56	106.50	1149.25	91.94	1057.31	9.08	139.71	
20	Special Loan Assistance from REC	1656.95	149.50	1806.45	21.20	183.15	1644.49	149.50	1494.99	9.08-10.65	183.92	
21	Kerala Financial Corporation	0.00	0.00	0.00	500.00	4.39	495.61	52.63	442.98	9	22.41	
22	Medium Term Loan Kerala Financial Corporation	0.00	0.00	0.00	500.00	10.00	490.00	120.00	370.00	8	3.33	
	TOTAL	5977.83	631.11	6608.94	1544.68	769.29	7384.33	797.43	6586.90		699.10	
	B) Unsecured Loan											
1	Loans - Short term loan from Bank of Baroda	400.00	0.00	400.00	800.00	800.00	400.00	0.00	400.00	7.85	31.58	
	Total	400.00	-	400.00	800.00		400.00		400.00		31.58	
	SEC+UNSEC	6,377.83	631.11	7,008.94	2,344.82	1,569.29	7,784.47	797.43	6,987.04	9.88	730.69	

		Арре	endix 1A: Deta	ails of capital lia	bilities (2020-2	1)-SBU G (Rs Cr)					
SL NO	NAME OF THE FINANCIAL INSTITUTION	Net Loan - Opening	(IND Adj) 2019-20	Gross loan- Opening – 01/04/2020	Add: Drawal(s) during the Year	Less: Repayment (s) of Loans during the year	Gross loan – Closing – 31/03/2021	CFL	Net loan – Closing – 31/03/2021	Rate of Interest on Loan on annual basis	Interest on loan
Α	SECURED LOANS TERM LOANS										
1	Loan from REC-Thottiyar Gene. Scheme	71.45	10.12	81.58	0.00	81.58	0.00	0.00	0.00	11.29- 12.03%	8.88
2	Special Loan Assistance from REC	331.51	29.91	361.42	0.00	51.70	309.72	28.16	281.57	9.08- 10.65%	34.64
3	Loan from REC - Peringalkuthu. Scheme	72.95	0.00	72.95	8.92	0.00	81.87	0.00	81.87	10.06- 10.16%	8.06
4	Loan from REC – Bhoothathankettu Scheme	114.70	0.00	114.70	0.00	0.00	114.70	0.00	114.70	10.16%	11.65
5	Loan from SOUTH INDIAN BANK-Barapole SHEP	68.99	6.00	74.99	0.00	6.00	68.99	7.20	61.79	9.75%	7.07
6	Loan from REC for the DDG Scheme	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.14	11.0%	0.02
7	Loan from RIDF of NABARD Banasurasagar SPVP	0.45	0.00	0.45	0.00	0.00	0.45	0.00	0.45	6.25%	0.03
8	Loan from RIDF of NABARD Upper Kallar SHEP	3.61	0.00	3.61	0.00	0.00	3.61	0.00	3.61	6.25%	0.23
9	Loan from SBI	164.72	19.02	183.73	83.39	21.04	246.08	27.32	218.76	7.95%	16.86
10	Special Loan Assistance from PFC	229.93	18.39	248.33	0.00	31.88	216.45	17.32	199.13	9.08%	26.31
11	Loan from PFC GEL Kakkayam	17.83	1.37	19.21	0.00	1.37	17.84	1.37	16.47	10- 10.25%	3.02
12	Loan from PFC GEL Perumthenaruvi	32.05	2.56	34.61	0.00	2.57	32.04	2.56	29.48	10.25%	2.21
13	Kerala Financial Corporation				94.17	0.83	93.34	9.91	83.43	9.0%	4.22
14	Medium Term Loan Kerala Financial Corporation				94.17	1.88	92.29	22.60	69.69	8.0%	0.63
	SUB-TOTAL	1108.20	87.38	1195.58	280.79	198.85	1277.53	116.44	1161.09		123.82
В	UNSECURED LOANS TERM LOANS										
	From Banks										
1.00	Loans - Short term loan from Bank of Baroda	80.03		80.03	145.98	150.67	75.34	0.00	75.34	7.85%	5.95
	SUB-TOTAL	80.03	0.00	80.03	145.98	150.67	75.34	0.00	75.34		5.95
	TOTAL	1188.23	87.38	1275.61	426.77	349.52	1352.86	116.44	1236.42	9.87	129.77

		Арр	oendix 1B: D	etails of capita	al liabilities (20	020-21) SBU T (Rs Cr)				
SL NO	NAME OF THE FINANCIAL INSTITUTION	Net Loan -Opening	(IND Adj) 2019-20	Gross loan- Opening – 01/04/2020	Add: Drawal(s) during the Year	Less: Repayment (s) of Loans during the year	Gross Ioan - Closing - 31/03/2021	CFL	Net loan – Closing – 31/03/2021	Rate of Interest on Loan on annual basis	Interest on loan
Α	SECURED LOANS TERM LOANS										
1	Loan from REC-TRAN-Group I	77.46	7.51	84.97		9.83	75.14	9.07	66.07	9.92- 10.66%	8.45
2	Loan from REC-TRAN.Kattakkada - Pothencode Scheme	72.85	14.33	87.19		15.53	71.66	14.33	57.33	10.09- 11.39%	9.32
3	Loan from SBI	248.49	28.69	277.18	165.68	34.88	407.97	45.30	362.67	7.95%	27.95
4	Special Loan Assistance from PFC	346.88	27.75	374.63	12.92	28.71	358.84	28.71	330.13	9.08%	43.62
5	Special Loan Assistance from REC	500.13	45.12	545.25	18.80	50.57	513.48	46.68	466.80	9.08- 10.65%	57.43
6	Kerala Financial Corporation			0.00	156.12	1.37	154.75	16.43	138.32	9%	7.00
7	Medium Term Loan Kerala Financial Corporation			0.00	156.12	3.12	153.00	37.47	115.53	8%	1.04
	SUB-TOTAL	1245.82	123.40	1369.22	509.63	144.01	1734.84	197.99	1536.85		154.81
В	UNSECURED LOANS TERM LOANS										
1	Loans - Short term loan from Bank of Baroda	120.73		120.73	253.96	249.79	124.90	0.00	124.90	7.85	9.86
	SUB-TOTAL	120.73	0.00	120.73	253.96	249.79	124.90	0.00	124.90		9.86
	TOTAL	1366.55	123.40	1489.95	763.59	393.80	1859.74	197.99	1661.74	9.83	164.67

			Appendix 1C: D	etails of capita	l liabilities (2	2020-21) SBU D (R	s Cr)				
SL NO	NAME OF THE FINANCIAL INSTITUTION	Gross Loan -Opening	Cumulative repayments of Loans upto previous year (IND Adj)2019-20	Net loan- Opening – 01/04/2020	Add: Drawal(s) during the Year	Less: Repayment (s) of Loans during the year	Net loan – Closing – 31/03/2021	CFL	Net loan – Closing – 31/03/2021	Rate of Interest on Loan on annual basis	Interest on loan
Α	SECURED LOANS TERM LOANS										
1	Loan from REC for the DDG Scheme	0.14	0.00	0.14	0.00	0.14	0.00	0.00	0.00	-	0.00
2	Loan from R E C - RGGVY	10.59	1.96	12.55	0.00	1.96	10.59	1.96	8.63	10.5- 11.75%	1.30
3	Loan from REC- Distriburion - Meter Scheme	13.69	14.94	28.63	0.00	16.18	12.45	12.45	0.00	9.92%	2.25
4	Loan from PFC R-APDRP	225.52	0.00	225.52	0.00	0.00	225.52	0.00	225.52	9.00%	40.88
5	Loan from PFC R-APDRP Part B	188.39	46.50	234.88	0.00	13.26	221.63	0.00	221.63	9.00%	7.76
6	Loan from SBI	410.07	47.34	457.41	250.93	55.80	652.54	72.46	580.09	7.95%	44.71
7	Loan from REC R-APDRP PART-B	437.97	65.16	503.13	0.00	70.60	432.54	65.16	367.37	9.92- 10.16%	47.20
8	Special Loan Assistance from PFC	572.43	45.79	618.22	1.65	45.92	573.96	45.92	528.04	9.08%	69.77
9	Special Loan Assistance from REC	825.31	74.46	899.78	2.40	80.88	821.29	74.66	746.63	9.08- 10.65%	91.85
10	Loan from REC-Distriburion - 23 Circle Scheme	939.70	124.17	1063.87	0.00	134.52	929.35	124.17	805.18	9.67- 10.16%	101.90
11	Kerala Financial Corporation				249.71	2.19	247.52	26.29	221.23	9.00%	11.19
12	Medium Term Loan Kerala Financial Corporation				249.71	4.99	244.72	59.93	184.79	8.00%	1.66
	SUB-TOTAL	3623.81	420.33	4044.14	754.40	426.44	4372.10	483.00	3889.10		420.49
В	UNSECURED LOANS TERM LOANS										
	From Banks										
1	Loans - Short term loan from Bank of Baroda	199.24		199.24	400.07	399.54	199.77	0.00	199.77	7.85%	15.77
	SUB-TOTAL	199.24	0.00	199.24	400.07	399.54	199.77	0.00	199.77		15.77
	TOTAL	3823.05	420.33	4243.38	1154.46	825.97	4571.87	483.00	4088.87	9.90	436.26

		Арр	endix-2: Det	ails of the sh	ort-term loa	ns availed for	r meeting cap	oital liabilitie	s (Rs Cr)			
No	Short term loans	Balance as at 31.03.13	Balance as at 31.03.14	Balance as at 31.03.15	Balance as at 31.03.16	Balance as at 31.03.17	Received in 2017- 18	Repaid in 2017-18	Balance as at 31.03.18	Balance as at 31.03.19	Balance as at 31.03.20	Balance as at 31.03.21
1	State Bank Of India	300.00	300.00	500.00	750.00	500.00	1000.00	750.00	750.00			
2	Vijaya Bank	199.97	200.00	200.00	200.00	200.00	400.00	600.00		400.00		
3	Bank of India		199.98	350.00	450.00	387.50	1362.50	1550.07	199.93			
4	South Indian Bank	350.00	400.00	100.00	100.00	200.00	300.00	500.00				
5	Syndicate Bank		0.00	100.00	100.00	0.00						
6	Dhanalekshmi Bank		100.00									
7	Canara Bank						500.00	500.00				
8	REC - STL	150.00					500.00	0.00	500.00			
9	PFC - STL - 1	250.00										
10	PFC - STL - 2	250.00										
11	KSPIFC - STL	26.00	26.00									
12	Tamilnad Mercantile Bank			100.00								
13	Indian Overseas Bank		300.00	650.00								
14	Union Bank of India						401.47	401.47				
15	Andhra Bank				300.00	600.00	300.00	900.00				
16	Bank of Baroda	_									400.00	400.00
	Total	1525.97	1525.98	2000.00	1900.00	1887.50	4763.97	5201.54	1449.93	400.00	400.00	400.00

						Appendi	x 3- Details	of short-to	erm loan Int	erest fron	n 2012-13 to	2020-21	•						-
No	Bank	201	2-13	20:	13-14	20:	14-15	20	15-16	20:	16-17	20	2017-18 2018-19		8-19	201	19-20	202	20-21
		Rate (%)	Amount (Rs.Cr)	Rate (%)	Amount (Rs.Cr)	Rate (%)	Amou nt (Rs.Cr)	Rate (%)	Amoun t (Rs.Cr)	Rate (%)	Amo unt (Rs.Cr								
1	SBI	10.40	30.76	10.15	30.96	10.15	44.03			9.05	69.45	8.00	56.69	8.42	39.08				
2	SBT	10.75	10.00					9.95	43.76										
3	Canara Bank	10.75	1.12	10.75	3.61			9.65	94.63										
4	Federal Bank	10.75	21.47					9.63	41.70										
5	Vijaya Bank	10.65	20.66	10.25	20.01	10.25	20.13	9.65	26.56	8.65	18.85	8.15	14.50	8.70	24.73	8.70	23.37		
6	South Indian Bank	11.00	26.44	10.50	30.12	10.50	19.73			9.00	17.92	8.25	13.46						
7	REC STL	13.00	4.63	13.00	20.61							8.20	5.05	8.20	11.91				
8	PFC STL	12.50	11.16	12.50	42.52														
9	PFC STL	12.75		12.75															
10	KSPIFC STL	11.50	1.33	11.50	2.99	11.50	1.16												
11	Bank of India			10.50	9.07	10.50	43.07			8.75	44.49	8.15	25.02	8.15	0.25				
12	IOB			10.25	2.16	10.25	48.54												
13	Dhanalekshmi Bank			11.50	0.82	11.50	4.09												
14	Syndicate Bank					10.25	10.09			9.70	2.39								
15	ТМВ					10.75	5.60	10.40	0.17										
16	UBI							9.65	19.18										
17	Andhra Bank									8.85	38.97	8.85	19.05						
18	KGB							9.65	3.43										
19	Bank of Baroda															8.55	8.45	7.85	31.58
	Total		127.57		162.87		196.44		229.43		38.97		133.77		75.97		31.82		31.58

	Appendix 4: PROJECT WISE ANALYSIS OF CAPITAL EXP	ENDITURE FOR THE	YEAR ENDED 31/0	3/2020 (Rs. Cr)	
Project Code	Brief Description of Project	Cost as on 01/04/2020	Cost Incurred during the year	Capitalised during the year	Total cost upto the end of 31/03/2021
Α	GENERATION				
14.02	Idamalayar H E Project	0.03	0.55	0.01	0.56
14.03	Solar Power Project.	7.95	0.32	0.03	8.24
14.07	Kakkad Scheme	-	0.14	0.14	-
14.08	LNG based Thermal power scheme	2.78	-	-	2.78
14.09	Renovation of Sengulam Pump House	17.76	6.70	24.46	-
14.11	Kallada Low Head Scheme	0.02	0.06	0.06	0.02
14.12	Bhoothathankettu Small H.E Scheme	201.83	16.44	0.04	218.23
14.14	Mananthavady Multi Purpose Scheme	2.69	-	-	2.69
14.15	Olikkal Small H.E Scheme	4.17	0.56	-	4.74
14.16	Lower Periyar Tunnel Works - Other than W B Aided Works	_	1.71	1.71	-
14.19	Uppen sengulam Hp	7.64	6.45	5.68	8.41
14.2	Western Kallar SHP	0.04	0.05	-	0.09
14.21	Malampuzha Power Gen. Scheme	_	0.09	0.09	-
14.24	Peppara Low Head Scheme	-	0.02	0.02	-
14.25	RMU SHOLAYAR	78.98	13.64	4.11	88.51
14.27	Chimoney Small H E Scheme	-	0.04	0.04	-
14.28	Poringalkuthu Left Bank Diversion Scheme	_	0.85	0.85	-
14.29	Kuttiar Diversion Scheme	0.11	-	-	0.11
14.3	Wind Generator, Kottamala, Palakkad	-	0.05	0.05	-
14.32	Poringalkuthu Left Bank H E Project Extension Scheme	-	8.05	7.83	0.22
14.33	Automatic Demand Management scheme(ADMS)	3.01	4.14	-	7.15
14.36	Anakkayam Small HE Scheme	11.85	1.78	0.01	13.62
14.37	Onipuzha Mini HE Scheme	0.00	-	-	0.00
14.38	Wanchiyam Small HE Scheme	0.02	-	-	0.02
14.39	Chathankottu Nada Small HE Scheme	45.19	23.11	-	68.30
14.4	DRIP Project	91.32	10.53	-	101.84
14.41	Renovation Division for Idukki H.E.P.	43.17	8.75	48.70	3.21
14.42	Valanthode SHEP	3.98	1.05	-	5.04
14.43	Roof Top Solar Power Plants	-	5.39	5.09	0.30
14.44	Sengulam Augmentation Scheme	64.93	9.15	0.01	74.07
14.45	Athirapally H E Project	15.56	0.01	-	15.57

14.46	Chembukadavu Mini HEP Stage II	-	0.20	0.20	-
14.48	Urumi Mini H E Project II	-	0.02	-	0.02
14.49	Poovaramthode Small H.E Scheme	6.01	0.56	-	6.57
14.61	Expenditure due to Natural Calamity	4.80	6.40	1.97	9.23
14.64	MARMALA SHEP	1.80	0.68	0.05	2.43
14.65	Kuttiadi Small Hydro Electric Project	-	1.12	0.87	0.25
14.66	Upper Kallar HE Scheme	25.30	5.98	-	31.28
14.68	Peechad Small Hydro Electic project	0.08	-	-	0.08
14.69	RMU-Porinngalkuthu	-	0.03	0.03	-
14.7	Vakkalar Hydro Electric Project	0.06	-	-	0.06
14.71	Peruvannamuzhi Small Hydro Electric Project	21.28	14.81	-	36.09
14.72	Chembukadavu III Small H.E Scheme	5.88	0.00	-	5.88
14.74	Chinnar HES	36.68	18.09	-	54.77
14.75	Pazhassi Sagar Small H.E Scheme	15.05	7.99	-	23.04
14.77	Pallivasal Extension Scheme	341.06	38.74	0.04	379.76
14.78	Barapole S.H. Scheme	-	0.23	0.11	0.12
14.79	Mangulam Hydroelectric Scheme	37.31	6.49	0.03	43.77
14.8	Achencoil SHEP	4.57	-	=	4.57
14.83	Peechi SHEP	-	0.01	0.01	-
14.84	Maripuzha SHEP(2 X 3 MW)	0.21	1.47	0.04	1.64
14.85	Bhramapuram D P P	=	0.01	0.01	-
14.86	120 MW DGPP Kozhikode	0.00	0.14	0.14	-
14.88	Kuttiady Addl. Extention Scheme	22.15	-	=	22.15
14.89	LADRUM SHEP	1.84	0.94	0.06	2.72
14.9	CWIP - General	206.22	-12.98	15.74	177.50
14.93	Vilangad Small Hydro Project	-	0.01	0.01	-
14.95	Perunthenaruvi- SHE scheme	0.13	0.09	0.08	0.13
14.96	Thottiyar HES	122.53	35.74	0.08	158.20
14.97	CWIP - Closed Projects	1.79	4.26	4.79	1.27
14.98	Poringalkuthu Addl.Extn. Scheme	126.70	11.16	0.80	137.06
	SUB TOTAL (A)	1,584.50	261.81	124.00	1,722.31
В	TRANSMISSION LINES & SUB STATIONS				
14.01	Electrical Transmission Schemes	508.45	331.06	410.87	428.64
14.18	Power System Development Fund	303.03	249.52	29.63	522.93
14.56	Load Despatch & Communication Schemes	2.73	6.67	7.60	1.80
14.61	Expenditure due to Natural Calamity	0.13	-	-	0.13
14.9	CWIP - General	103.77	160.22	173.60	90.39
14.94	TRANSGRID 2.0 PROJECT	238.34	472.14	57.94	652.54
	SUB TOTAL (B)	1,156.44	1,219.61	679.64	1,696.42

С	DISTRIBUTION				
14.05	Deen Dayal Upadhyay Gram Jyothi Yojana (DDU GJY)	3.79	44.45	46.32	1.92
14.13	Integrated Power Development Scheme (IPDS)	48.90	99.34	126.82	21.42
14.5	Rural Electrification Scheme	0.04	1.41	1.41	0.04
14.51	Distribution Line Extension	0.99	180.43	178.57	2.86
14.52	Distribution Service Connection	4.87	152.82	154.53	3.16
14.53	Distribution System Improvement	17.69	728.49	730.04	16.14
14.54	Electrification of Harijan Colonies	=	0.80	0.80	-
14.55	Electrification of Tribal Colonies	=	0.21	0.21	-
14.57	Punja Package	0.12	0.26	0.38	-
14.58	System Improvement in other areas	0.07	7.53	7.60	-
14.59	Distbn. Capacitor Installation Scheme	0.99	1.14	0.01	2.11
14.6	Street Lights	2.59	37.30	39.55	0.34
14.61	Expenditure due to Natural Calamity	0.05	4.49	4.46	0.08
14.62	RGGVY-Village electrification Infrastructure	-	0.14	0.14	-
14.63	RGGVY-For effecting BPL Service Connection	=	0.01	0.01	-
14.67	Part B Projects of R-APDRP	15.87	71.78	73.96	13.68
14.82	R- APDRP Scheme	407.93	69.77	219.75	257.94
14.9	CWIP - General	503.91	136.82	217.49	423.23
14.91	Innovation fund	0.02	0.56	0.58	
14.99	Projects not Identified	1.29	0.12	0.36	1.06
	SUB TOTAL (C)	1,009.12	1,537.86	1,802.98	744.00
	GRAND TOTAL (A+B+C)	3,750.06	3,019.29	2,606.63	4,162.73

	Appendix	4A GE	NERATION S	BU - DETAIL	S OF PAF	RT CAPITALISA	ATION OF PE	ROJECTS FO	R THE FY 20	20-21 (Rs Cr)				
					10-0	Group Break-u	up (in Rs. Cr)				Compo	nents o	f Cost
SI.No	Name of Project & project code	Land	Buildings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Network, etc	Vehicles	Furniture & fixtures	Office Equipment	Total	Materials	Labour	Expenses Capitalised
1	Construction of 2 N os 110KV feeder bays for accommodating 110KV feeders from kohamangalam S/s and Bhoothathan kettu HEP to Idamalayar HEP	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06	0.06	0.00	0.00
2	Renovation- IHEP -Moolamattom	0.00	1.32		0.03	40.13	0.05	0.00	0.01	0.00	41.54	35.74	5.80	0.00
3	RMU SHOLAYAR	0.00	0.00	0.00	0.17	3.93	0.01	0.00	0.00	0.01	4.12	4.12	0.00	0.00
	TOTAL	0.00	1.32	0.00	0.20	44.12	0.06	0.00	0.01	0.01	45.72	39.92	5.80	0.00

	Apper	ndix 4B T	RANSM	ISSION SBU	DETAILS O	F PART CAPIT	ALISATION	OF PROJEC	CTS FOR THE	FY 2020-2	1				
	Break-up of Project Cost														
					10-G	roup Break-up	(in Rs. Cr)					С	omponent	ts of Cost	
SI. N o	Name of Project	Land	Build ings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Networ k, etc	Vehicles	Furniture & Factures	Office Equipm ent	Total (in Rs. Cr)	Materials	Labour	Expense s Capitaliz ed	Othe rs if any
1	33KV POTHUKALLU - Constuction of Sub Station	0.00	0.00	0.00	0.01	3.12	0.38	0.00	0.00	0.00	3.51	0.46	0.70	2.35	0.00
2	33 MAKKARAPARAMBA CAPACITY ENHANCEMENT	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.70	0.56	0.14	0.00	0.00
3	33WANDOOR	0.13	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.13
4	33 THAZHEKKODE - Relacement with auto reclosure with new CB	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
5	33 POOKOTTUMPADAM - Line work	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09	0.00	0.00	0.09	0.00
6	66 KV NILAMBUR - Upgradation	0.00	0.03	0.00	0.00	0.25	0.91	0.00	0.00	0.00	1.19	0.00	0.40	0.79	0.00
7	110 PERINTHALMANNA - Upgradation	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00	0.00	0.17	0.00	0.07	0.10	0.00
8	110 MANJERI - Upgradation	0.00	0.00	0.00	0.00	0.00	2.07	0.00	0.00	0.00	2.07	0.27	0.03	1.77	0.00
9	110 KUTTIPPURAM Capacity enhancement	0.00	0.00	0.00	0.01	0.22	0.00	0.00	0.00	0.00	0.23	0.15	0.08	0.00	0.00

10	110 MELATTUR - Capacity enhancement	0.00	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	1.37	1.29	0.08	0.00	0.00
11	110 EDARIKKODE Capacity enhancement	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.00	0.00
12	110 EDAPPAL - New 11 KV out let	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
13	110 TIRUR - Traction Sub Station	0.00	0.00	0.00	0.00	1.92	0.00	0.00	0.00	0.00	1.92	1.08	0.84	0.00	0.00
14	110 KIZHISSERY - Upgradation work	0.00	0.00	0.00	0.00	1.74	0.31	0.00	0.00	0.00	2.05	1.72	0.33	0.00	0.00
15	110 PONNANI - Instalation of MVA 33/11 KV Transformer	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00
16	110 PARAPPANANGADI - Treecutting Compensations	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00
17	220 MALAPARAMBA - Instalation of 200 MVA & 100 MVA transformer	0.00	0.00	0.00	0.00	6.58	0.14	0.00	0.00	0.00	6.72	6.48	0.10	0.14	0.00
18	Trans Section MALAPPURAM - Replacing disk insulator	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00
19	TC RAMAPURAM-Providing protection wall	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.00
20	TC Nilambur - Manjeri Nilambur Line	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.78	0.00	0.78	0.00	0.00
21	220 KV SS Elankur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.00
22	SSSD Tirur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	Construction of 33KV S/s at Marayoor	0.00	0.00	0.00	0.00	0.05	0.31	0.00	0.00	0.00	0.36	0.00	0.30	0.06	0.00
24	220 KV SOLAR SUBSTATION AMBALATHARA II nd Phase.	0.00	0.00		2.87	4.40	1.42		0.00	0.00	8.68	3.56	5.12	0.00	0.00
25	Construction of 110kV substation, Mannuthy	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00	0.00	1.07	0.00	1.07	0.00	0.00
26	Construction of 33 kv s/s at Thumboor and Ele. Sec. Kombodinjimakkal under TC Section Pudukkad	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.72	0.00	0.00	0.00
27	Capacity Enhancement 110 KVSS Vyttila	0.00	0.00	0.00	0.00	1.79	0.00	0.00	0.00	0.00	1.79	1.77	0.02	0.00	0.00
28	Capacity Enhancement 110 KVSS Edappally	0.00	0.00	0.00	0.00	1.84	0.00	0.00	0.00	0.00	1.84	1.81	0.03	0.00	0.00
29	Line Compensation Mannam Cherai 110 KV DC line	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.47	0.00	0.00	0.47	0.00
30	110 KV SS Pattambi	0.07	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.61	0.03	0.04
31	110 KV SS Vennakkara : 110kV GIS	0.00	0.14	0.00	2.00	0.41	0.05	0.00	0.01	0.00	2.61	0.28	2.33	0.00	0.00
32	Up-gradtion of 33 kV Thambalamanna Substation to 110 kV Substation	0.17	0.54	0.00	0.17	6.54	18.27	0.00	0.00	0.00	25.69	16.58	9.11	0.00	0.00
33	UP gradation of 66 kV Mankavu Substation to 110 kV Substation	0.34	0.74	0.00	0.08	7.23	0.00	0.00	0.00	0.00	8.39	6.00	2.39	0.00	0.00
34	Construction of additional bay for ecacuating power from Chathangottunada Stage II SHEP - construction of foundation and erection of yard structure at 110 kV SS Kuttiady	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.07	0.03	0.04	0.00	0.00
35	Up gradation of 1st phase of 66 kV Kuttikkattur	0.36	1.24	0.00	0.00	4.01	0.00	0.00	0.00	0.00	5.61	3.34	2.26	0.00	0.00

	Substation														
36	Newly Constructed 66 kV Sub Station Ambalavayal	0.00	0.71		0.39	2.23	0.00	0.00	0.00	0.00	3.33	1.52	1.81	0.00	0.00
37	Erection of yard structure, equipments of the additional bay, assembling and commissioning of new 12.5 MVA 110/11 kV Transformers at 110 kV SS Kinalur	0.00	0.00	0.00	0.00	1.59	0.00	0.00	0.00	0.00	1.59	1.48	0.11	0.00	0.00
38	Control room extension of 33 kV SS Melady	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00
39	Installation of 110 kV 20 MVAR capacitor bank at 110 kV SS Meppayyur	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.08	0.13	0.00	0.00
40	work providing earth shiel oven new control room Value addition at 110 kV SS Vadakara	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00
41	Value addition work renovation of earthing system of 220 kV SS Nallalam- cnnecting of newly provided fencing to existing earth Mat	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
42	Formation of Electrical Vehicle Charging Station at 220 kV SS Nallalam	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.22	0.00	0.22	0.00	0.00
43	Supply, laying, testing and commissioning of 3c*300sqmm UG cable with 24 fibre OFC and constructing and commissioning of OH line for river crossing for power evacaution from Chathangottunada SHEP II to 110 kV SS Kuttiady	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.86	0.86	0.00	0.00	0.00
44	Capacity enhancement of 220kV Substation Nallalam upgradation of existing 2*60MVA + 2*100MVA to 2*200 MVA transformer and related works	0.00	0.00	0.00	0.00	17.64	0.00	0.00	0.00	0.00	17.64	16.37	1.27	0.00	0.00
45	Value Addition - Construction of steel bridge over Canoli Canal for conveying 110 kV cable to Chevayur Substation at 110 kV GIS Gandhiroad	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.31	0.03	0.28	0.00	0.00
46	Erection of 16MVA, 66/11kv transformer and related works at 66kv SS Cyber Park	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	1.17	1.13	0.04	0.00	0.00
47	JBIC Project- supply and installation of drinking water pipe line including water meters at 220 kv SS Compound	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00
48	Upgradation of Sasthamcottah-Karunagappally 66kV Double Circuit line to 110kV Double Circuit line using ACSR-Wolf conductor and Upgradation of 66kV Sub Station Karunagappally to 110kV level	0.00	0.01	0.00	0.01	0.85	0.76	0.00	0.00	0.00	1.63	0.87	0.00	0.76	0.00
	TOTAL	1.79	3.55	0.10	7.68	66.32	27.06	0.00	0.03	0.00	106.54	68.61	31.20	6.56	0.17

Appendix 4C TRANSMISS	SION SBU	-DETAILS OF	PART CAPITA	ALISATION O	F PROJECTS FO	OR THE FY 20:	16-17 and cor	nmissioned i	n 2020-21					
			Break-up o	f Project Cos	st						COD			
			20-21											
Name of Project	Hydraulic Works Works Plant and Machinery Network, etc Equipments Tota													
Constuction of 2nd Circuit Malappuram Tirur 110 KV Line						0.20				0.20	0.20			
Upgradation of 110 kV S/s,Kaloor to 220 kV-Surveying works of 220 kv O H linesfrom Brahmapuram to Thuthiyoor						0.01				0.01	0.01			
Con. Of 220kV S/s Kothamangalam					0.01					0.01	0.01			
	0	0	0	0	0.01	0.21	0	0	0	0.22	0.22			

Appendix 4D TRANSMISSION SE	BU - DETA	ILS OF PART C	APITALISATION	N OF PROJECTS	FOR THE FY 2	017-18 COMM	SSIONED DUR	ING 2020-21			COD		
Break-up of Project Cost													
				10-0	Group Break-սլ	o (in Rs. Cr)							
Name of Project	Land	Buildings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Network, etc	Vehicles	Furniture & Factures	Office Equipments	Total (in Rs. Cr)			
Construction of 66kV SS Ambalavayal	0.81									0.81	0.81		
Upgradation 66 KVSS Nilambur						0.01				0.01	0.01		
TOTAL	0.81	0	0	0	0	0.01	0	0	0	0.82	0.82		

Appendix 4E: S	BU T - D	ETAILS OF PA	ART CAPITALI	SATION - FY	2018-19 (Rs.	Cr) commissi	oned during 2	2020-21					
					Break-ı	up of Project	Cost						
				10-Gr	oup Break-u	p (in Rs. Cr)					COD		
Name of Project/Work	Land	Buildings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Network, etc	Vehicles	Furniture & Fixtures	Office Equipment	Total	2020-21		
110 kV SS Pattambi													
Purchase of 193.80 cents of Land at survey number 33/8 and 33/9 of Kizhayur village Pattambi	2.37									2.37	2.37		
220 kV Substation, Shoranur													
II Feeder for Railway traction work					0.14					0.14	0.14		
220 kV Substation, Palakkad													
Construction of II Feeder for Traction SS Kanjikode					0.11					0.11	0.11		
Survey of 110 KV Nemmara-Kollengode line						0.005				0.01	0.01		
	2.37	0	0	0	0.25	0.005	0	0	0	2.63	2.63		

Append	lix 4F SBU T - D	ETAILS OF P	ART CAPITAL	ISATION - FY	2019-20 (Rs C	Cr) Commissio	oned during 2	2020-21			
Name of Duciost				В	reak-up of Pro	oject Cost					
Name of Project				10-0	Group Break-u	ıp (in Rs. Cr)					COD
	Land	Buildings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Network, etc	Vehicles	Furniture & Fictures	Office Equipments	Total (in Rs. Cr)	2020-21
Upgradation of 110kv melattur				0.03	0.05					0.08	0.08
Upgradation of 110kv S/S,Manjeri				0.14	0.51	0.01				0.66	0.66
Upgradation 110kv s/S Perinthalmanna		0.05			0.60	0.07				0.72	0.72
Malapparamba-Ramapuram DC line to MC line						1.61				1.61	1.61
Nilambur -Edakkara using ACSR dog conductor						0.98				0.98	0.98
Capacity enhancement110kv Tirur					0.17					0.17	0.17
Traction s/s Tirur					0.06					0.06	0.06
Malappuram- Trur SC line to DCline						1.06				1.06	1.06
33 kv Pookottumpadam					0.07	0.27				0.34	0.34
Nilambur-Edakkara line						1.35				1.35	1.35
33 kv s/s,Makkaraparamba					0.01					0.01	0.01
Adyanpara-pothukallu 33kv line						0.91				0.91	0.91
Kuttippuram-vairamcode 33kv dc line						0.01				0.01	0.01
110 KV S/S PARAPPANANGADI				0.02	0.68	0.11		0.01		0.82	0.82
220 KV MALAPARAMBA					0.04					0.04	0.04
Construction of 33 kV S/s at Marayoor	0.00	0.66			0.17				0.00	0.83	0.83
110 kV SS Pattambi	0.28									0.28	0.28
110 KV SS Vennakkara		0.03								0.03	0.03
TOTAL	0.28	0.74	0.00	0.19	2.36	6.38	0.00	0.01	0.00	9.96	9.96

		Appendix 4	G SBUT SBUT-	PROJECT CODI	WISE ASSET ADD	DITION DURING 20)20-21				
			14.	01 - TRANSMIS	SION SCHEMES						
ARU	SUBSTATION/PROJECT	Land	Buildings	Hydraulic Works	Other Civil Works	Plant and Machinery	Lines, Cable Network, etc	Vehicles	Furniture & Factures	Office Equipment	TOTAL
	110kV SS Ayur	2,55,434.00			79,22,547.00	3351149	15950028			16,900.00	27496058
	66kV SS Karunagappally		63,720.00		81,837.00	8568639	7608346				16322542
	110kV SS Chavara		55,973.00		21,240.00	16539620	55488		3399	9,950.00	16685670
	Intrest & Finance Charges & Employee Cost for FY 2019-20		2,76,044.00		4,63,939.00	9880030	12576962				23196975
	110kV SS Anchal		98,415.00		742979	14266569	1061698		2,97,052.00		16466713
	220kV SS Kundara		1,07,599.00		5,88,231.00	1168719	80,948.00		3,83,346.00		2328843
	110kV SS Ayathil				51,850.00	158180	10870				220900
	220kV SS Edamon		1,83,462.00		3,12,459.00	6008788	962314		1,480.00		7468503
	110kV SS Kottarakkara				3,63,415.00	349840	300108		176.00		1013539
	110kV SS Kavanad				95449	745842					841291
_	110kV SS Punalur					3172783	1394237				4567020
ara	66kV SS Thenmala					834324	4,292.00		1,500.00		840116
Kottarakkara	LMS Edamon					6,11,108.00	3767348		14,500.00	40,710.00	4433666
tara	33kV SS Oachira					616861					616861
Ç	110kV SS Pathanapuram					121391			1,487.00		122878
Circle I	110kV SS Sasthamcottah					112744	86,253.00		800		199797
l ä	110kV SS Kottiyam					913830	266420				1180250
٤	110kV SS Ambalappuram					211364			750.00		212114
	LMS Punalur					90,107.00	710161		4,600.00		804868
	TCS Edamon					93,408.00					93408
	110kV SS Parippally					25,979.00	1,82,800.00				208779
	LMS Kundara					160200	1369918				1530118
	110kV SS Perinadu						459633				459633
	110kV SS Kavanadu						521307				521307
	TCS (Lines) Punalur						17921228				17921228
	110kV GIS Kollam						100			1,91,585.00	191685
	TSD Punalur						2,143.00		3000		5143
	Inchivial-Perinadu 220kV Line						3,00,000.00				300000
	Puthoor – Ambalappuram 33kV Line						4,27,240.00				427240
	Kayamkulam – Edamon 220kV Line						7,03,991.00				703991
	TOTAL	255434	785213	0	10643946	68001475	66723833	0	712090	259145	147381136
cle ant th	110 KV Substation , Erattupetta	243494.00			535983.00	2384829.00	281907.00	14100.00		6503.00	3466816
Tr Circle Poovant huruth	220 KV Pallom		380891.00	·		377887.00				·	758778
누운로	110 kV S/S Pala		11105989.00			197759.00	79537.00	1450			11384735

66 kV S/S, Mundakkayam		1684373.00	1	1074301.00	1363582.00		27700.00			414995
110 KV Chengalam		1081611.00			1092614.00					217422
110 KV Vaikom		174510.00		106533.00	575958.00					85700
110 KV Kodimatha		98576.00			8500.00		4398.00			11147
110 KV SS Pampady		297150.00			189838.00		27035.00			51402
Transmission Division Poovanthuruth		141229.00			7881.00			57001.00	20017.00	22612
Transmissin Subdivision Poovanthuruth					3000		24148.00	2950.00	2450.00	3254
66 kV S/S, Changanacherry		523798.00			3000		1440.00			52823
66 kv Substaton, Kottayam		450810.00			778656.00					122946
110 kv Substation, Kanjirappally		84365.00					2050.00		31900.00	1183
66 KV Kuravilangadu		246290.00			134992.00					3812
66 KV Ettumanoor		63519.00		189740.00	624319.00	1111849.00			31900.00	20213
T C Section, Erumely					114921.00				41899.00	1568
33 KV Paika		183401.00			117717.00	53729.00				3548
Mundakkayam Kanjirappally Feeder				290343.00		598690.00				8890
220 kV S/S,Poovanthuruthu					3737608.00					37376
66 kV Substation Koothattukulam					884465.00					8844
110 KV Mundakkayam					171862.00	2241431.00				24132
33 kv Substation, Kallara					147472.00					1474
33kV S/S,Kaduthuruthy					509536.00					5095
66 kV S/S, Kanjirappally					684486.00					6844
33 kv S/s, Manimala					295176.00					2951
110 KV Thrikkodithanam					3000			1500.00		45
Erumely- Kanjirappally 110 kv Line						1091969.00				10919
Pala- Ettumanoor						1427426.00				14274
L M S, Poovanthuruth						309000.00				3090
Pallom Kanjirappally						3808641.00				38086
Pallom - Punnapra Line						489330.00				4893
LMS Pala						474190.00	138949.00			6131
Pampady Kanjirappally Line						17820.00				178
110 kv S/s, Ayarkunnam								13368.00		133
T C Section, Koothattukulam								115852.00		1158
110 kv S/s, Erumely								2000.00		20
Transmission subdivision Kanjirappally								6000.00		60
Transmission subdivision Pala								1400.00	21400.00	228
66 KV Gandhinagar									9399.00	93
220 KV Switching Station New Pallom									400860.00	4008
Transmission subdivision Vaikom									5723.00	57
Transmission Circle Office									27200.00	272
TOTAL	243494	16516512	0	2196900	14409058	11985519	241270	200071	599251	463920
Pudukkad	7232940.00	553747				633058		======		84197
Annamanada		499764			878832.00	48412				14270
Koratty(33 kV s/s)		2790933			2. 2002.00	.0.12				27909

T C Viyyur	451408	117720.00	1250	2079129				2649507
400 K V S/S Madakkathara	4863901	19474440	14701702	10692455		19428	10348	49762274
Mala	553593		13636388	1120				14191101
110 kv SS Chalakudy	659479.00							659479
110kv SS Kandassankadav	1155942							1155942
Kattoor	469617							469617
Viyyur	283368	22815	1271753	34,914			16265	1629115
Allocation by H O during 2019-20	1311566.55	2098506	31632195.00	31762284.00			218595	67023147
Ayyampuzha		1136223						1136223
TC Section TSR-2		4185006	1300	639790				4826096
Angamaly		558152.00		20,334				578486
Chalakudy		143662	4743379	34815337	627434			40329812
Kallettumkara		820587						820587
Kandassankadavu		333593	2360			19350	14900	370203
Kodungalloor 110 kV s/s		840909	13781834.00	44442431				59065174
Malayattoor		106253	727629					833882
Mundur		649093.00	2389532	1163436				4202061
Ollur		2453282	804824	590821			9200	3858127
Pattikkad		114113.00	1584978.00	89911				1789002
Puthur		113159.00	2842075	159386				3114620
TC Sec Valappad		265709		140896				406605
T C Sec Kundukad		415048		547639				962687
Tran dvn Thrissur		2083353.00	9200			6000		2098553
Valappadu		744914	246855.00	171315		86278	12600	1261962
SSSD Valappad		51028		351412				402440
Athani			2305151	51640.00				2356791
Karukutty			1783049.20	425876		69606		2278531
Mullassery			2775402					2775402
33 kv ssMundur			135921					135921
Punnayurkulam			1348387	700				1349087
Tran Dvn Chalakkudy			174163	565578				739741
Chirakkal			1031984					1031984
Irinjalakkuda			574368	85928				660296
Kaipamangalam			1065863	2035856				3101719
Kodakara			296690	2000000		51526		348216
Kunnamkulam			671386			31323		671386
LMSI&II Madakkathara			320303	1412988				1733291
Parappukkara			18960	1112330	+	+		18960
Pazhayannoor			955864	121582	+	+		1077446
Poomala			35299	121302				35299
T C Section Madakkathara			6386					6386
TC Section Madakkathara TC Section Chalakudy			1527051	954659				2481710
T.C. Circle Thrissur			9440	334033			45000	54440

	Transmission Division Irinjalakuda			1	ĺ	10089	Ì		I		10089
	33 K V S/S Chavakkad					1320					1320
	Vydhyuthi Bhavanam Thrissur					1044300					1044300
	Anthikkad33kVSub Station					303220					303220
	Chalakudy ISHCH						2702585				2702585
	Mannuthy						755031				755031
	Chirakkal 11 kv line outlet						552549				552549
	Ollur-Pattikad Dc Line						1175709				1175709
	Parappur- Mullassery						87211				87211
	Pullazhi						509489				509489
	T C Sec Pudukkad						13163985				13163985
	T C Store Madakkathara						35950				35950
	TC Sec Annamanada						54553				54553
	Vadanappilly						126358				126358
	Cherpu								73315		73315
	Chelakkara SS									29485	29485
	TOTAL	7232940	13593319	0	36727565	105650682	153202307	627434	325503	356393	317716143
	220KVSS Nallalam	381290	1411440	1604433.00	4620350	176875684	290143		1920		185185260
	66KV SS Mankave	3419062	7420622		769268	72378323.00			226430.00		84213705
	66KV SS Kuttikattoor	3614451.00	12375902			40078887					56069240
	110 kv SS Koyilandy	803041.00	534524			2482166.00					3819731
	66 kV SS Thambalamanna	1651700.00									1651700
	110 KV SS Kinalur		2141956			15901736				12000	18055692
	110KV s/s Chakkittapara		327357			119300				96924	543581
	110Kv SS Thiruvallur		589671								589671
	110 KV SS vadakara		428955.00	29037		1200				80973.00	540165
ф	110 KV SS Thambalamanna		5337443						165660.00		5503103
多	33 KV SS Melady		1148552			270912.00				60946.00	1480410
Circle Kozhikkode	66 kV SS Ambalavayal		7063177		3918107	24454387					35435671
Š	110 KV GIS Gandhi Road		649332		3080969	96781					3827082
e	66KV SS Kaniyambetta		706644								706644
	33 KV SS Thambalamanna		86617		1715065	65413299.00	182727276				249942257
Ĕ	110 kV SS Meppayyur		213035.00		832329	5260448				101802.00	6407614
	110KV SS Kunnamangalam			29702.00					2830.00		32532
	66 KV SS Kuthumunda			48700	10000.00						58700
	110 KV SS Kuttiadi				1061409	678982.00	8610937		20040.00		10371368
	33KV SS Meenangadi				187307						187307
	110KV SS Koduvally				4196	1165759			1500		1171455
	110KV SS West Hill				752443	299909			31653.00		1084005
	66 Kv Gis Puthiyara					210489					210489
	PT RU Nallalam					1050346					1050346
	66kv SS Cyber Park					11716368.00					11716368

ĺ	33 KV s/s Pulpally			ĺ		3328760					3328760
-	LMS Vadakara					167775	8697096				8864871
	220KVSS Orkattery					1103718			25284.00	248780.00	1377782
	66 kV SS Mananthavady					50463			31200.00		81663
	33 KV SS Balussery					106606					106606
ľ	33 kV Kalpetta					1290					1290
	66 KV SS Anjukunnu					2000					2000
Ī	220 KV SS Kaniyambetta					70352			89800.00	32875.00	193027
Ī	110KV s/s Chevayoor					1600			18640		20240
Ī	110KV SS Kuttikattoor					138060					138060
f	LMS Nallalam					340876	5318582				5659458
f	TCS Thambalamanna					85225					85225
Ī	Civil Section Nallalam					398840					398840
f	33KV Trans. Sn. Kaniyambetta					85493	437379				522872
f	Kunnamangalam Substation to Kuttikkattur Substation :										
	conversion of existing 5.6 kV Single circuit line to						46019778				
	double circuit in 110 kV Parameter										46019778
Ī	Tr Section Nallalam						1474036.00			3990.00	1478026
Ī	T.C. Sn. Gandhi Road						35211854				35211854
f	LCS Kaniyambetta								14000.00	3750.00	17750
f	SS SD Kunnamangalam.								68334		68334
ľ	110KV SS Agastiamuzhy								28792		28792
	110KV SS Nadapuram								2750		2750
f	33KV s/s Padinharethara								1100		1100
Ī	LCS Ambalavayal								76860.00		76860
Ī	Transmission Section Ambalavayal								39200.00		39200
Ī	33 KV SS Perambra									54943.00	54943
	Computers & other equipments for various Offices									313413	313413
	TOTAL	9869544	40435227	1711872	16951443	424336034	288787081	0	845993	1010396	783947590
	Trans. Circle Palakkad								60,614	97952	158566
Ī	Trans. Dvn Chittur								5,500		5500
Ī	220KV S/s Kanjikode		647870		38,55,994.00	5766095	20,47,427				12317386
	220KV S/s Shornur		525288		543643	2263963	930781			18,770.00	4282445
	110KV S/s Vennakkara		1855764		20095113	4739636	830264		1,05,404		27626181
Ī	110KV S/s Kanjikode		18,413.00		3832146	6130703	310266				10291528
Ī	110KV S/s, Walayar		18,412.00		51,903.00	684247	310260				1064822
	110KV S/s Parli		18,413.00		51,903.00	1223486	310260		2,714		1606776
Ī	110KV S/s Mannarkkad		18,413.00		51,903.00	980961	310264		•		1361541
Ī	110KV S/s Malampuzha		18,412.00		51,902	772444	310260				1153018
ļ	110KV S/s, Kalladikode		1,07,159		51,903	684247	310260				1153569
	110KV S/s, Pathiripala		18,412.00		51,903.00	704307	310260				1084882
f	110KV S/s Ottapalam		18,412.00		51,902.00	1043293	310260				1423867
Ī	110KV S/s Cherpulassery	l	18,412.00		51902	1372609	310260				1753183

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110KV S/s Kottanad		18,412.00		51,902.00	742835	3,10,260.00				1123409
110KV S/s Vadakkenchery		18,412.00		51,902.00	684248	210264				964826
110KV S/s Kollengode		18,412.00		30,38,108	5087961	310260				8454741
110KV S/s Kozhinjampara		18,412.00		2,03,250	6509512	310260				7041434
110KV SS Pattambi	675432	-,	15,483.00	61,12,266				12,851		6816032
110KV S/s Wadakkanchery			.,	9,82,125	1566785			69,581		2618491
66KV S/s Nemmara		17,262.00	91,638.00	48,659	641483	290870		,		1089912
66KV S/s Chittur		17,262.00	,	346182	1338522	290869				1992835
66KV S/s Kannampully	3,90,085.00	17,261.00		48,659	641482	290869				1388356
66KV S/s Chandranagar		17,261.00		48,658	641480	290869				998268
33KV S/s Vydyuthi Bhavanam		9,864		1,41,581	366562	166210				684217
33KV S/s Olavakkode		9,864		27,805	366565	1288735				1692969
33KV S/s Agali		9,864	51,589	37441	657724	166217				922835
33KV S/s Alanellur		9,864	,	27,805	380445	166211				584325
33KV S/s Kongad		9,864		27,805	461645	166211				665525
33KV S/s Maniampara		9,864		27,805	366562	166211				570442
33KV S/s Sreekrishnapuram		9,864		27,805	366562	166211				570442
33KV S/s Pallassana		49,766		27,805	366562	166211				610344
33KV S/s Koduvayur		9,864		1,81,986	366562	166211				724623
33KV S/s Nelliampathy		9,864		27,805	366562	166211				570442
33KV S/s Muthalamada		66,205		27,805	366562	166211				626783
33KV S/s, Vannamada		9,864		27,805	497645	166210				701524
33 KV S/s, Velanthavalam		9,864		27,805.00	366562	166210				570441
33KV S/s, Meenakshipuram		9,864		27,805.00	366562	166210				570441
33KV S/s Alathur		9,864		27,805.00	461645	166210				665524
33KV S/s Tarur		9,863		27,805.00	366562	166210				570440
33KV S/s Chittadi		9,863		27,805.00	476913	166210				680791
33KV S/s Chalissery		9863		27,805.00	366561	166210				570439
33KV S/s Thirthala		3,29,147		27,805.00	6716044	166210				7239206
33KV S/s Pattambi		9,863		27,805.00	366561	166210				570439
33KV S/s,Thiruvegappura		9,863		7,00,017.00	921365	166210				1797455
LMSD Shornur					1,89,980	166210				356190
TC Section, Kanjikode						1,75,776				175776
SS Sub Dn Chittur						, , , ,			14,700.00	14700
TOTAL	1065517	4067151	158710	41259440	60433260	14170539	0	256664	131422	121542703
220 KV Sub Station MYLATTY		618335			352496	505433		11564		1487828
110 KV Sub Station SREEKANDAPURAM		754731		3506051	6335681	1233370				11829833
110 KV Sub Station NEDUMPOIL		835910		4878430	5007206	17300453				28021999
33 KV SubStation WEST ELERY		2092422			171655					2264077
33 KV SubStation TRIKKARIPUR		1296051								1296051
110 KV Chemberi		3395650		10414012	95881772	93679665		94500		203465599
33 kV Puthur		104035			4376012					4480047

33 kV Kelakam		905679		1358518	5031547	4528390.00		İ		11824134
33 KV SS Rajapuram		754731		1546035	5113160	10465881.00				17879807
33 KV SS Veliyambra		7934098		2128816	5800882	1334350		48024		17246170
110KV SS Kanhangad		690111		1512997	9582				35800	2248490
Solar SS,Ambalathara				28654525	43977949	34893539				107526013
110 KV Sub Station THALASSERY				772222		762080				1534302
110 KV Sub Station PINARAYI		15931737		30072		650936		5000	39991	16657736
110 KV Sub Station PANOOR		704715			35960					740675
110KV Sub Station MULLERIA		2577029			306849					2883878
110 KV Sub Station MANJESWARAM		2473345								2473345
110 KV Sub Station CHERUVATHUR		120952			818626			17300		956878
110 KV SS KUBANOOR		1593573			4779578	108962578				115335729
110 KV SubStation MATTANNUR		123731								123731
33 KV Sub Station NADUKANY		30478				571075				601553
33 KV Sub Station Belur		728905								728905
110 KV SS KSIDC VALIYAVELICHAM		436809			475037	398266			14790	1324902
110 KV Sub station CHOVVA		20547469								20547469
34 KV SS Thottada					7247222					7247222
220 KV SubStation THALIPARAMBA					2989334					2989334
33KV Puthiyatheru					4152943					4152943
110 KV Sub Station PAYYANNUR					4123415	23010				4146425
110 KV Sub Station, CHERUPUZHA					366807			39978		406785
33KV Alakkode					193012					193012
110KV Sub Station, KASARAGOD					925550				8900	934450
33 KV Sub Station Kodiyeri					92495	1212118				1304613
MYLATTY-THOUDUGOLY LINE					1098821	11817818				12916639
33 KV SS Dharmadam					3569017	710911				4279928
110 KV SS Mundayad					2705067	126708				2831775
220 KV S/S Kanhirode					608092					608092
LMS KANNUR 1						172625				172625
TSD MATTANNUR						621103				621103
LMS Payyannur						281241				281241
LMS Mylatty						10030				10030
TSD Payyannur						28810			15900	44710
Trans. Circle, KANNUR								22700	18050	40750
Computers equipments for various Offices									19409	19409
										0
TOTAL	0	64650496	0	54801678	206545767	290290390	0	239066	152840	616680237
33KV Substation, Makkaraparamba					70,33,244.00					7033244
33KV Substation, Edavanna					12,458.00					12458
33KV Substation Pulamanthole										0
33KV Substation, Wandoor	12,40,443.00				1,17,293.00					1357736
33KV Substation, Thazhekode					75,489.00					75489

33KV Substation, Thirunavaya				4,82,644.00						482644
33KV Substation, Kalikavu						30,660.00				30660
TC Sec./33KV Substation, Pookkottumpadam						9,24,871.00				924871
33KV Substation,Pothukallu				87,116.00	77,58,574.00	37,59,140.00			29,900.00	11634730
TC Edarikode						23,600.00				23600
66KV Substation, Nilambur	12,892.00				25,31,826.00	14,99,881.00				4044599
110 KV Substation, Perinthalmanna				6,58,591.00	57,165.00		7,47,291.00	5,000.00		1468047
110 KV Substation, Manjeri						30,18,491.00				3018491
66KV Substation Mankada				1,62,910.00						162910
110KV Substation,Kuttippuram				1,34,074.00	21,76,301.00	11,474.00				2321849
110KV Substation, Malappuram					48,805.00			7,850.00		56655
110KV Substation Melattur					1,36,82,648.00	10,220.00		15,200.00		13708068
110KV Substation, Edarikode				14,443.00	9,43,405.00				20,903.00	978751
110KV Substation, Edappal					1,35,282.00					135282
110KV Substation Tirur					1,91,86,588.00			23,100.00		19209688
110KV Substation Kizhissery					1,73,96,406.00	31,28,979.00		4,720.00	4,720.00	20534825
110KV Substation Ponnani					3,47,204.00					347204
110 KV SS ,Parappangadi						3,55,661.00				355661
220KV Substation Malaparamba					6,58,02,757.00	14,20,783.00			32,490.00	67256030
TC Section Malappuram						5,31,590.00				531590
Transmission Section, Ramapuram						14,14,915.00			9,990.00	1424905
Transmission Division Malappuram									15,000.00	15000
Transmission Division, Tirur								13,865.00		13865
Transmission Circle, Malappuram		3,01,754.00		9,80,701.00	2,34,82,937.00	2,53,09,759.00				50075151
Substation Subdivision, Tirur						10,000.00				10000
TC Nilambur						78,22,510.00			8,051.00	7830561
220 KVSS Elankur								1,71,296.00		171296
TOTAL	1253335	301754	0	2520479	160788382	49272534	747291	241031	121054	215245860
220kV Substation Kalamassery		17461071			1,64,81,801.00	25,44,378.00	400487		2,862.00	36890599
220KV S/s,Brahmapuram		235302			5333564.00	3,29,002.00		67,246.00		5965114
110 kV S/S, Vytila		2759517			3,00,17,345.00					32776862
66kV Panambilli Nagar		2,31,761.00								231761
33 kVSS Thammanam		1,53,082.00								153082
110 kVSSNew Vyttila		59,548.00								59548
Transmission Circle, Kalamassery		4,71,316.00								471316
220 KV Tran. Colony Kalamassery		61544.00								61544
66 kV S/S, Njarkkal		3,00,500.00			271776					572276
Tran.Divn Brahmapuram		25,339.00						3400.00		28739
110 Kv S/s,Cherai site				15,98,536.00						1598536
110 kVSS Kadavanthra				4,61,678.00	11,29,596.00					1591274
				12.04.004.00	5048435.00			2840		6435359
220 KVSS Ambalamughal	<u> </u>			13,84,084.00	3046433.00			2040		0.0000

66KV S/s,Mulavukad				3,32,675.00						332675
66KV S/s,Kakkanadu				4,26,691.00				1257		427948
110 kV S/S, Edayar				726884.00						726884
110KV S/sAluva				3,04,420.00				15489		319909
110KV S/s,Kaloor				44,39,069.00				4,200.00		4443269
110 KV S/S CHERAI				20,37,970.00	12,82,380.00			15,999.00		3336349
110 kV S/S, Mattanchery				2,42,280.00						242280
110 kV S/S, Panangad				79,397.00						79397
66 kv S/s,Edathala				7,75,182.00						775182
PTRU, Kalamassery					34,01,864.00					3401864
110 KV S/S N.Parur					29,48,821.00			5359		2954180
110 kV S/S, W.Island					10,59,621.00			1,500.00		1061121
110 kV S/S, Kurumassery					18153.00					18153
LMS S/D Kalamassery					937208	513993.00				1451201
66KV S/S ,Thrikkakara					694539.00					694539
66 kV s/S, Puthrncruz					3412923.00			17111.00		3430034
33KV S/s ,Alangad					18,90,565.00					
						2,33,190.00				2123755
33 KV S/S, Puthenvelikara										
					4,976.00					4976
110KV S/s,Kandanadu					183611.00					183611
110KV S/s,Edappally								4,950.00		
					2,74,52,183.00	7036826		4,550.00		34493959
Kalamassery to Vytila						118419.00				118419
Kalamassery- Muvattupuzha						540.00				540
220 kv LP Brahmapuram feeder						13211571.00				13211571
Mannam-Cherai 110 kV DC line						21,20,04,418.00				212004418
Kurmassery Puthanvelikkara line						1,95,265.00				195265
EB-GB(2012-13)						51,14,992.00				5114992
11 KV line Kalamassery s/s						31,14,332.00				3114332
11 KV line Kalamassery 3/3						7,20,321.00				720321
110 KVSS Ernakulam						7,20,321.00		6,144.00		6144
66 KV S/S,Kizhakabalam								17,741.00	5850	23591
Trans Div,Kalamassery								13,632.00	3630	13632
66 kv s/s Marine drive								23,250.00		23250
Civil Sub Divn Kalamassery								23,230.00	34950	34950
Trans Div, EKM									11,900.00	11900
TOTAL	0	21758980	0	12966016	101613416	242022915	400487	200118	55562	379017494
110KV S/s ,paruthippara	0	21/30300		1447356	19849275	28803	400407	200118	33302	21325434
110KV S/s , parutnippara 110KV S/s , Thirumala			1	213087	181489	20003				394576
110KV S/s , Inirumaia 110KV S/s , kattakada				213087	2709704					2709704
110KV Sys ,kattakada 110KV Subststion,Varkala		193845			5630005					5823850

	110 KV S/sBalaramapuram					35318170		ĺ			35318170
Ī	110 KV S/s,Parassala					1389516					1389516
Ī	66 KV S/s,Neyyattinkara		866598		5393650	33794063					40054311
Ī	110 KV S/s,Neyyattinkara				1287650		770047				2057697
Ī	110KVS/s,Medical College					179326					179326
Ī	Tran.Line.sec.li,parithippara						3413114				3413114
Ī	LMS I Paruthippara						2062580				2062580
Ī	TC,TVM		6330854							1137980	7468834
-	110KVS/s,Attingal					8106	17864				25970
Ī	110KVS/sNedumangad					224978					224978
	110KVS/Aruvikkara				55285	144430					199715
Ī	110KVs/s,Terls					940725					940725
Ī	110 KV S/s,veli				1384326	2345217					3729543
Ī	TC Section Veli				24581	84616	46050329				46159526
	220KV Subststion Kattakada	39616119	18000000		1884067	9301780					68801966
	110KV S/SKazhakoottom		20936073		87537	36076399					57100009
Ī	33kV Subststion Karamana				53072						53072
Ī	220KVS/s,Pothencode					31229	239367225				239398454
Ī	110 KV S/s , Muttathara		25632815		15755142	37992256	180526965				259907178
Ī	33 KV Substation, Pattoor		194250								194250
	66 KV Substation, Palode					415663					415663
Ī	PTCD-KTKDA line						142451622				142451622
	NTA-PSLA line						5656201				5656201
Ī	NDD - Aryanad line						152443				152443
	PPRA - Veli line						603598				603598
	GIS LA Complex		242897		635624	1493340					2371861
Ī	Panthalacode	60336981									60336981
Ī	33 KV S/s,Kallambalam		14611306		1042251	29228675	18494377				63376609
	TOTAL	99953100	87008638	0	29263628	217338962	639595168	0	0	1137980	1074297476
	110kV S/S Chellanam		142166		43441	10325					195932
	220 KV S/s, Edappon		88300		113988	2626186	23801		17367		2869642
	33 KV S/s, Karuvatta		113526		894800				1800		1010126
	66 KV S/s, Alappuzha		57414						13697		71111
	Trans.Sub Dvn, Edappon		409840								409840
	110 KV S/s, kayamkulam		280000		91420	670789					1042209
Ī	66kV SS Pathirappally					827503	626446		38749		1492698
	66kV SS Kuttanadu		86745						3850		90595
Ī	66kV SS Kattanam		721751						4560		726311
Ī	TSD Mavelikkara		70021								70021
Ī	Trans Div Mavelikkara		21101						78970		100071
Ī	110 KV S/s, Edathua				252008	1297428					1549436
Ī	110 KV S/s, Chengannoor				119562		49229		55		168846
Ī	66 KV S/s,Nangiarkulangara				138661	6629			14643		159933

	33 KV S/s, Kattanam			898932	5886003	3279952	I		1	10064887
	220 kv S/S .Punnapra			1456178				11050		1467228
	110 KV S/s, Punnapra				3822125					3822125
	110 KV S/s, S L Puram				334530			4102		338632
	110 KV S/s, Aroor				1521781			50162		1571943
	33 KV S/s, Vallikunnam				1097718					1097718
	110kV Thycattusserry				866840			12700		879540
	110 KV S/s, Mavelikkara				875710			217240		1092950
	110Kv S/s Eramalloorr	447871			7255630			21017		7724518
	33 Kv S/s Kalarcode				2224165	1405212		21480		3650857
	LMS Cherthala	4253765								4253765
	66kV SS Karuvatta				617301	705442				1322743
	TSD Edappon				162704	1056858		17671		1237233
	33 KV S/s,Thakazhy					117809				117809
	LMS Edappon					1266826				1266826
	66 KV S/s, Cherthala							43100		43100
	TSD Cherthala							17391		17391
								5279		5279
	Trans Sub Dvn Aroor							1650		1650
	Trans. Circle, Alappuzha							74794		74794
	Tran Dvn Alappuzha							39592		39592
	LMS Alappuzha							1500		1500
	TOTAL	6692500	0	4008990	30103367	8531575	0	712419	0	50048851
	LMS, Moozhiyar			1034364	659136					1693500
	66 KV S/s.Adoor			1481950	269043	25331		227745		2004069
	66 KV S/s, Enathu			71358	1085661	3495085				4652104
	LMS,Pathanamthitta			317065		275744				592809
	110KV Substation, Ranni			182591	321869			1388		505848
ro.	TC Section,Pandalam			277266		1529504				1806770
Ħ	66 KV S/s, Triveni			2632514				1500		2634014
Ĭ	66 KV S/s, Kochupampa			611514	50636					662150
Division Pathanamthitta	66 KVS/s.Thiruvalla			308394	17822768	6709018		94167		24934347
<u> </u>	110 kV S/s, Kozhencherry			790880	1234655	93270				2118805
<u>~</u>	TD, Pathanamthitta			3113773	2204979	4373252		1350	14987	9708341
<u>.</u> ë	33 KVS/s.Konni				10789					10789
<u>`</u> ≧	110 KVS/s.Pathanamthitta				109218	426251	496401	2217		1034087
<u> </u>	110 KV S/s,Mallappally				231594			1490		233084
_	TCSD,Thiruvalla				93021	2700		4562		100283
	TC, Enathu				913861	474289		900		1389050
	33 kv S/s, Kumbanad				159744					159744
	TCSD, Pathanamthitta					3031532			16640	3048172
	33 KVS/s.Pandalam					11266			i .	11266
	66 KV S/s, Chumathra					11200				0

	110 kv s/s, Koodal								1500		150
	TSD, Kozhencherry										
	TOTAL				10821669	25166974	20447242	496401	336819	31627	5730073
	66kV Vandiperiyar		735109		434793.00	3002461				12760.00	418512
	110 kv S/s Kuthumkal		10690.00		323886.00	299962				9400.00	64393
	LMS Muvattupuzha		1101221.00			2300	1020968				212448
	110 kv S/s Rayonpuram			11700.00		859488.00					87118
	110 kv S/s Perumbavoor			17024.00		14681					3170
	33kV s/s Vandanmade				1387918.00	23210196					245981
	110 kv S/s Marady				1587069.00	21791909					233789
	110 kv S/s Murickassery				48210.00						482
	33kV S/s Kallorkkade					133227.00					1332
	110kV S/s Muvattupuzha				415701.00	79691465.00					801071
	110 kV S/s Udumbannor					9319212.00					93192
	66kV S/s peermade					36777458.00					367774
	33 kV S/s Marayoor					475805	1015767				14915
	66kv S/s Kattappana					1014923.00					10149
•	110kV S/s Muttom		21691387.00				12833435				345248
Thodupuzha	66kV s/s Odakkali					15148745	6844792				219935
ם	66KkV S/s Marady					2378576					23785
Б	33kV S/s Vengola					82781.00					827
두	66 kV S/s Kulamvu					14237685.00					142376
Circle	33kV S/s Kuruppampady					1461253					14612
Ξ	220 kv S/s Kothamangalam					18954995					189549
ř	66kV S/s Karimanl					458471.00					4584
	33kV S/s Mazhuvannoor					374980.00					3749
	LMS Kothamangalam					1410	5439731				54411
	66kv S/s Kothamangalam					149860					1498
	TC Nedumkandom						492411				4924
	66kv S/s Thodupuzha					503860					5038
	LMS Vazhathope						4395722				43957
	TC Kothamangalam						5219784.00				52197
	110 kV S/s Piravom					2407					24
	TC Peermade						1558686				15586
	TC Vandaaanmade						557794				5577
	TSD Nedumkandom							816032.00			8160
	Furniture for various Sub stations								440754		4407
	Office equipments for various offices									496009	4960
	TOTAL	0	23538407	28724	4197577	230348110	39379090	816032	440754	518169	2992668
4.01 - T	RANSMISSION SCHEMES - GRAND TOTAL (In Rs)	119873364	279348197	1899306	226359331	1644735487	1824408193	3328915	4510528	4373839	41088371
	(In Crores)	11.987	27.935	0.190	22.636	164.474	182.441	0.333	0.451	0.437	410.8

			14.18- PO	WER SYSTEM D	EVELOPMENT FL	JND					
102	GEN CIRCLE THRISSUR					0.144					0.144
103	GEN CIRCLE MOOLAMATTOM					1.998					1.998
104	GEN CIRCLE MOOZHIYAR					0.628	0.182				0.810
207	GEN CIRCLE KOTHAMANGALAM					2.497					2.497
960	CE TRANSGRID SHORNUR				0.002	1.649	22.525				24.176
14.18	8 - POWER SYSTEM DEVELOPMENT FUND - GRAND TOTAL				0.002	6.916	22.707	0.000	0.000	0.000	29.625
			14.56- LOAD D	ESPATCH & CO	MMUNICATION S	CHEMES					
217	SYS OPERATION CIRCLE TVPM					2.770	0.024				2.794
218	SYS OPERATION CIRCLE KLMSRY					2.377					2.377
219	SYS OPERATION CIRCLE KANNR					2.423					2.423
14.5	66 - LOAD DESPATCH & COMMUNICATION SCHEMES - GRAND TOTAL	0.000	0.000	0.000	0.000	7.570	0.024	0.000	0.000	0.000	7.594
				14.90- CWIP-	GENERAL						
	VARIOUS ARUS	172.830				0.360	0.400			0.010	173.600
	14.90- CWIP-GENERAL - GRAND TOTAL	172.830	0.000	0.000	0.000	0.360	0.400	0.000	0.000	0.010	173.600
			14.	.94- TRANSGRII	2.0 PROJECT						
960	CE TRANSGRID SHORNUR	37.777	0.003	0.000	1.470	2.739	15.761		0.076	0.111	57.937
1	4.94- TRANSGRID 2.0 PROJECT - GRAND TOTAL	37.777	0.003	0.000	1.470	2.739	15.761	0.000	0.076	0.111	57.937
SBU	-T TOTAL ASSET ADDITION DURING 2020-21 (In Crores)	222.594	27.938	0.190	24.108	182.059	221.333	0.333	0.527	0.558	679.640

	Appendix 5 SBU DETAILS OF CONTRIBUTIONS, GRANTS AND SUBSIDIES TOWARDS COST OF CAPITAL ASSETS (GROSS) (Rs. Cr)																
SL No.	PARTICULARS		20:	2018-19			20	19-20			2020-21			А	ddition d	uring 2020)-21
SL NO.	PARTICULARS	GEN	TRANS	DIST	TOTAL	GEN	TRANS	DIST	TOTAL	GEN	TRANS	DIST	TOTAL	GEN	TRANS	DIST	TOTAL
1	Consumer contribution		94.37	1485.58	1,579.95	0.00	153.23	1827.83	1981.06	0.00	171.76	2212.65	2384.41	0.00	18.53	384.83	403.36
2	Subsidies	68.79		93.55	162.35	70.89	0.00	93.55	164.45	70.89	0.00	93.55	164.45	0.00	0.00	0.00	0.00
3	Grants Recd. Towards Cost Of Fixed Assets	19.83	345.5	529.85	895.19	19.83	446.67	681.93	1148.44	19.83	487.74	891.64	1399.21	0.00	41.07	209.71	250.78
4	Others	0.03	48.75	233.58	282.36	0.03	50.39	272.72	323.14	0.03	60.46	381.05	441.54	0.00	10.07	108.33	118.39
5	Gross Total	88.654	488.624	2342.57	2,919.84	90.75	650.30	2876.03	3617.08	90.75	719.96	3578.89	4389.61	0.00	69.66	702.86	772.53
6	Add: Concessional loan	5.34	8.52	82.07	95.93												
7	Add: Decommissioning liability	5.08	5.88	11.22	22.18	5.11	6.27	12.81	24.19	5.18	6.70	14.38	26.26	0.07	0.43	1.57	2.07
8	Less :Subsidies & grants amortization	17.64	49.57	325.61	392.81	23.08	83.98	485.97	593.03	28.52	115.56	694.64	838.71	5.44	31.58	208.67	245.69
9	As per Accounts	81.44	453.46	2110.24	2645.15	72.79	572.59	2402.87	3048.25	67.42	611.10	2898.64	3577.15	5.37	38.51	495.76	528.91

Appendix 6: Employee Cost for the period from 2018-19 to 2020-21 (Rs. Cr)								
Sl. No	Particulars	2018-19	2019-20	2020-21				
1	Basic Pay	1828.35	1827.45	1,944.84				
	Pension fund -Actuarial valuation	498.37	435.64	2,099.90				
	Add: Provision for pay revision	176	250.00	585.00				
2	Overtime / Holiday wages	0.29	0.36	0.37				
3	D.A.	547.44	684.99	711.29				
	Add: Provision for DA revision		22.89	19.10				
		3050.45	3221.33	5360.50				
4	Other Allowances							
	a) HRA	45.01	44.46	47.38				
	b) Spread over allowances							
	c) Incentive allowances	32.39	28.37	29.79				
	d) Local and other allowances							
5	Bonus	9.44	9.73	9.75				
6	Medical Reimbursement	12.88	12.85	11.72				
7	a) Earned Leave encashment	181.1	160.46	169.64				
	b) Terminal Surrender							
	LTA	0.22	0.26	0.02				
8	Payment under workmen compensation Act	0.54	0.22	0.31				
9	Leave Salary and Pension Contribution							
	NPS Contribution	17.87	21.84	25.02				
10	Staff welfare expenses	0.43	4.52	0.44				
	a) Uniform & Livery expenses	4.29	4.37	4.39				
	b) Cash award for meritorious service etc							
		304.17	287.08	298.46				
11	Gross employee cost (before capitalization)-As per accounts	3354.63	3508.41	5,658.96				
	Less: Actuarial liability	498.37	435.64	2,099.90				
12	Employee Cost net of actuarial liability	2856.26	3072.773	3559.06				
13	Increase over previous year		216.51	486.29				
14	YOY increase %		7.58	15.83				
15	Less Capitalized	410.54	460.94	486.69				
16	Net employee cost	2445.72	2611.837	3072.37				
17	YOY increase		166.12	460.53				
18	YOY increase %		6.79	17.63				

	Appendix 7: SBU wise break up of Non-Tariff Income 2020-21 (Rs. Cr)							
SI No	Particulars	SBU G	SBU T	SBU D	Total			
1	Interest on staff loans and advances	0.00	0.01	0.06	0.07			
2	Income from rent of land or buildings	0.61	0.60	1.39	2.61			
3	Income from sale of scrap	3.70	23.15	39.37	66.22			
4	Rental from staff quarters	0.05	0.06	0.13	0.24			
5	Excess found on physical verification	0.00	0.00	0.06	0.06			
6	Interest on investments, fixed and call deposits and bank balances	2.36	2.33	3.81	8.51			
7	Interest on advances to suppliers/contractors	-0.04	-0.12	0.19	0.04			
8	Income from hire charges from contractors and others	0.01	0.00	0.01	0.02			
9	Income due to right of way granted for laying fibre optic cables/co-axial cables on distribution system	0.00	0.00	51.11	51.11			
10	Income from advertisements, etc.	0.00	0.00	0.00	0.00			
11	Miscellaneous receipts	2.65	21.36	91.25	115.26			
12	Rebate from Central Generating Stations	0.00	0.00	149.65	149.65			
13	Recovery for theft and pilferage of energy	0.00	0.00	10.12	10.12			
14	Meter/metering equipment/service line rentals	0.00	0.00	99.48	99.48			
15	Miscellaneous Charges from consumers			236.38	236.38			
16	Wheeling charges recovery			2.89	2.89			
17	Reactive energy charges				0.00			
18	Clawback of Grant	5.44	34.42	205.83	245.69			
19	Reversal of provision on doubtful debts			328.88	328.88			
20	Misc receipts/ Charges from interstate trading of energy			45.98	45.98			
	Total	14.78	81.81	1266.60	1363.20			

	Appendix –8: Miscellaneous charge from consumers (Rs Cr)								
NO	NO PARTICULARS Rs Cr								
2	TF/RF	6.38							
3	LE/SC Minimum	0.05							
4	4 Processing fee power allocation 2.68								
5	5 STOA Registration and application 0.21								
6	STOA Open access charges	21.80							
7	Energization charges	0.33							
8	Misc charges-PF penalty	50.62							
9	Application fee & Registration fee for grid connectivity to solar								
9	plants	6.81							
10	TOTAL	88.88							

Appendix-9: MISCELLANEOUS RECEIPTS (Rs Cr)						
No	Particulars	2020-21				
1	Rental from staff quarters	0.24				
2	Rental from contractors	0.15				
3	Rent from others	2.12				
4	Pole rent Cable TV Operators	51.11				
5	Infra dev charges and supervision charges	9.51				
6	SD Forfeited	0.95				
7	Sale of trees	0.06				
8	Usufructs	0.06				
9	Penalty/LD from contractors/suppliers	10.34				
10	Interest/penalty on pole rent SD	2.22				
11	Outside students-project	0.11				
12	Fee for providing information	0.01				
13	Revenue Energy audit consultancy	0.06				
14	Rent from office cum complex	0.33				
15	Optical fiber cable leasing	5.71				
16	Registration and Application fee-Roof Top Solar Power Plants	1.75				
17	Testing fee from contractors	0.47				
18	Centage from Govt deptt/ agencies	1.91				
19	Commission for collection of electricity duty	9.39				
20	Commission Inspection Fees	0.12				
	Total	97.06				

	Appendix 10: INCOME FROM SALE OF BULB, SCRAP, TENDER FORM RTC(Rs. Cr)								
No	Particulars	AMOUNT							
1	Sale of scrap	66.25							
2	Sale of tender forms	4.71							
3	Sale of LED Bulbs	48.43							
4	Sale of safety equipment	0.04							
5	Hire charge	0.02							
4	Total	119.45							

	Appendix 11 Comparison of SBU wise break up of ARR, ERC and Revenue gap for 2020-21 (Rs Cr)													
		Audited Accounts				TU Sought				Vatiation Accounts and TU				
	Particulars		2	020-21			2	020-21		2020-21				
No		SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total	
1	Cost of Generation (SBU-G)			772.31				530.65				241.66		
2	Cost of Power Purchase			7439.15	7439.15			7342.41	7342.41			96.74	96.74	
3	Cost of Inter-State Transmission			618.78	618.78			618.78	618.78					
4	Cost of Intra-State Transmission (SBU-T)			1329.45				980.07				349.38		
5	NLDC/RLDC Charges				0.00									
6	Cost of generation of power	4.80			4.80	4.80			4.80					
7	Interest & Financial Charges													
8	Interest on loans	129.77	164.67	436.25	730.69					129.77	164.67	436.25	730.69	
9	Less: Capitalized	43.88	36.90	82.08	162.86	68.36	138.70	370.42	577.48	-24.48	-101.80	-288.34	-414.62	
10	Net interest	85.89	127.77	354.17	567.83				0.00	85.89	127.77	354.17	567.83	
11	Interest on GPF	5.27	16.29	139.13	160.69	5.27	16.29	139.13	160.69					
12	Other interest			2.17	2.17			2.17	2.17					
13	Interest on Master Trust	35.50	67.36	589.38	692.24	35.50	67.36	589.38	692.24					
14	Int on SD			149.07	149.07			193.01	193.01			-43.94	-43.94	
15	Working capital interest	7.29	15.02	132.05	154.36	6.22	17.46		23.68	1.07	-2.44	132.05	130.68	
16	Carrying cost	0	0.00		0.00			603.75	603.75			-603.75	-603.75	
17	Total I&F	133.95	226.44	1365.97	1726.36	115.35	239.81	1897.85	2253.01	18.60	-13.37	-531.88	-526.65	
18	Depreciation	179.25	251.34	581.39	1011.98	127.72	171.49	179.06	478.27	51.53	79.85	402.33	533.71	
19	O&M Expenses													
20	Employee cost	304.52	634.24	4701.10	5639.86					304.52	634.24	4701.10	5639.86	
21	Less: Capitalized	40.19	91.73	354.77	486.69					40.19	91.73	354.77	486.69	
22	Balance	264.33	542.51	4346.33	5153.17					264.33	542.51	4346.33	5153.17	
23	R&M expenses	22.45	31.62	206.51	260.58			344.15		22.45	31.62	-137.64	260.58	

2.4	A0.C	44.25	116.10	424.02	F0F 2F					44.25	116.10	424.02	FOF 2F
24	A&G expenses	44.25	116.18	434.92	595.35					44.25	116.18	434.92	595.35
25	Less: Capitalized	0.32	0.04	1.12	1.48					0.32	0.04	1.12	1.48
26	Balance	43.92	116.14	433.80	593.86	0.94	1.93	16.98	19.85	42.98	114.21	416.82	574.01
27	O&M New stations					138.81			138.81	-138.81			-138.81
28	Total O&M Expenses	330.70	690.27	4986.64	6007.61	139.75	418.62	2648.49	3206.86	190.95	271.65	2338.15	2800.75
29	Pay revision	27.64	56.93	500.45	585.02	24.66	50.80	446.53	521.99	2.98	6.13	53.92	63.03
30	Master Trust Contribution					10.26	22.64	167.10	200.00	-10.26	-22.64	-167.10	-200.00
31	Return on equity (14%)	131.16	201.80	0.00	332.96	116.38	119.99	253.50	489.87	14.78	81.81	-253.50	-156.91
32	Other Expenses	0.07	1.17	163.21	164.45	0.07	1.17	163.21	164.45				
33	Exeptional items	1.01	0.07	17.53	18.61	1.01	0.07	17.53	18.61				
34	Master Trust-Actuarial liability	99.17	204.34	1796.38	2099.89					99.17	204.34	1796.38	2099.89
35	Amortization of expenses & int						2.87		2.87		-2.87		-2.87
36	Share of gain onT&D loss reduction							101.17	101.17				
37	Recovery of past approved gap				0.00								
38	Total ARR	780.94	1371.09	17274.43	17324.70	539.99	1027.46	15346.36	15403.09	240.95	343.63	1928.07	1921.61
39	Less Tariff Income/ Rev from operation			14316.00	14316.00			13701.56	13701.56	0.00	0.00	614.44	614.44
40	Less: PF Incentive							25.76	25.76	0.00	0.00	-25.76	-25.76
41	Less: Revenue from external sale			104.63	104.63			104.63	104.63	0.00	0.00	0.00	0.00
42	Less Non-Tariff Income	8.63	41.64	698.49	748.76	9.34	47.39	824.03	880.76	-0.71	-5.75	-125.54	-132.00
43	Total ERC/ Transfer price	772.31	1329.45	15119.12	15169.39	530.65	980.07	14604.46	14661.19	241.66	349.38	514.66	508.20
44	Net Revenue Gap			-2155.31	-2155.31			-741.90	-741.90	•		-1413.41	-1413.41

	Appendix 12 Comparison of SBU wise break up of ARR, ERC and Revenue gap for 2020-21 (Rs Cr)													
			KSERC				TU Sought				Vatiation Approval and TU			
	Particulars		20	020-21			2020-21				2020-21			
No		SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total	SBU G	SBU T	SBU D	Total	
1	Cost of Generation (SBU-G)			586.34				530.65				55.69		
2	Cost of Power Purchase			8240.70	8240.70			7342.41	7342.41			898.29	898.29	
3	Cost of Inter-State Transmission			557.24	557.24			618.78	618.78			-61.54	-61.54	
4	Cost of Intra-State Transmission (SBU-T)			1162.47				980.07				182.40		
5	NLDC/RLDC Charges			3.00	3.00							3.00	3.00	
6	Cost of generation of power					4.80			4.80	-4.80			-4.80	
7	Interest & Financial Charges													
8	Interest on loans	116.32	263.65	281.40	661.37					116.32	263.65	281.40	661.37	
9	Less: Capitalized					68.36	138.70	370.42	577.48	-68.36	-138.70	-370.42	-577.48	
10	Net interest	116.32	263.65	281.40	661.37				0.00	116.32	263.65	281.40	661.37	
11	Interest on GPF	10.60	23.39	172.60	206.59	5.27	16.29	139.13	160.69	5.33	7.10	33.47	45.90	
12	Other interest							2.17	2.17			-2.17	-2.17	
13	Interest on Master Trust	35.50	78.34	578.40	692.24	35.50	67.36	589.38	692.24		10.98	-10.98		

14	Int on SD			218.49	218.49			193.01	193.01			25.48	25.48
15	Working capital interest	6.84	20.48		27.32	6.22	17.46		23.68	0.62	3.02		3.64
16	Carrying cost			121.78	121.78			603.75	603.75			-481.97	-481.97
17	Total I&F	169.26	385.86	1372.67	1927.79	115.35	239.81	1897.85	2253.01	53.91	146.05	-525.18	-325.22
18	Depreciation	174.35	222.92	121.53	518.80	127.72	171.49	179.06	478.27	46.63	51.43	-57.53	40.53
19	O&M Expenses												
20	Employee cost												
21	Less: Capitalized												
22	Balance												
23	R&M expenses							344.15				-344.15	
24	A&G expenses												
25	Less: Capitalized												
26	Balance					0.94	1.93	16.98	19.85	-0.94	-1.93	-16.98	-19.85
27	O&M New stations					138.81			138.81	-138.81			-138.81
28	Total O&M Expenses	153.37	452.88	2658.75	3265.00	139.75	418.62	2648.49	3206.86	13.62	34.26	10.26	58.14
29	Pay revision					24.66	50.80	446.53	521.99	-24.66	-50.80	-446.53	-521.99
30	Master Trust Contribution	10.26	22.64	167.10	200.00	10.26	22.64	167.10	200.00				
31	Return on equity (14%)	116.38	119.99	253.50	489.87	116.38	119.99	253.50	489.87				
32	Other Expenses					0.07	1.17	163.21	164.45	-0.07	-1.17	-163.21	-164.45
33	Exeptional items					1.01	0.07	17.53	18.61	-1.01	-0.07	-17.53	-18.61
34	Master Trust-Actuarial liability												
35	Amortization of expenses & int						2.87		2.87		-2.87		-2.87
36	Share of gain onT&D loss reduction							101.17	101.17				
37	Recovery of past approved gap			850.00	850.00							850.00	850.00
38	Total ARR	623.62	1204.29	15973.31	16052.40	539.99	1027.46	15346.36	15403.09	83.63	176.83	626.95	649.31
39	Less Tariff Income/ Rev from operation			13874.14	13874.14			13701.56	13701.56	0.00	0.00	172.58	172.58
40	Less: PF Incentive			32.50	32.50			25.76	25.76	0.00	0.00	6.74	6.74
41	Less: Revenue from external sale			615.68	615.68			104.63	104.63	0.00	0.00	511.05	511.05
42	Less Non-Tariff Income	37.28	41.82	571.23	650.33	9.34	47.39	824.03	880.76	27.94	-5.57	-252.80	-230.43
43	Total ERC/ Transfer price	586.34	1162.47	15028.55	15107.65	530.65	980.07	14604.46	14661.19	55.69	182.40	424.09	446.46
44	Net Revenue Gap			-944.75	-944.75			-741.90	-741.90			-202.85	-202.85

----- End of Chapter 5 -----

CHAPTER- 6: SUMMARY OF TRUE-UP AND PRAYER

6.1 An item wise comparison of the ARR, ERC and Revenue gap as per ARR and the actual as per the truing up petitions are given in the Table - 6.1 below.

SUMMARY OF TRUE-UP FOR FY 2020-21											
Particulars	Approved	Actual	Sought for TU	Deviation from approval							
Generation Of Power	0.00	4.80	4.80	-4.80							
Purchase of power	8800.94	8057.93	7961.19	839.75							
Interest & Finance Charges	1927.79	1726.36	2253.01	-325.22							
Depreciation	518.80	1011.98	478.27	40.53							
O&M cost	3265.00	6007.61	3206.86	58.14							
Other Expenses	0.00	164.45	164.45	-164.45							
Interest on Additional Bond to Trust	200.00	0.00	200.00	0.00							
Gains out of T&D loss reduction			101.17	-101.17							
Amortization of past gap	850.00		0.00	850.00							
RoE	489.87		489.87	0.00							
Amortization and interest			2.87	-2.87							
Exceptional item		18.61	18.61	-18.61							
Provision for pay revision			521.99	-521.99							
Net Expenditure (A)	16052.40	16991.74	15403.09	649.31							
Non-Tariff Income	650.33	748.76	880.76	-230.43							
Revenue from Tariff	14457.32	14420.63	13780.43	676.89							
Total Income (D)	15107.65	15169.39	14661.19	446.46							
Revenue surplus (Gap) (D-C)	-944.75	-1822.35	-741.90	-202.85							

6.2 The Statutory Auditors have audited and certified the accounts for the year 2020-21. This truing up petition is prepared on the basis of the audited accounts. The petitioner is furnishing the details of accounts as per formats given in the Tariff regulation. However, should the Hon Commission require any further details or information; the petitioner will be furnishing them as and when required.

Prayer

KSEBL humbly requests before the Hon Commission that:

- (1) Truing up of Expenses and Revenue as per the Audited Accounts of KSEBL for the year 2020-21 as explained in this petition may kindly be approved, in view of the care and caution taken by the Board for carrying out the functions of the Board as a public utility as per the statutory provisions under the Electricity Act, 2003 and also as per the directions, orders and regulations issued by the Hon'ble Commission, policies and directions issued by the State and Central Government and other statutory bodies within the provisions of the Electricity Act-2003.
- (2) The revenue gap as per the petition may be accounted as regulatory asset or any other appropriate means deemed fit by the Hon'ble Commission according to the provisions of law.

On Behalf of KSEB Limited

Chief Engineer
Commercial & Tariff