CHAPTER – 5

ANNUAL REVENUE REQUIREMENT FOR FY21

5.0 Annual Revenue Requirement (ARR) for FY21 - CESC's Filing:

CESC in its application dated 28th November, 2019, has sought approval of the Commission for the revised ARR for the FY21 and the revision of retail supply tariff for FY21. The summary of the proposed ARR for FY21 is as follows:

TABLE – 5.1

Proposed ARR for FY21

Amount in Rs.Crores

Sl. No	Particulars	FY21
1	Energy at Generating Bus in MU	8151.00
2	Transmission Losses in %	3.13%
3	Energy at Interface in MU	7895.71
4	Distribution Losses in %	11.90%
	Sales in MU	
6	Sales to other than IP & BJ/KJ	3627.94
7	Sales to BJ/KJ	143.84
8	Sales to IP sets	3184.34
	Total Sales	**6956.12**
	Revenue at existing tariff Rates:	
9	Revenue from tariff and Misc. Charges	2789.92
10	Tariff Subsidy to BJ/KJ	101.87
11	Tariff Subsidy to IP Sets	1816.63
	Total Existing Revenue including Miscellaneous Revenue	**4708.42**
	Expenditure:	
12	Power Purchase Cost	3198.06
13	Transmission charges of KPTCL	410.94
14	SLDC Charges	2.91
15	**Total Power Purchase Cost including cost of transmission**	**3,611.91**
16	Employee Cost	694.34
17	Repairs & Maintenance	75.24
18	Admin & General Expenses	113.28
19	**Total O&M Expenses**	**883.36**
20	Depreciation	306.80
	Interest & Finance charges:	
21	Interest on Loans	182.07
22	Interest on Working capital	49.72
23	Interest on belated payment on PP Cost	0.00

Sl. No	Particulars	FY21
24	Interest on consumer deposits	48.63
25	Other Interest & Finance charges	6.91
26	Less: interest & other expenses capitalised	-8.75
27	**Total Interest & Finance charges**	**278.58**
28	Other Debits	10.47
29	Net Prior Period Debit/Credit	0.00
30	Return on Equity	0.00
31	Funds towards Consumer Relations/Consumer Education	0.00
32	Less: Other Income	-116.55
33	**ARR**	**4,974.57**
34	Add Deficit carried forward (Regulatory Asset)	209.35
35	**Net ARR**	**5183.92**
36	**Net Deficit for FY21**	**-475.50**

CESC has requested the Commission to approve the revised Annual Revenue Requirement of Rs.5183.92 Crores for FY21 including the deficit of Rs.209.35 Crores for FY19. Considering the estimated revenue from sale of power to the consumers and miscellaneous revenue at the existing tariff, of Rs.4708.42 Crores, CESC has projected the revenue gap of Rs.475.50 Crores for FY21. In order to bridge the revenue gap of Rs.475.50 Crores for FY21, the CESC has proposed the average increase in retail supply tariff by 68 paise per unit in respect of all category of consumers including BJ/KJ and IP set consumers for FY21.

5.1 Annual Performance Review for FY19 & FY20:

As discussed in the preceding chapter of this Order, the Commission has carried out the Annual Performance Review for FY19 based on the audited accounts and other relevant records furnished by CESC. Accordingly, a surplus of Rs.62.46 Crores of FY19, is required to be carried forward to the ARR of FY21.

As regards APR for FY20, it is noted that the financial year 2020 is not yet to be completed and the accounts thereon are yet to be finalized, hence the Commission decides to take up the APR of FY20, while taking up the revision of ARR / Retail Tariff, if any, for FY22.

5.2 Annual Revenue Requirement for FY21:

5.2.1 Capital Investments for FY21:

CESC Proposal:

The CESC, in its Tariff application, has proposed capex of Rs.761.92 Crores and Rs.835.50 Crores for FY20 and FY21 respectively as below:

TABLE - 5.2

CESC's Proposed Capex for FY21

Amount in Rs. Crores

Sl. No	Schemes	FY20 CESC Proposal as per Tariff application	FY21 CESC Proposal, as per Tariff application
1	Extension and Improvement	120.17	225.00
2	NJY	19.47	0.00
3	IPDS	44.28	20.00
4	DDUGJY	75.00	20.00
5	DDG	5.00	0.00
6	RAPDRP	0.00	0.00
7	Soubhagya	10.00	10.00
8	Replacement of failed transformers	5.00	5.00
9	Service Connection(WS, IP SET, New connection)	140.00	305.00
10	TSP-Energization of IP Set	1.00	3.00
11	SCP-Energization of IP Set	7.00	9.00
12	Special development Programme (SDP)	25.59	30.00
13	Gangakalyana- Energisation of IP Set	83.99	92.00
14	Tools & plants	6.00	5.00
15	Civil Engineering works	12.00	14.00
16	Providing meters to DTC, BJKJ, Streetlight, Replacement of electromechanical meters, Providing modems to meters for communication	15.00	20.00
17	IT initiatives	20.00	15.00
18	5 Model villages in each MLA/MP constituency	70.00	8.00
19	Model sub division	85.00	40.00
20	DSM Activities	10.00	4.50
21	New Projects (any Central or State Govt. Programmes	7.42	10.00
	Total	**761.92**	**835.50**

The CESC has submitted that, the proposed amount of Capex consists of spill-over works of FY20 and new works of FY21. The scheme-wise investment programme for FY21, as corrected and submitted by CESC, in its compliance to preliminary observations is as given below.

a) **Extension and Improvement work**: CESC has taken steps to improve its distribution network to cater to the increasing load growth in its system, reduce the breakdowns and interruptions, provide additional distribution transformers in towns and villages, provide link lines to evacuate power from newly established Stations/MUSS by KPTCL, provide Express feeders from Stations, re-conductoring the existing lines to increase capacity or to replace aged /deteriorated conductors, replace deteriorated Poles etc. For these works provision of Rs.225 Crores is made for FY21.

b) **Integrated Power Development Scheme-IPDS**: Distribution network strengthening and metering works in 33 towns are included under this scheme and the proposed project cost is Rs.170.00 Crores as per the given guidelines of IPDS. Tender process has been completed and work is under progress. Hence Budget provision has been made for Rs.20 Crores for FY21.

c) **Deen Dayal Upadhyaya Grameena Jyothi Yojane- DDUGJY**: The Improvement works in rural area such as:

- Separation of agriculture and non-agriculture feeders.
- Strengthening and augmentation of sub-transmission and distribution.
- Metering
- Rural electrification (including SAGY- Sansad Adarsh Grama Yojana) come under this scheme.

The works are awarded for Rs.182.43 Crores and work is under progress. Budget provision has been made for Rs.20 Crores for FY21.

d) **Soubhagya Scheme**: Government of India has launched Pradhana Mantri Sahaj Bijli Har Ghar Yojana (Soubhagya) on 20.10.2017 to achieve universal household electrification in the country. It is being implemented in Kodagu District in CESC jurisdiction. The work has been awarded for the amount of

Rs.16.98 Crores. The work is under progress. Hence Budget provision has been made for Rs.10.00 Crores for FY21.

e) **Replacement of failed Transformers**: In some cases, the failed transformer is required to be scrapped and if it needs replacement by a new transformer, it has to be accounted under capex. Hence budget provision of Rs.5.00 Crores is made for FY21.

f) **Service Connection works:** Arranging Power supply to lighting and power installations, drinking water supply works and providing infrastructure to IP set works are covered under Service Connection Works. Budget provision has been made for Rs.305 Crores for FY21.

g) **Special Component Plan (SCP), Tribal Sub-Plan (TSP) and SDP (Special Development Plan) works**: Budget grants for Energization of IP sets under SC and ST Category were released under SCP and TSP programmes. Hence budget provision of Rs.9 Crores for SCP and Rs.3 Crores for TSP for FY21.

h) **Special development Programme (SDP):** As per Dr. Nanjundappa committee report there are 20 Nos. of backward Taluks in CESC area for which budget provision are made for infrastructure development in Energy Sector. Hence provision of Rs.30 Crores is made in FY21 under SDP scheme.

i) **Gangakalyana works**: There are 2318 number of Ganga Kalyana works applications pending electrification, as at the end of September 19 from all the five Development Corporations. For FY21 a target of 3200 number of IP sets under Gangakalyana scheme is set by the CESC. Action has already been initiated to float tenders for energization of these GK IP sets works and tenders are awarded. Hence budget provision of Rs.92 Crores is made for FY21.

j) **Purchase of T&P Materials:** Materials for safety and prevention of accidents are purchased under T&P account head, for which budget provision of Rs.5 Crores is made in FY21.

k) **Civil Engineering Works:** For construction of office buildings and other civil related works budget provision of Rs.14 Crores is made in FY21.

l) **Metering programme**: It is planned to Provide Meters to DTC, BJ/KJ, Street Lights, replacement of electromechanical meters, providing modems to meters for communication, for which budget provision of Rs.20 Crores is made in FY21

m) **IT initiatives:** IT initiatives like FMS (Financial Management System), MMS (Material Management System), DTLMS (Distribution Transformer Lifecycle Management System) and Date Centre etc., are being implemented in CESC to bring transparency in financial accounting, which will also help in timely submission of accounts and control over finances of the company for which budget provision of Rs.15 Crores is made in FY21.

n) **Improvement works in 5 Model villages in each MLA Constituency**: As per the announcements in Hon'ble CM's Budget speech of 2017-18 improvement works in 5 Model villages in each MLA Constituency is proposed. Works are taken up under unit rate contract total turnkey basis. Hence provision of Rs.8.00 Crores is made in FY21.

o) **Model Sub-Division works:** It is planned to convert overhead distribution system to UG cable in selected areas of Mysore city under Model Sub-division project and the works awarded under total turnkey basis. These works are under progress. For these works provision of Rs.40 Crores is made for FY21.

p) **DSM Activities**: Budget provision of Rs.4.50 Crores. is made for replacement of existing pump sets by energy efficient pump sets under AG-DSM work in Hoskote feeder at Smart grid area.

q) **New Projects**: CESC has made Budget provision of Rs.10 Crores for FY21 for new projects coming up in future, based on the following:

- New schemes or projects that may be envisaged by the Central Government or State Government for betterment of public life through quality of power supply.
- Works which involves increasing the aesthetic value of cities coming under CESC.
- Smart city concepts, UG cable concepts even at small taluk level in future.

Commission's Analysis and decision:

As per the Tariff application, CESC has proposed capex of Rs.761.92 Crores and Rs.835.50 Crores for FY20 and FY21 respectively. In the preliminary observations the CESC was directed to explain the rationale behind submitting the above proposal as against the Commission approved capital expenditure of Rs.700 Crores for FY20 and Rs.650 Crores for FY21, in the Tariff Order 2019, by considering the financial capability of CESC.

The CESC in its compliance has stated that, it has proposed CAPEX budget of Rs.835.50 Crores for FY21 during MYT filing for fifth control period for FY20 to FY22. It has made provision for new projects which is proposed by GoI/GoK to be taken up during FY21. Hence the original proposal as made under MYT application has been retained at Rs.835.50 Crores for FY21.

It is to be stated here that CESC has filed application for APR of FY19 and revision of ARR for FY21. Hence the question of approving the revised capex for FY20 will not arise in these proceedings. The capex for FY20 shall be regulated in terms of the approval given in the MYT Order dated 30th May, 2019. Any excess or savings in the expenditure shall be dealt with by suitable appropriation and re-appropriation within the approved amounts. The marginal difference, if any, vis-à-vis the approved and the actual expenditure will be considered during the Annual Performance Review for FY20. Hence it is unable to consider approving revised capex for FY20 during these proceedings.

In the preliminary observation, the CESC was directed to submit the total capex incurred/to be incurred in respect of E&I works and metering and corresponding targets for reduction in distribution losses and percentage of metering in the corresponding categories, for which meters are provided viz. DTC, BJKJ, Street light etc. for the last three financial years (FY17, FY18 and FY19). However, the CESC has not provided any compliance in this regard.

The CESC's previous years' achievement of capex is shown in the table below:

TABLE – 5.3

Approved and Actual Capex incurred by CESC

(Amount in Rs. Crores)

Particulars	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Capital investment filed	560.00	575.50	455.00	669.00	762.00	889.00	972.25
Capital investment approved by the Commission	560.00	575.50	455.00	317.00	707.00	889.00	972.25
Actual capital investment incurred as per audited accounts *	195.87	321.75	318.83	488.52	467.64	535.00	479.38
Percentage of actual capital investment to the approved capital investment	34.98%	55.91%	70.07%	154.11%	66.14%	60.18%	49.31%
***without considering capital investment disallowed due to prudence check**							

The Commission, based on the previous five years' average expenditure of about Rs.458 Crores, and considering the break up capex furnished by the CESC, recognizes the capex proposal of CESC, at Rs.650 Crores for FY21. The Commission reiterates that all the capital expenditure shall be regulated within the approved limits and that for any expenditure incurred without the approved, the corresponding financing costs will not be passed on in the tariff to the consumers.

The Commission directs CESC to maintain the physical progress as well as financial progress in respect of the works carried out under Capex indicating timelines of completion, cost to benefit ratio, etc. These details shall be furnished to the Commission as and when Commission directs.

The Commission directs CESC to take concrete measures to complete and capitalize the works in the prescribed time schedule, so that, its benefits are being passed on to the consumers effectively and capitalize the works proposed as far as possible during each financial year.

The Commission directs the CESC to put sincere efforts towards achieving the following objectives of the proposed schemes under capex on due priority:

1. Reducing distribution losses;
2. Reducing the HT:LT Ratio;
3. Reduce Transformer failures;
4. Segregate the loads in the feeders;
5. Increase the penetration of HVDS;
6. Reduce Power theft;
7. Bring programs for the awareness among the people on usage and conservation of energy;
8. Improve the sales to metered category;
9. Improve the Power factor of the IP set loads by installing switched; capacitors of suitable capacity to the secondary of the transformers.

5.2.2 Sales for FY21:

A. Sales- Other Than IP Sets:

CESC Proposal:

CESC in its filing has estimated the revised sales for FY21 as 6,956.12 MU, including station auxiliary consumption of 5.38MU.

I. CESC's Approach:

a. CESC, in its filing has submitted that the forecast for FY20 & FY21 is based on CAGR for the period FY16 to FY19, CAGR for the period FY14 to FY19 and trend analysis of 10-year data (linear & logarithmic trends). CESC has also submitted that comparison of the projections has been made with the forecast as per the reports of 19th EPS, PRDC report and Feedback

Infra report and that the projections as per the above reports have not been considered, as they are way off the mark.

b. CESC has adopted 3-year CAGR for estimating number of installations for LT-2a, LT-6WS, HT-1, HT-2b and HT-2c categories and for all other categories except BJ/KJ, it has adopted 5-year CAGR. While adopting 3-year or 5-year CAGR, CESC has compared the previous year growth rate also. For BJ/KJ, the number of installations is retained at September, 2019 level, stating that there are no new services under BJ/KJ category.

c. Similarly, CESC has adopted 5-year CAGR for estimating energy sales for LT-4a &c, LT-6, HT-1 & HT-3 categories and for all other categories except BJ/KJ, LT-4b & HT4, it has adopted 5-year CAGR. While adopting 3-year or 5-year CAGR, CESC has compared the previous year growth rate also.

The observations of the Commission on sales forecast for the FY21 and replies furnished by CESC are as indicated in the following paragraphs:

a) At page 126, the 5-year CAGR for HT-2a category should be 5.36% and not 7.56% as indicated.

CESC Replies:

At page 126 the growth rate shall be corrected as 5.36% and the same growth rate is adopted for projection.

b) In HT-5 category, since the previous year growth is negative, considering 24.57% growth in installations is too high. The Commission suggested to CESC to consider revising the same.

CESC Replies:

HT-5 is temporary in nature and for this category lowest of 5-year and 3-year CAGR is considered. Hence, estimates of CESC may be retained.

c) Sales estimates for BJ/KJ and LT-4b has been done considering previous year growth rate. CESC was suggested to estimate the sales to BJ/KJ and LT-4b based on FY19 specific consumption.

CESC Replies:

As almost all BJ/KJ installations are on NJY or rural feeders, there is increasing trend in consumption and considering specific consumption may not project actual requirement. Hence, estimates of CESC may be retained.

As CAGR is negative for LT-4b category, previous year growth is considered. Hence, estimates of CESC may be retained.

d) At page 132, the 3-year sales CAGR for LT-2b category should be 7.58% and not 1.59% as indicated. Similarly, for LT-3 it should be 4.76% and not 3.18%. CESC was directed to confirm the growth rates considered and reconcile the data.

CESC Replies:

At page 132 the 3-year CAGR of LT-2b shall be corrected as 7.58% and for LT-3 as 4.76%. It is further submitted that, for estimation, for LT-2b category 7.58% and for LT-3 4.76% are considered.

e) For LT 4c, considering 15.51% sales growth is too high. CESC was suggested to estimate sales by considering specific consumption of FY19.

CESC Replies:

As there was good rainfall in the region, for LT-4c lowest of CAGR is considered.

f) For HT-4 sales considering 14.94% growth rate is too high. The Commission suggested to CESC to consider revising the same.

CESC Replies:

For HT-4, due to lifestyle changes, the sales in the previous year was 14.94%. Hence, the same growth rate is retained for FY21.

g) In order to analyze HT sales, CESC was directed to furnish the breakup of sales data of HT2(a), HT2(b), HT2(c) and HT-4 categories along with the consumption from open access / wheeling for the period 2017-18 to 2018-19 in the specified format.

CESC Replies:

CESC has furnished the details.

h) The Commission noted that the growth rate for installations estimated by CESC is on the lower side for HT-1 and is higher for LT2a, HT-2b & HT-4, when compared to the CAGR. Hence, the Commission suggested to The Commission suggested to CESC to consider revising the same.

CESC Replies:

a. For HT-1 mid-year growth of five number of installations has been considered for estimating the number of installations.
b. For LT-2a maximum CAGR is considered, anticipating more additions of installations.
c. As per tariff order-2019, all activities listed under LT-3 tariff schedule and not included in HT-2b tariff shall be classified and billed under HT-2b, if HT supply is availed and therefore, higher projection is made.
d. For HT-4 conservative estimates are made.

i) The Commission noted that the energy sales growth rate considered for HT2a & HT-4 is higher and for LT-6- Water Supply is lower, keeping in view the CAGR. Hence, the Commission suggested to CESC to consider revising the same.

CESC Replies:

a. For HT-2a highest CAGR is considered, as previous year growth is 13.37%.
b. For HT-4 previous year growth rate is considered as CAGR is negative.
c. For LT-6 WS, previous year growth rate is considered as CAGR is high.

j) For HT2(a) category, the sales estimate based on the analysis of open access impact shall be considered. CESC should have computed the growth rates considering the total energy sold to this category including OA/wheeling and should have estimated the sales considering the ratio of energy sold by CESC in FY19 to the total sales of FY19 including OA/wheeling sales. CESC may compute HT-2a sales on the above method and furnish the data.

CESC Replies:

CESC has submitted that the overall sales including OA consumption had 9.04% growth rate during FY16 to FY19 and the OA consumption alone had average growth rate of 41.605% over last three years. Based on this approach, the sales for FY20 would be 832.66 MU which would be difficult to achieve in FY20. Hence, CESC has requested the Commission to retain the sales as estimated by CESC.

k) To validate the sales, the Commission directed CESC to furnish the category wise information in the specified format.

CESC Replies:

CESC has submitted the above information.

The Commission has noted the above replies of CESC and appreciates CESC for analyzing HT-2a sales based on OA consumption. However, the reason given for BJ/KJ sales estimation is not acceptable, for the reason that with segregation of feeders, CESC would be able to arrive at BJ/KJ specific consumption more accurately than before. Similarly, in case of HT-2b, the reason furnished is not satisfactory.

The approach of the Commission in estimating the number of installations and energy sales for FY21 is discussed in subsequent paragraphs.

II. Commission's approach for estimating the number of installations and sales for FY21:

1) No. of Installations:

While estimating the number of installations (excluding BJ/KJ and IP), the following approach is adopted:

a. The Commission has validated both the number of installations and energy sales to various categories considering the actuals as on 30th November, 2019 and has estimated the number of installations and sales for the remaining period reasonably. Accordingly, the base year estimation has been revised which has an impact on the estimates on the number of installations and sales for the FY21.

b. Wherever the number of installations estimated by the CESC for the FY21 is within the range of the estimates based on the CAGR for the period FY14–FY19 and for the period FY16 - FY19, the estimates of the CESC are retained.

c. Wherever the number of installations estimated by the CESC for the FY21 is lower than the estimates based on the CAGRs for the period FY14–FY19 and for the period FY16-FY19, the estimates based on the lower of the CAGRs for the period FY14–FY19 and for the period FY16-FY19 are considered.

d. Wherever the number of installations estimated by CESC for the FY21 is higher than the estimates based on the CAGRs for the period FY14–FY19 and for the period FY16-FY19, the estimates based on the higher of the CAGRs for the period FY14–FY19 and for the period FY16-FY19 are considered.

e. For LT-7 and HT-5 categories, the estimates of CESC are retained.

Based on the above approach, the total number of installations (excluding BJ/KJ consuming ≤ 40units/month and IP installations) estimated by the Commission for the FY21 is indicated in the table below:

Approved Number of installations

FY21	
Filed	Approved
2547745	2537364

***Excludes 250 numbers of station auxiliary installations**

2) Energy Sales:

(i) For categories other than BJ/KJ and IP sets, generally the sales are being estimated, considering the following approach:

a. The base year sale for FY20 as estimated by the CESC has been validated, duly considering the actual sale upto November, 2019 and modified suitably as stated earlier.

b. Wherever the sale estimated by the CESC, for the for FY 21, is within the range of the estimates based on the CAGR for the period FY14–FY19 and for the period FY16-FY19, the estimates of the CESC are considered.

c. Wherever the sales estimated by the CESC for the FY21 is lower than the estimates based on the CAGRs for the period FY14–FY19 and for the period FY16-FY19, the estimates based on the lower of the CAGRs for the period FY14–FY19 and for the period FY16-FY19 are considered.

d. Wherever sale estimated by CESC for FY21 is higher than the estimates based on the CAGRs for the period FY14–FY19 and for the period FY16-FY19, the estimates based on the higher CAGRs for the period FY14–FY19 and for the period FY16-FY19 are considered.

e. LT-4b and LT-4c, the sales are estimated based on FY19 specific consumption.

f. For LT-7 and HT-5 categories, the estimates of CESC are retained.

g. For HT-2a CAGR approach is adopted, as the estimates based on OA is higher.

h. HT-4 sales are retained at FY20 level as there are no additions to installations in FY21.

Based on the above approach, the sales (excluding BJ/KJ consuming ≤ 40 units/month and IP sales) estimated by the Commission, for the FY21, is indicated in the following table:

Approved Energy Sales*

in Million Units

FY21	
Filed	**Approved**
3664.13	**3694.90**

***Excludes Auxiliary consumption of 5.38 MU**

(ii) Sales to BJ/KJ:

The break-up of sales to BJ/KJ installations considered for FY19 is as indicated below:

Particulars	No. of Installations	Consumption in MU	Specific consumption per installation per month (kWh)
Installations consuming less than or equal to 40 units	464785	100.21	17.97
Installations consuming more than 40 units and billed under LT2(a)	28170	30.07	88.95

The Commission notes that, in respect of BJ/KJ installations consuming less than or equal to 40 units per month, the specific consumption works out to 17.97 units /installation/month and 88.95 units /installation/month in respect of BJ/KJ installations consuming more than 40 units per month.

The Commission notes that the number of BJ/KJ installations as on 30.11.2019 is 4,92,224 (455319 installations consuming less than or equal to 40 units & 36905 Installations consuming more than 40 units), whereas for FY20 & FY21 CESC has estimated total BJ/KJ installations as 491121(446261 installations consuming less than or equal to 40 units & 44860 Installations consuming more than 40 units), which is lower than the mid-year figure for FY20. Hence, the Commission has considered the number of installations as on 30.11.2019, as furnished by CESC and the specific consumption as indicated earlier, for estimating BJ/KJ sales. Thus, the sales approved for FY21 is as indicated in the following Table:

TABLE – 5.4

Break Up of BJ/KJ Installations

Particulars	No. of Installations	Sales-MU
Installations consuming less than or equal to 40 units	455319	98.17
Installations consuming more than 40 units and billed under LT2(a)	36905	39.39

B. Sales to IP sets – projections for ARR FY21;

CESC Proposal:

CESC, in its tariff application, has projected IP sets consumption of 3,184.34 MU against 4,16,036 for FY21. CESC, as per D-2 Format, has reported actual consumption of 2,885.52 MU against 3,78,274 number of IP set installations for FY19. CESC, in its current tariff filing, has reported a growth of 5.36% over previous year in the number of IP installations and as a result has considered addition of 18,881 number of installations for FY20 and the same increase for FY21.

Commission's Analysis and Decision:

a. While verifying the computations of IP set, it is found that, the actual sales to IP set installations for FY19 works out to 2,733.39 MU (as detailed in Chapter-4 Sales portion). Based on the actual sales to IP sets, the Commission has arrived at the specific consumption as 7,415 units per installation per annum for the FY19, by considering the mid-year installations of 3,68,648 numbers.

b. From the data for FY18 and FY19 submitted by CESC, the Commission has found that the average addition to the number of IP sets installations during FY18 and FY19 is 19,796. As per the submissions made by CESC, it is observed that, CESC has considered an addition of 18,881 number of installations for FY20 as well as for FY21 based on the growth rate of 5.36% over the previous year. As the proposal of CESC is found to be reasonable., the number of installations are projected for FY21 based on this proposal. The number of installations for FY20 are projected as 3,97,155 (3,78,274 + 18,881) and for FY21 it is projected as 4,16,036 (3,97,155 + 18,881).

c. The actual sales to IP sets for FY20, till November 2019, as reported by CESC, in its replies to preliminary observations for tariff filing is 1,726.62 MU against 3,88,521 number of installations. The actual specific consumption per IP per month for FY19 on the basis of revised worked out sales works out to 617.92 units per IP per month. By considering the approved specific consumption for FY19 and actual sales till November 2019, sales for the remaining four months i.e., December 2019 to March 2020 have been estimated. The specific consumption for the revised sales for FY20 is worked out and the same is applied for projecting the sales to IP sets for FY21. The Commission has decided to the consider the data of actual sales to IP sets for FY20, till November 2019 as furnished by CESC, in its replies to preliminary observations, only on provisional basis, for making the estimates for FY21.

d. Based on the estimated number of installations and consumption for FY20 and by considering the revised specific consumption for FY19, the details of energy sales projections of IP set consumers for FY21 are as indicated below;

TABLE – 5.5
Approved IP Set Sales for FY21

Particulars	FY21		
	As approved by the Commission in TO 2019	**As submitted by CESC in its Tariff Application**	**As approved by the Commission (Revised)**
No. of Installations	4,05,041	4,16,036	4,16,036
Mid-year number of Installations	3,97,371	4,06,596	4,06,596
Specific consumption in units/installation/annum	6,459	7,832	6,925
Sales in MU	**2,566.58**	**3,184.34**	**2,815.67**

Accordingly, the Commission approves 2,815.67 MU as energy sales to IP-sets for the FY21, as against the projected sale of 3,184.34 MU. The number of

installations approved for FY21 is 4,16,036. This approved IP set consumption for FY21 is with the assumption that the Government of Karnataka would release full subsidy to cover the approved quantum of IP-sales. However, if there is any reduction in the subsidy allocation by the GoK, the quantum of sales to IP sets of 10 HP and below, shall be proportionately regulated by restricting the hours of supply based on the subsidy allocation from the Government. The Commission will not consider any quantum of energy supplied (for computation of subsidy), over and above the numbers of hours for which the Government of Karnataka has extended free power to the IP sets.

e. The Commission notes that, the sales to all the other categories of consumers except BJ/KJ and IP Set categories is indicating a reducing trend, whereas the sales to IP set installations is showing an increasing trend. The Commission took note of the sales figure of CESC and the methodology followed in arriving the figure therein. Even after segregation of the IP feeders with huge investment, the Commission has observed that the power supply to the IP Set category is not being arranged as per the hours of supply stipulated in the Government Orders and thus the sales under IP sets category is increasing year on year. The Commission has further observed that the month-wise IP set sales figures submitted earlier during FY19 differs from the figures submitted by the CESC in the present application. By considering all these aspects, the Commission decides that, if discrepancies are continued in computation of IP set sales figures submitted by the ESCOMs, the Commission may take up third party verification of the DTC meter readings and the meter reading of the IP set feeders for establishing the correctness of computation of IP Set sales figures.

The Commission notes that in view of the increase in the IP set sales, the sales and subsidy amount to IP Set installations payable by the Government is increasing year on year and the amount of subsidy receivable from the GoK towards the outstanding subsidy is also increasing, which is affecting the finances of ESCOMs. **Thus, the Commission directs the CESC to restrict its sales to IP Set installations to the level of sales approved by the Commission.**

For any increase in consumption without establishing the increase in the number of installations or specific approval from the Government for giving enhanced hours of supply, CESC itself would be responsible and that the consequent additional financial burden would not be considered for the purpose of ARR and also for the additional subsidy payable by GoK. In such a situation, the Commission would, besides disallowing the excess consumption, will also consider levy of penalty for the increased distribution losses.

The Government of Karnataka is requested to issue necessary directions to the ESCOMs in this regard, and monitor the monthly consumption regularly so to ensure that the IP set consumption is regulated as per the subsidy made available to the ESCOMs.

f. The Commission notes that CESC has taken up GPS survey of IP-sets to identify the defunct / not in use / dried up installations in the field and to arrive at the correct number of IP-sets by deducting such defunct / not in use / dried up IP-set installations from its account, on the basis of GPS survey results. CESC has not submitted the data of GPS survey with clarity giving details of working and defunct / not in use / dried up installations. From the data of GPS survey furnished by CESC, it is observed that there is a difference in number of installations to that of the number of IP installations in the DCB and the accounts. Thus, the Commission has observed inconsistency in the GPS survey data furnished by CESC and hence the Commission is unable to accept the same.

g. In view of fact that the GPS survey of IP-sets as furnished by CESC is not satisfactory, the number of installations reckoned for FY19 and estimates for FY21 are subject to change based on the GPS survey results. Accordingly, after furnishing the GPS survey data and finalization of the report, CESC shall furnish the correct number of IP set installations, duly deducting the number of installations not in use / dried up / defunct IP sets from the total number. Thereafter, any variation in the sales due to change in the number of installations would be trued up during the Annual Performance Review for the FY20/21.

h. While assessing the sales to IP sets for FY19, the Commission had observed abnormal average consumption per IP installation per month, in few of the segregated agricultural feeders. Hence, the feeder-wise, month-wise data of assessment of IP sets for the period from April 2019 to November 2019 furnished by CESC, in its replies to preliminary observations, has been considered provisionally for the purpose of projecting the sales for FY20 and FY21. The Commission would consider revision of the same, based on the GPS survey data. **Hence, CESC is directed to submit the final survey Report within 3 (three) months from the date of this Order. The survey data should be reconciled with the DCB Statement data and thereafter report the total IP-set consumption to the Commission, month on month regularly, as per the format prescribed in the previous tariff orders of the Commission.**

Based on the above discussions, the category wise approved number of installations for the FY21 vis-à-vis the estimates made by the CESC is indicated in the following Table:

TABLE-5.6

Category-wise approved number of installations

No of Installations

	Category	CESC Filing FY21	KERC Approved FY21
LT-1 (a)	Bhagya Jyoti < =40 units	446261	455319
LT-1 (a)	Bhagya Jyoti>40	44860	36905
LT-2a	Domestic AEH	2049658	2052122
LT-2b	Pvt. Institutions	3432	3382
LT-3	Commercial - Applicable to areas coming under VPs	275037	271801
LT-4 (a)	IP sets - Less than 10 HP - General	416036	416036
LT-4 (b)	Irrigation Pump sets - More than 10 HP	213	234
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	10839	10509
LT-5	Lt Industries	46116	45379
LT-6	Water Supply	32395	31845
LT-6	Street Lights	25770	25770
LT-7	Temporary Power Supply	56855	56855
	LT Total	**3407472**	**3406157**

	Category	CESC Filing FY21	KERC Approved FY21
HT-1	HT Water Supply	189	185
HT-2 (a)	HT Industries	1105	1107
HT-2 (b)	HT Commercial	750	745
HT-2(c)	Hospitals run by Govt. Charitable Institutions etc.	370	370
HT-3(a) & (b)	HT Irrigation & LI Societies	109	109
HT-4	Res. Apartments	20	19
HT-5	Temporary	27	27
HT Total		**2570**	**2562**
Grand Total		**3410042**	**3408719**
	***Categories other than IP sets and BJ/KJ consuming less than or equal to 40 units/mth./instl.**	**2547745**	**2537364**
	IP sets and BJ/KJ consuming less than or equal to 40 units/mth./instl.	**862297**	**871355**

***Excludes 250 station auxiliary installations**

The approved category-wise sales are as indicated in the following Table:

TABLE - 5.7
Category wise approved energy sales

Million Units

Tariff Category	Consumer Category	CESC Filing FY21	KERC Approved FY21
LT-1 (a)	Bhagya Jyoti < =40 units	102.27	98.17
LT-1 (a)	Bhagya Jyoti>40	41.57	39.39
LT-2a	Domestic AEH	1048.57	1066.96
LT-2b	Pvt. Institutions	11.31	11.07
LT-3	Commercial - Applicable to areas coming under VPs	327.55	337.86
LT-4 (a)	IP sets - Less than 10 HP - General	3184.34	2815.67
LT-4 (b)	Irrigation Pump sets - More than 10 HP	0.80	0.52
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	26.75	24.33
LT-5	Lt Industries	152.73	153.15
LT-6	Water Supply	280.35	300.41
LT-6	Street Lights	136.17	132.65
LT-7	Temporary Power Supply	21.70	21.70
	LT Total	5334.11	5001.89
HT-1	HT Water Supply	472.15	475.07
HT-2 (a)	HT Industries	811.08	802.89
HT-2 (b)	HT Commercial	153.28	149.80

Tariff Category	Consumer Category	CESC Filing FY21	KERC Approved FY21
HT-2(c)	Hospitals run by Govt. Charitable Insttns etc.	55.69	57.83
HT-3(a) & (b)	HT Irrigation & LI Societies	116.61	114.57
HT-4	Res. Apartments	5.48	4.35
HT-5	Temporary	2.34	2.34
HT Total		1616.63	1606.85
*Grand Total		**6950.74**	**6608.74**
	*Categories other than IP sets and BJ/KJ consuming less than or equal to 40 units/month./instln. (including Auxiliary Consumption)	3664.13	3694.90
	IP sets and BJ/KJ consuming less than or equal to 40 units/month./instln.	3286.61	2913.84

***Excludes station auxiliary consumption of 5.38 MU**

5.2.3 Distribution Losses for FY21:

CESC's Submission:

CESC in its application has reported distribution loss of 11.90% for FY21 as against an approved loss level of 12.50%. CESC in its filing has submitted the following:

TABLE – 5.8
Projected Distribution Loss-FY21 – CESC's Submission

Figures in %

Particulars	FY21
Input at Distribution Level	7895.71
Total Sales	6956.12
Total distribution Loss (MU)	939.59
Total Losses at CESC input (%)	**11.90%**

Commission's Analysis and Decisions:

The Commission, in its Tariff Order dated 30.05.2019, has approved the distribution losses for CESC at 12.50% for FY21. The performance of CESC in achieving the loss targets set by the Commission in the past five years is as follows:

TABLE – 5.9

Approved & Actual Distribution Loss FY14 to FY19

Figures in %

Particulars	FY14	FY15	FY16	FY17	FY18	FY19
Approved Distribution loss	15.50	15.00	14.50	13.25	13.00	12.75
Actual distribution loss	14.73	13.88	13.60	13.10	13.20	14.15*

*As per the Audited accounts, CESC has considered 12.04% as distribution losses. However, due to the revision of the IP set consumption for FY19 by the Commission, as discussed in the APR chapter, the losses for FY19 works out to 14.15%.

The Commission notes that, in the preceding years of FY18 & 19, the distribution loss has increased by 1.05 percentage points. However, in the past five years (with base year as FY14), CESC has been able to achieve distribution loss reduction of 0.58 percentage point only.

The Commission, in its preliminary observation had observed that considering the proposed capex of Rs.761.92 Crores for FY20 and Rs. 835.50 Crores for FY21 and the actual distribution 12.04% achieved during FY19 as submitted by CESC, the distribution losses proposed by CESC for FY21, a meagre reduction target of 0.14% over FY19, is not justifiable. Hence, CESC was directed to re-assess and propose the revised the distribution loss targets for FY21. CESC, in its reply, has submitted that CESC has achieved distribution loss of 12.04% against Commission's approved average loss percentage of 12.75% and any further reduction in the loss is difficult and requires time to study the impact. Thus, CESC has requested the Commission to consider the same and retain the proposed losses of 11.90% for FY21.

The Commission notes that, most of the capex works like E&I works, IPDS, DDUJY, providing meters to DTC, etc. should enable CESC not only to strengthen its infrastructure but also result in reduction of the distribution losses.

Hence, in view of the substantial investment, the loss reduction proposed for FY21 by CESC is meager. In the light of the above discussion and the capex incurred so far, along with the proposed capex for FY21 and the reduction in distribution losses achieved by CESC during the previous years, the Commission decides to fix the following distribution loss targets for FY21:

TABLE – 5.10
Approved Distribution Losses for FY21

Figures in % Losses

Particulars	FY21
Upper limit	11.75
Average	**11.50**
Lower limit	11.25

5.2.4 Power Purchase for FY21

The ESCOMs, in their tariff applications have submitted the D-1 Format, wherein the requirement of power purchase for the FY21 has been furnished. The consolidated statement showing the energy requirement for FY21, is shown hereunder:

TABLE – 5.11
Requirement of Energy as filed by ESCOMs

ESCOMs	Energy requirement for FY21 (in MU)
BESCOM	35120.40
MESCOM	6453.45
CESC	8151.00
HESCOM	16312.64
GESCOM	9328.34
Total	**75365.83**

CESC's submission:

The CESC has submitted its power purchase requirement for the year FY21 based on the projected sales, as follows:

TABLE – 5.12
Energy Requirement as filed by CESC

Particulars	FY21
Sales (MU)	6956.12
Distribution losses (%)	11.90%
Energy at IF point (MU)	7895.71
Transmission Losses (%)	3.13%
Energy Required to meet the sales of CESC (MU)	**8151.00**

5.2.5 Sources of Power:

CESC's submission;

The CESC, in its tariff application, has furnished the sources of power from, which it plans to meet the requirement of Power, for FY21.

CESC has submitted the basis for considering the availability of power from different sources, as follows:

(i) The availability/ power procurement from KPCL Thermal and Hydel stations is on the basis of Power Purchase Agreement dated 22.05.2010, based on norms approved by the State Commission vide its order dated 03.08.2009.

(ii) Availability of power from Central Generating Stations (CGS) is as per the Ex-Bus generation details furnished by the CGS to the CEA, for preparation of LGBR.

(iii) In respect of Major IPPS, RE and other sources such as UPCL, RE generators and others sources such as Jurala Power & TB Dam Power etc., the availability is reckoned based on the contracted capacity.

(iv) The Capacity of the existing sources and the envisaged additional sources vis-à-vis the energy requirement for the entire State, the fixed charges and variable charges are indicated in the tariff application of CESC. The same are shown in the following Tables.

TABLE-5.13

Power purchase requirement of CESC for FY21

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Cost in Rs Crs.	Avg. cost Per unit Rs./unit
KPCL Hydel Energy	3004.82	301.59	1.00
KPCL Thermal Energy	851.08	623.79	7.32
CGS Energy	1771.86	864.21	6.12
UPCL	377.01	262.54	6.96
Renewable Energy/Bundled	1845.06	763.17	4.14

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Cost in Rs Crs.	Avg. cost Per unit Rs./unit
power			
Other State Hydel	16.25	5.46	3.36
Medium Term	146.46	76.32	5.21
PGCIL & POSOCO Charges		220.68	
KPTCL Transmission & SLDC		413.85	
Allocation to other ESCOMs	138.47	78.44	5.67
TOTAL	**8151.00**	**3611.91**	**4.43**

Commission's analysis and decisions

The energy requirement of the ESCOMs, including CESC, is being met by the following sources, through long-term Power Purchase Agreement (PPAs) with:

a) Karnataka Power Corporation Limited (KPCL) Generating stations;
b) Central Generating Stations (CGS);
c) Major Independent Power producers (IPPs) and
d) RE sources.

To arrive at the available quantum of energy and power for the year FY 21, the Commission has considered the availability as furnished by KPCL in respect of KPCL Generating Stations and availability as furnished by the SRPC in respect of Central Generating Stations. The availability of CGS stations is based on the share of Karnataka, as notified from time to time.

The Commission has considered the availability of energy from the Renewable Energy sources and Medium Term Power Purchases based on the actual generation capacity contracted through PPAs by the ESCOMs, as indicated in D-1 Format. The availability from the other sources such as Jurala Hydel Station and TB dam Power Stations of Telangana State has been considered based on Karnataka's share in the installed capacity and as per the contracts executed with these generators.

The availability as furnished by the KPCL in respect of Yelahanka Combined Cycle Power Plant (YCCPP), having a capacity of 350 MW has not been considered, as the said generating station is yet to be synchronized with the grid and the Commercial Operation Date (COD) is yet to be declared.

The availability of New NLC Plant Thermal Power Project has been considered based on Karnataka's share, as furnished by the PCKL, duly limiting the quantum of energy as per the requirement of ESCOMs, to meet the sales targets. The plant has since been synchronized and supplying power to the grid.

Based on the above availability criteria, the energy requirement for the State, with reference to the sales target approved for FY21, is given in the following Table.

TABLE – 5.14

ABSTRACT OF POWER PURCHASE REQUIREMENT OF THE STATE FOR THE YEAR FY21

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Total Cost in Rs Crs.	Avg. cost per unit Rs./unit
KPCL Hydel Energy	11567.04	992.71	0.86
KPCL Thermal Energy	15193.60	9462.99	6.23
CGS Energy	19948.10	9339.82	4.68
UPCL	3600.00	2448.00	6.80
Renewable Energy:	17628.37	6700.75	3.80
Other State Hydel	183.60	61.70	3.36
Bundled Power	3698.57	1459.31	3.95
Medium Term (Co Gen)	1285.06	669.52	5.21
PGCIL & POSOCO Charges		1774.37	
KPTCL Transmission & SLDC		4318.30	
TOTAL	**73104.34**	**37227.47**	**5.092**

5.2.6 CESC's Power Purchase Cost & Transmission charges for FY21:

CESC's Submission

CESC has submitted the Power Purchase requirement along with the cost including the transmission charges and SLDC charges, in D-1 Format. CESC has sought approval of the Commission for purchase of power to an extent of

8151.00 MU at a cost of Rs. 3611.91 Crores, which includes transmission and SLDC charges, for the year FY21.

As regards the cost of power, the CESC has submitted that, same is considered as per the norms defined in contracts (PPAs)/ Regulations and based on the tariff indicated by KPCL for its Stations and the tariff determined by the CERC in respect of Central Generating Stations, DVC Stations and UPCL stations.

Commission's analysis and decisions

After a detailed analysis of the power purchase costs claimed by the CESC, the Commission has arrived at the power purchase quantum and cost, to be allowed in the ARR for FY21. The basis for computation of power purchase quantum and cost for the year FY21 is as indicated below:

1. Quantum of Power: Based on the approved sales and the allowable distribution losses, the requirement of Power for the CESC, for the year FY21, is worked out as detailed below:

TABLE – 5.15
Power Purchase requirement of CESC for the year FY 21

Particulars	FY21
Sales (MU)	6614.12
Distribution losses (%)	11.50%
Energy at IF point (MU)	7473.58
Transmission Losses (%)	3.039%
Energy at generation bus Required to meet the sales target of CESC (MU)	**7707.823**

2. While approving the cost of power purchase, the Commission has determined the quantum of power from various sources in accordance with the principles of merit order dispatch based on the ranking of all approved sources of supply.

3. The rates considered in respect of the KPCL stations are based on the Commission's order dated 03.08.2009 for hydel stations, except for

Shivasamudram, Shimsha, Munirabad & MGHE for which separate rates, as per Order dated 25th February 2015, are applicable.

4. The variable costs of State thermal stations and UPCL, are considered based on the recent power purchase bills passed by the CESC and also based on the recent landed cost of fuel and other variable components.

5. The fixed charges and the variable charges in respect of the Central Generating Stations, UPCL Stations and the DVC Stations have been considered based on the Tariff determined by the CERC as per the CERC norms. However, the energy has been considered from these units by limiting the quantum of energy as per the requirement of ESCOMs, to meet the sales target on the basis of Merit Order Despatch. **It is expected that any surplus energy available from tied up sources of energy would be traded by the ESCOMs through PCKL on commercial principles. Similarly, any requirement over and above the quantum approved in this Tariff Order, shall be procured from the contracted/ tied up sources only.**

6. The variations, if any, in the costs allowed now will be considered during the FAC exercise / Annual Performance Review of FY21.

7. The Commission has allowed the KPTCL transmission charges and SLDC charges to be paid by the ESCOMs in the Power Purchase Cost and is as detailed below:

TABLE-5.16

Transmission Charges & SLDC Charges payable by ESCOMs

Name of ESCOM	KPTCL Transmission Charges in Rs. Crores	SLDC Charges in Rs. Crores
BESCOM	2179.288	11.923
MESCOM	319.224	1.996
CESC	466.272	2.815
HESCOM	806.902	5.032
GESCOM	521.183	3.665
Total	**4292.869**	**25.430**

8. In reply to the Commission's observation that the ESCOMs are paying the PGCIL transmission charges at exorbitant rates, CESC has stated that the transmission charges of PGCIL are likely to be reduced after issue of new CERC (Sharing of Inter State Transmission Charges and Losses) Regulations. In this regard the Commission notes that the draft Regulation does not specify the POC charges applicable for Karnataka State. Further the Commission note that the final notification of the Regulation has been issued by the CERC. The CESC shall intimate the Commission, any changes in the existing POC charges and the applicability of period along with the POC charges.
9. Based on the requirement of energy allowed and the power allocation given by the Government of Karnataka, the Power Purchase quantum and its costs are approved in the ARR of CESC for the year FY21, as shown in Annexure- 1 & 2.
10. The consolidated power purchase cost for the year FY2, as approved by the Commission, is shown the following Table:

TABLE -5.17

ABSTRACT OF APPROVED POWER PURCHASE FOR CESC FOR THE YEAR FY21

SOURCES	FINANCIAL YEAR 20-21		
	Energy in MU	Total Cost in Rs Crs.	Avg. cost per unit Rs./unit
KPCL Hydel Energy	1913.89	134.99	0.71
KPCL Thermal Energy	1709.60	1030.74	6.03
CGS Energy	1570.73	752.59	4.79
UPCL	504.00	342.72	6.80
Renewable Energy:	1416.63	546.47	3.85
Other State Hydel	17.91	6.02	3.36
Bundled Power	428.61	169.03	3.94
Medium Term (Co Gen)	146.46	76.31	5.21
PGCIL & POSOCO Charges		103.32	
KPTCL Transmission & SLDC		469.085	
TOTAL	**7707.823**	**3631.28**	**4.711**

Thus, the Commission hereby approves power purchase quantum of 7707.823 MU at a cost of Rs.3631.28 Crores, for FY21. The breakup of source-wise Power and the cost thereon, is shown in Annexure- 1 and 2 of this Order.

The CESC shall regulate the quantum and cost of power as per the above approval of the Commission. However, since the power purchase costs are uncontrollable, any excess quantum or cost will be trued up in Annual Performance Review for FY21.

5.2.7 Renewable Purchase Obligation (RPO) target for FY21:

The Commission, vide its KERC (Procurement of Energy from Renewable Sources) (Sixth Amendment) Regulations, 2018 has specified a non-solar RPO target of 12% and solar RPO of 8.5% for FY21.

CESC in its filing, has submitted that as per the source-wise power allocation given by Government of Karnataka and considering the probable generation from each of the sources, CESC will be able to achieve non-solar RPO of 13.46% as against a target of 12% and solar RPO of 20.10% as against a target of 8.5% for FY21.

The Commission directs CESC to take all necessary action to meet the above non-solar and solar RPO targets. In case, there is any need to buy RECs to fully meet the RPO, the cost thereon would be factored in the APR of FY21.

5.2.8 O&M Expenses for FY21:

CESC's Proposal:

The CESC in its application has submitted that the O&M expenses of Rs.826.09 Crores have been computed in accordance with the methodology specified in the MYT Regulations. CESC has requested the Commission to approve the projected O&M expenses of Rs.909.16 Crores by considering the additional liability on account of contribution to Pension and Gratuity Trust due to increase in contributory from 42.53% to 57.30% with effect from 01.04.2017 onwards and Rs.56.86 Crores towards additional liability pay revision and earned leave surrender as per Actuarial Valuation Report, contributions to Family Benefit Fund and additional liability on account of regularization of 1610 number of Junior Line Men (JLM) recruited in FY17, to be regularized in FY21.

However, for the computation of revenue gap for FY21, CESC has reckoned the O&M of Rs.883.36 Crores based on:

a. Weighted Inflation Index of CPI and WPI at 8.26% by considering the past twelve years data at WPI and CPI at 20% and 80% weightage, respectively;
b. Consumer growth index at 3.65%;
c. Efficiency factor of 2.00%;

Considering these indices, CESC has projected the O & M expenses, A&G expenses and employee cost, for FY21, as detailed below:

TABLE-5.18

O &M Expenses - CESC's Proposal

Amount in Rs. Crores

Sl. No.	Particulars	FY21
1	Employee cost	694.34
2	Administrative and General expenses	113.78
3	Repairs and Maintenance expenses	75.24
	Total O&M Expenses	**883.36**

Commission's analysis &decision:

As per the norms specified under the MYT Regulations, the O & M expenses are controllable expenses and the distribution licensee is required to regulate these expenses within the approved limits.

The Commission, in its preliminary observations, had directed the CESC to submit a copy of journal entry passed to account Rs.74.23 Crores and Rs.56.86 Crores towards additional liability on account of revision of percentage rates in actuarial valuation of Pension and Gratuity and additional liability on account of regularization of 1610 Numbers of Junior Line Men (JLM) for FY20 and FY21, respectively.

CESC in its reply, has submitted that since 1610 JLMs are to be regularized in FY21 and the accounts of FY20 is not yet completed, the journal entry is not made.

The Commission had also directed CESC to furnish the computation sheet for Rs.135.16 Crores of its claims towards terminal benefits for FY21, considering the contribution to the employees recruited up to 31.03.2006 and employees recruited after 31.03.2006, separately.

CESC in their replies have furnished the statement showing the break-up details for Rs.135.16 Crores pertaining to terminal benefits. CESC has also submitted that the employees appointed on or after 01.04.2006 do not come under the ambit of P&G contribution scheme as they come under NDCPS scheme. CESC has submitted the details of contribution to the employees appointed before 31.03.2006 coming under P&G trust. The Commission notes the reply furnished by CESC.

The Commission has noted the actual O&M expenses of Rs.684.91 Crores as per the audited accounts of CESC for FY19. This amount, also includes the contribution towards P&G Trust and the amount on account of revision of pay along with the other employee cost, R&M expenses and A&G expenses. Hence, the Commission decides to consider the actual O&M expenses of Rs.684.91 Crores as per the audited accounts (all inclusive) for FY19, as the base year data (being the latest data available as per the audited accounts), to arrive at the projected O&M expenses for the base year in FY20 and FY21.

The Commission, as per the norms specified under the provisions of MYT Regulations, for computation of O&M expenses has considered the consumer growth rate (CPI) based on 3-year CAGR and inflation rate index based on the methodology followed by the CERC.

The Commission has computed the O&M expenses for FY21 duly considering the actual O&M expenses of FY19 as per the audited accounts (being the latest data available as per the audited accounts) to arrive at the O&M expenses for base year i.e. FY20. The actual O& M expenses for FY19 are Rs.684.91 Crores, which includes pay revision amount and contribution to P&G trust. Considering the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer Price Index (CPI), as per the data available from the Labour Bureau, Government of India and adopting the methodology followed by CERC with CPI and WPI in a ratio of 80:20, in line with the methodology followed by the Commission, in its earlier Tariff Order, the allowable annual escalation rate for FY20 is computed as follows:

TABLE – 5.19

Computation of Inflation Index for FY21

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2007	73.6	130.8	119.36				
2008	80	141.7	129.36	1.08	0.08	1	0.08
2009	81.9	157.1	142.06	1.19	0.17	2	0.35
2010	89.7	175.9	158.66	1.33	0.28	3	0.85
2011	98.2	191.5	172.84	1.45	0.37	4	1.48
2012	105.7	209.3	188.58	1.58	0.46	5	2.29
2013	111.1	232.2	207.98	1.74	0.56	6	3.33
2014	114.8	246.9	220.48	1.85	0.61	7	4.30
2015	110.3	261.42	231.196	1.94	0.66	8	5.29
2016	110.3	274.3	241.5	2.02	0.70	9	6.34
2017	114.1	281.2	247.78	2.08	0.73	10	7.30
2018	118.9	294.8	259.62	2.18	0.78	11	8.55
A= Sum of the product column							40.16
B= 6 Times of A							240.97
C= (n-1)*n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.08
g(Exponential factor)= Exponential (D)-1							0.0826
e=Annual Escalation Rate (%)=g*100							**8.2604**

For the purpose of determining the normative O&M expenses for FY21, the Commission has considered the following:

a) The actual O & M expenses incurred as per the audited accounts for FY19 inclusive of contribution to the Pension and Gratuity Trust and pay revision amount, to arrive at the base rate of O&M expenses for FY19.
b) The three-year compounded annual growth rate (CAGR) of the number of installations considering the actual number of installations as per the audited accounts upto FY19 and as projected by the Commission for FY21, at 3.67% for FY21.
c) The weighted inflation index (WII) at 8.2604% as computed above.
d) Efficiency factor at 2%;

The above said parameters are computed duly considering the same methodology as is being followed in the earlier orders of the Commission and the relevant Orders of the Commission on various Review Petitions.

As per the decisions of the Commission in the earlier Tariff Orders, the distribution licensees are required to justify any increase in pay scale with commensurate increase in real employee productivity. **Hence, the Commission expects that with the increase in the emoluments, the improved productivity of the employees would be reflected in terms of increased sales, reduction of losses, better service to the consumers and improved revenue collections**.

Accordingly, the normative O & M expenses for FY21 are as follows:

TABLE – 5.20

Approved O & M expenses for FY21

Particulars	FY21
No. of Installations	3408969
CGI based on 3 Year CAGR in %	3.67%
Inflation index in %	8.2604%
Base Year O&M expenses (projected as per actuals of FY16) in Rs. Crores.	684.91
O&M Index= 0&M (t-1) *(1+WII+CGI-X) Rs.in Crores.	**846.08**

Since, the base year data of O&M expense for FY19 also includes the contribution to the P&G Trust and pay revision arrears amount, the Commission has not considered allowing the same separately for FY21.

Regarding the additional claims of CESC for the regularization of 1610 number. of JLM workers, the Commission will consider the same on incurring the actual expenditure while taking up APR for FY21.

Thus, the Commission decides to approve O&M expenses of Rs.846.08 Crores for FY21.

5.2.9 Depreciation:

CESC's Proposal:

The CESC in its filing has claimed an amount of Rs.306.80 Crores for FY21, as follows:

TABLE – 5.21
Depreciation FY21- CESC's Proposal

Amount in Rs. Crores

Particulars	FY21
Land & Right	0.04
Buildings	5.69
Plant & Machinery	49.94
Towers, Poles, fixtures O.H conductors, U.G Cables	246.98
Hydraulics works	0.26
Vehicles	0.82
Other Civil	0.08
Furniture	2.06
Office Equipment	0.93
Total	**306.80**

Commission's analysis and decision:

In accordance with the provisions of the MYT Regulations and amendments thereon, the Commission has determined the depreciation for FY21 considering the following:

a) The actual rate of depreciation of category wise assets is determined considering the depreciation and gross block of opening and closing balances of fixed assets as per the audited accounts for FY19.

b) This actual rate of depreciation is considered on gross block of average of opening and closing balance of fixed assets projections on the approved capex and categorization of assets thereon by the Commission for FY20 and FY21.

c) The depreciation on account of assets created out of consumers' contribution / grants are deducted, as per AS-12, based on the average of opening and closing balance of such assets duly considering the addition of assets as considered and projected by the Commission for FY 21, at the weighted average rate of depreciation as per actuals in FY19.

Accordingly, the depreciation for FY21 is as follows:

TABLE – 5.22

Approved Depreciation for FY21

Amount in Rs. Crores

Particulars	Depreciation
Buildings	3.71
Hydraulic works/civil works	0.17
Other Civil	0.07
Plant & Machinery	58.50
Line, Cable Network	182.54
Vehicles	0.37
Furniture	3.35
Office Equipment	0.75
Computers	8.01
Intangible Assets	0.00
Released Assets issued to works	0.00
Land/ Lease hold assets	0.03
Total	**257.50**
Less Depreciation on assets created out of grants/contribution	85.27
Allowable net depreciation	**172.23**

Thus, the Commission decides to approve an amount of Rs.172.23 Crores towards net depreciation for FY21.

5.2.10 Interest on Capital Loans:

CESC's proposal:

CESC, in its application has computed, the Interest on capital loan of Rs.182.07 Crores for FY21 based on the following assumptions:

- Funding of CAPEX is based on 80% from borrowings and 20% from internal resources.

- Interest on the existing loan balances are considered as per the terms and conditions of each loan.
- Interest rate in respect of the new loans are considered at 10.50% for REC/PFC loans. For other loans from commercial banks the interest rate considered is on the basis of the prevailing Base rate plus 1% to 1.75% spread.

Based on the above assumptions, CESC has requested the Commission to approve interest on capital loans for FY21 is as follows:

TABLE – 5.23

Interest on Capital Loans– CESC's Proposal

Amount in Rs. Crores

Particulars	FY 21
Opening Balance of loans	1566.58
Receipts-New Loans	396.32
Loan Repayment	201.36
Closing Balance of loans	1761.54
Interest on Capital loan	**182.07**

Commission's analysis and decision:

The Commission has noted the capex and capital loan proposals of the CESC for FY21. As discussed in the preceding paragraphs of this Chapter, considering the capex amount recognized by the Commission for the approval of ARR for FY21, the requirement of loan capital is Rs.300 Crores for FY21. Further, the Commission has considered the repayment of loan at Rs.185.06 Crores for FY21.

The Commission in its preliminary observations, had directed CESC to furnish the bank-wise details of the loan sanctioned, opening balance, amount borrowed, repayment, interest for the year, closing balance, rate of interest, purpose of loan availed and tenure of loans for both short-term and long-term projected for FY19 to FY21. The Commission noted the reply furnished by CESC.

As per the audited accounts and as per the APR of FY19, the CESC had incurred interest on capital loan at a weighted average interest rate of 10.13% per annum. This rate of interest has been considered for the existing loan balances for which interest has to be factored during FY20. Further, for FY21, the Commission has considered the weighted average interest rate of 10.24% of the preceding year on the existing loan balances. The Commission notes that while furnishing the source of fund to the capex, CESC has not properly reckoned the internal resources and the substantial amount of works to be executed under consumer contributions and grants.

The Commission has considered the new loan capital for FY21, duly factoring the availability of capital grants from GoI/GoK, internal resources and consumer contributions on the proposed works submitted by CESC. CESC in its filing has proposed capex of Rs.835.50 Crores for FY21. As indicated in pre-para of this chapter, the Commission, in order to avoid the front loading of interest and depreciation on the capex in the retail supply tariff, decides to consider a reasonable capex of Rs.650 Crores as approved under MYT Tariff Order for FY21. As against this, after deducting cost of proposed works to be met with capital grants from GoI / GoK, internal resources, and the consumer contribution towards capital works, the balance of capital expenditure likely to be met by the CESC, by raising capital loan, the Commission decides to consider Rs.300 Crores as new capital loans towards the approved capex for FY21. The Commission has considered new loans, in accordance with the debt equity ratio of 70:30 as per the MYT Regulations.

The Commission notes the rate of interest on the new capital loans proposed by CESC for FY21. CESC has requested the Commission to consider interest rate @10.50% being charged by REC/ PFC based on the base rate plus 1%to 1.75% as the spread rate. The weighted average rates is 10.24 % for FY20. The Commission further notes that the present interest rate being charged by commercial banks and financial institutions is on the basis Marginal Cost of Fund Based Lending Rates (MCLR). These rates are comparatively lower than the base rates considered earlier. Further in the current economic favorable scenario for investments, it is observed that there is a downward trend in the interest rates on loans under MCLR regime. Hence, in such a situation, the Commission is of the view that, The CESC can avail capital loan at a competitive interest rate.

The Commission notes that, the present SBI MCLR rate for capital loan with tenure of 3 years is 8.15%. Considering rate of interest at which the capital loans drawn by CESC from REC and PFC and the present MCLR based interest rates with the admissible basis points, the Commission decides to allow the interest rate of 11% for FY21 for new capital loan borrowings. It shall be noted that, the rate of interest now considered by the Commission on the new capital loans for FY21 is subject to review during APR of FY21.

Accordingly, the approved interests on loans for FY21 are as follows:

TABLE – 5.24

Approved Interest on Capital Loans for FY21

Amount in Rs. Crores

Particulars	FY21
Opening Balance of Capital Loans	1424.33
Add: New Loans borrowed	300.00
Less: Repayment of Loans	185.06
Total loan at the end of the year	1539.28
Average Loan	1481.80
Interest Rate on existing loan in%	10.24%
Interest Rate on new loans in %	11.00%
Allowable Interest on long term loans	**152.92**
Weighted average rate of interest based on the allowable interest on long term loans in %	10.32%

Thus, the Commission decides to approve interest on capital loans of Rs.152.92 Crores for FY21.

5.2.11 Interest on Working Capital:

CESC's proposal:

CESC has submitted that it has calculated the interest on working capital on normative basis. CESC has claimed interest on working capital of Rs.49.72 Crores for FY21.

Commission's analysis and decision:

As per the norms specified under the MYT Regulations, the Commission has computed the interest on working capital which consists of one-month O & M expenses, 1% of Opening GFA and two month's revenue as receivables.

The Commission notes that the present interest rates charged by the commercial banks and financial institutions is mainly on the basis of MCLR declared from time to time. Hence, the Commission would consider MCLR, depending upon the tenure of the loan. The Commission notes that, CESC needs to initiate financial prudence measures in availing working capital, so that the interest burden on its consumers is reduced. As discussed earlier, the MCLR for loan with a tenure upto two year is 7.60% to 8.05%. Therefore, the Commission by reckoning interest at which the short term loans availed by CESC and taking the downward trend in the internal rates, as per the provisions of the MYT Regulations, by the reckoning the present MCLR based rates with the spread of basis points, decides to consider the interest in working capital at 11% per annum for FY21 as follows:

TABLE – 5.25

Approved Interest on Working Capital for FY21

Amount in Rs. Crores

Particulars	FY 21
One-twelfth of the amount of O&M Exp.	70.51
Opening GFA	4733.26
Stores, materials and supplies - 1% of Opening balance of GFA	47.33
One-sixth of the Revenue	759.44
Total Working Capital	877.28
Rate of Interest (% p.a.)	11.00%
Interest on Working Capital	**96.50**

Thus, the Commission decides to approve the interest on working capital of Rs.96.50 Crores for FY21.

5.2.12 Interest on Consumer Deposit:

CESC's proposal:

CESC in its filing, has claimed an interest on consumer security deposit of Rs.48.63 Crores for FY21.

Commission's analysis and decision:

In accordance with the provisions of the KERC (Interest on Security Deposit) Regulations 2005, the interest rate to be allowed on the Consumer Security Deposits is the Bank Rate prevailing on the 1st of April of the financial year for which interest is due. The Commission has considered the bank rate of 5.40%, as per Reserve Bank of India Notification dated 4th October, 2019, for computation of interest on consumer deposits for FY21.

The Commission has considered the consumer security deposits as per the audited accounts of FY19 and half yearly accounts of FY20 and noted the additional amount of deposit collected from the consumers during the previous years. Based on the additional security deposits collected during FY19, the Commission has decided to factor Rs.50 Crores each as the additional security deposit likely to be collected during FY20 and FY21. Thus, the interest on consumer deposits for FY21 is computed as follows:

TABLE – 5.26
Approved Interest on Consumer Security Deposits for FY21

Amount in Rs. Crores

Particulars	FY21
Opening balance of consumer deposits	726.77
Addition of deposits over previous year	50.00
Closing balance of consumer deposits	776.77
Average consumer deposit	751.77
Rate of Interest at bank rate to be allowed as per regulations	5.40%
Allowable Interest on Consumer Security Deposit	**40.60**

Thus, the Commission decides to approve interest on consumer deposits at Rs.40.60 Crores for FY21.

5.2.13 Other Interest & Finance Charges:

CESC has claimed has claimed Rs.6.91 Crores towards Other Interest & Finance Charges which includes Rs.4.02 Crores towards guarantee commission charges for FY21.

Thus, the Commission decides to approve interest & Finance Charges of Rs.6.91 Crores for FY21.

5.2.14 Interest and other expenses capitalized:

CESC has claimed an amount of Rs.8.75 Crores towards capitalization of interest and other expenses for FY21.

Considering the capital expenditure incurred and amount of expenditure capitalized in the previous years, the Commission decides to allow capitalization of interest and other expenses of Rs.8.75 Crores, as proposed by CESC, for FY21.

The abstract of approved interest and finance charges for FY21 are as follows:

TABLE – 5.27

Approved Interest and finance charges for FY21

Amount in Rs. Crores

Particulars	FY21
Interest on Loan Capital	152.92
Interest on Working Capital	96.50
Interest on Consumers Deposit	40.60
Other Interest & Finance charges	6.91
Less: Interest & other expenses capitalised	-8.75
Total Interest & Finance Charges	**288.18**

5.2.15 Other Debits:

CESC in its application has claimed an amount of Rs.10.47 Crores towards other debits for FY21.

The Commission, as per the provision of MYT Regulations, as amended, is not allowing the other debits as claimed by the CESC, as the same cannot be estimated beforehand. However, such expenses, as per the provision of MYT Regulations, would be considered as per the actual expenses as disclosed in the audited accounts, for the relevant years, at the time of APR.

5.2.16 Return on Equity:

CESC's proposal:

CESC in its application has not claimed any Return on Equity for having estimated negative net-worth for FY21.

Commission's analysis and decision:

The Commission, for the purpose of allowing the RoE, has considered the actual amount of share capital, share deposits and the accumulated surplus / deficit under reserve & surplus the as per the audited accounts for FY19 and the additional equity support received from the GoK during FY20 for arriving at the allowable equity base for FY21.

The Commission, in accordance with the provisions of the MYT Regulations, has considered 15.5% of Return on Equity duly grossed up with the applicable Minimum Alternate Tax (MAT) of 17.94%. This works out to 18.88862% per annum. Further, as per the decision of the Commission in the Review Petition No.6/2013 and Review Petition 5/2014, and the amended provisions of the MYT Regulations, the Return on Equity is required to be computed based on the opening balances of share capital, share deposits and the accumulated balances of surplus / deficit under reserves and surplus account. Further, an amount of Rs.23 Crores of recapitalized consumer deposit, as net-worth is also considered as per the orders of the Hon'ble ATE in Appeal No.46/2014.The Commission also considered the amount of additional equity of Rs.89.20 Crores infused by the GoK during FY20 to arrive at the opening balance of equity for FY21.

The Commission, as per the orders of the Hon'ble ATE in Appeal No.46/2014, was directed to indicate the opening and closing balances of gross fixed assets along with break-up of equity and loan component in the Tariff Orders henceforth. Accordingly, the details of GFA, debt and equity (net worth) for FY21 are as follows:

TABLE – 5.28

Status of Debt Equity Ratio for FY21

Amount in Rs. Crores

Year	Particulars	GFA	Debt	Equity (Net worth)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
FY21	Opening Balance	4724.23	1424.33	108.98	3306.96	1417.27	30.14	2.31
	Closing Balance	5285.53	1539.25	108.98	3699.87	1585.66	29.12	2.06

From the above Table it is evident that the debt equity amounts lie within the normative debt equity ratio of 70:30 on the opening and closing balances of projected GFA for FY21. Further, the Commission will review the same during the Annual Performance Review for each year based on the actual data as per the audited accounts.

Based on the above, the computation of allowable Return on Equity for FY21 is as follows:

TABLE – 5.29

Return on Equity for FY21

Amount in Rs. Crores

Particulars	FY21
OB - Paid Up Share Capital	888.37
OB - Share Deposit	119.35
OB - Reserves and Surplus	-875.74
Less: Recapitalized Security Deposit	-23.00
Total Equity	108.98
RoE at 15.5%	16.89
RoE at 15.5% Grossed up with applicable MAT (For FY21=18.88862%)	**20.58**

Thus, the Commission decides to approve Return on Equity grossed up with MAT at 18.88862% at Rs.20.58 Crores for FY21. This is subject to truing up as per the actual equity and tax paid for the relevant year as per the audited accounts for FY21.

5.2.17 Other Income:

CESC's proposal:

CESC has claimed Rs.116.55 Crores towards other income for FY21 considering 5% increase over the previous year value, as detailed below:

TABLE – 5.30

Other Income – CESC's Proposal

Amount in Rs. Crores

Particulars	FY21
Interest on Bank Fixed Deposit	1.00
Profit on Sale of stores	0.52
Sale of Scrap	0.06
Other Misc. receipts from trading	0.06
Income accrued on account of energy savings	0.07
Rental from staff quarters	3.60
Rental from others	0.11
Excess found on physical verification of stock	0.07
Commission for collection of electricity duty	0.87
Misc. recoveries	9.03
Incentives received	15.88
Depreciation withdrawn from Contribution/subsidies as per AS-12	85.27
Total Other Income	**116.55**

Commission's analysis and decision:

The Commission notes that the other income earned by the CESC mainly includes income from depreciation withdrawn from Contribution/subsidies as per AS-12, miscellaneous recoveries, interest on bank deposits, rent from staff quarters and sale of scrap, profit on sale of stores, rebate on collection of electricity duty besides incentives for timely payment of power purchase bills. The actual 'other income' earned by CESC as per the audited accounts for FY19 is Rs.54.50 Crores.

Based on the other income earned by the CESC in the previous year, the Commission decides to consider 10% growth in income during each of the years FY20 and FY21 and decides to allow an amount of Rs.74.83 Crores as the other income for FY21.

Thus, the, Commission decides to consider the other income of Rs.74.83 Crores for FY21.

5.2.18 Fund towards Consumer Relations / Consumer Education:

CESC in its application has submitted Rs.0.50 Crores the fund towards consumer relation education for FY21.

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education towards taking action as specified under guidelines for consumer education and grievance redressal activities.

The Commission decides to allow Rs.0.50 Crore for FY21 towards meeting the expenditure on consumer relations / consumer education.

The Commission reiterates that CESC should furnish a detailed plan of action for utilization of this amount and also maintain a separate account of these funds and furnish the same at the time of APR.

5.3 Abstract of ARR for FY21:

In the light of the above analysis and decisions of the Commission, the following is the approved ARR for FY21:

TABLE – 5.31
Approved ARR for FY21

Amount in Rs. Crores

Sl. No	Particulars	As Approved
1	Energy @ Gen Bus in MU	7707.82
2	Transmission Losses in %	3.039%
3	Energy @ Interface in MU	7473.58
4	Distribution Losses in %	11.50%
	Sales in MU:	
5	Sales to other than IP & BJ/KJ	3700.28
6	Sales to BJ/KJ	98.17
7	Sales to IP	2815.67
	Total Sales in MU	**6614.12**
	Revenue at existing tariff	
8	Revenue from tariff and Misc. Charges	2878.06
9	Tariff Subsidy in BJ/KJ	68.03
10	Tariff Subsidy in IP	1610.57

Sl. No	Particulars	As Approved
	Total Existing Revenue	**4556.66**
	Expenditure	
11	Power Purchase Cost	3162,19
12	Transmission charges of KPTCL	406.252
13	SLDC Charges	2.82
	Power Purchase Cost including cost of transmission & SLDC Charges	**3631.28**
	O&M Expenses	846.08
14	Depreciation	172.23
	Interest & Finance charges:	
15	Interest on Capital Loans	152.92
16	Interest on Working capital loans	96.50
17	Interest on belated payment on PP Cost	0.00
18	Interest on consumer security deposits	40.60
19	Other Interest & Finance charges	6.91
20	Less: interest & other expenses capitalised	-8.75
	Net total Interest & Finance charges	**288.18**
21	Other Debits	0.00
22	Net Prior Period Debit/Credit	0.00
23	Return on Equity with MAT	20.58
24	Funds towards Consumer Relations/Consumer Education	0.50
25	Other Income	-74.83
	Net ARR	**4884.03**
26	Less: Surplus for FY19 carried forward	-62.81
27	**Total Net ARR for FY21**	**4821.22**

Thus, the Commission hereby approves the revised ARR of Rs. 4821.22 Crores for FY21

5.4 Segregation of ARR into ARR for Distribution Business and ARR for Retail Supply Business:

CESC in its application has proposed the following ratios for segregation of consolidated ARR into ARR for Distribution Business and ARR for Retail Supply as indicated below:

TABLE – 5.32
Segregation of ARR – FY21- CESC's Proposal

Particulars	Distribution Business	Retail Supply Business
Power Purchase	0%	100%
Repair and Maintenance	90%	10%
Employee cost	48%	52%
A&G expenses	55%	45%
Depreciation	78%	22%
Interest and Finance charges	100%	0%
Other Interest charges	0%	100%
Other debits	48%	52%
Prior period expenses	91%	9%
RoE	75%	25%
Provision for taxes	50%	50%

Commission's Analysis and Decisions:

The Commission notes that CESC has proposed ratios for segregation of consolidated ARR into ARR for Distribution Business and ARR for Retail Supply in its filings and has not justified its proposal. In the absence of any justified proposal, the Commission decides to continue with the existing ratio of segregation of ARR as detailed in the following table:

TABLE – 5.33
Basis of Segregation of ARR – FY21

Particulars	Distribution Business	Retail Supply Business
Power Purchase	0%	100%
O&M	51%	49%
Depreciation	84%	16%
Interest on Loans	100%	0%
Interest on Consumer Deposits	0%	100%
RoE	75%	25%
GFA	84%	16%
Non-Tariff Income	2%	98%
Power Purchase	100%	0%

Accordingly, the following is the approved ARR for Distribution Business and Retail supply business:

TABLE – 5.34

APPROVED ARR FOR DISTRIBUTION BUSINESS – FY21

Amount in Rs. Crores

Sl. No	Particulars	FY21
1	R&M Expenses	431.50
2	Employee Expenses	
3	A&G Expenses	
4	Depreciation	144.68
5	Interest & Finance Charges	
6	Interest on Capital Loans	152.92
7	Interest on Working capital loans	10.00
8	Interest on consumer security deposits	0.00
9	Other Interest & Finance charges	6.91
10	Less: interest & other expenses capitalised	-8.75
11	**Total**	**737.26**
12	RoE	15.44
13	Less: Other Income	-1.50
	NET ARR	**751.20**

TABLE – 5.35

APPROVED ARR FOR RETAIL SUPPLY BUSINESS – FY21

Amount in Rs. Crores

Sl.No.	Particulars	FY21
1	Power Purchase	3631.28
3	R&M Expenses	414.58
4	Employee Expenses	
5	A&G Expenses	
6	Depreciation	27.56
7	Interest & Finance Charges	
8	Interest on Capital Loans	0.00
9	Interest on Working capital loans	86.50
10	Interest on consumer security deposits	40.60
11	Other Interest & Finance charges	0.00
12	Less: interest & other expenses capitalised	0.00
13	Other (Misc.)-net prior period credit	0.00
14	ROE	5.15
15	Other Income	-73.33
16	Fund towards Consumer Relations / Consumer Education	0.50
	NET ARR	**4132.83**

5.5 Gap in Revenue for FY21:

As discussed above, the Commission has approved the Annual Revenue Requirement (ARR) of CESC for its operations in FY21 at Rs.4821.22 Crores as against CESC's application requesting approval of ARR of Rs.5183.93 Crores. The approved ARR includes an amount of Rs.62.81 Crores which is determined as the surplus as per APR for FY19 as discussed in Chapter-4.

Considering the existing revenue of Rs.4556.66 Crores, based on existing retail supply tariff, and the approved ARR of Rs.4821.22 Crores, there is a revenue deficit of Rs.264.56 Crores for FY21. This gap has to be recovered by revision of retail supply tariff in FY21.

The abstract of the approved net ARR, gap in revenue for FY21 and the average cost of supply for FY21 are shown the following table:

TABLE – 5.36
Revenue gap for FY21

Particulars	FY21
Net ARR including carry forward surplus of FY19 (Rs. Crores)	4821.22
Approved sales (MU)	6614.12
Average cost of supply for FY21 (Rs. /unit)	7.29
Revenue at existing tariff (Rs. Crores)	4556.66
Gap in revenue for FY21 (Rs. Crores)	**264.56**

The determination of revised retail supply tariff on the basis of the above approved ARR is discussed in detail in Chapter-6 of this Order.

However, the Commission was unable to issue the Tariff Orders for FY21 till October 2020 for the following reasons:

a) Due to total lock down declared by the Government of India / Government of Karnataka on account of Covid-19 pandemic and pendency
b) Pendency of Appeal No.97/2020 filed by the KPTCL before the Hon'ble Tribunal against the Commission's Order dated 16.01.2020 and disposal of the said Appeal by the Hon'ble Tribunal vide Order dated 05.10.2020.

c) Applicability of the Code of Conduct on account of announcement of bye-Election to Assembly Constituency No.136-Sira and 154-Rajajageswari Nagar scheduled on 03.11.2020, by the Election Commission of India, vide Gazette Notification dated 09.10.2020.

The Commission has taken note of the various restriction and measures initiated and enforced by the GoI/Gok during lock down period, to prevent the spread of Corona Virus which has been declared as a Pandemic (COVID-19). This has resulted in setback to all the economic activities, hugely affecting all the sections of the Society, socially and economically. Hence, the consumers could not be burdened with tariff increase from 01.04.2020. However, the tariff increase is imminent due to substantial increase in power purchase cost and other costs to be incurred by the ESCOMs.

In order to tide over the present adverse financial situation, the Commission has decided to give effect to the Order to increase the Tariff from 1st November, 2020. This, in effect, would give relief on account of increased tariff for seven months to the consumers and the Commission hopes that due to gradual relaxation of lockdown conditions, the economic activities would resume and the consumers have to bear the revised tariff from 1st November 2020 onwards.

Due to the postponement of the recovery of the revised tariff, out of the projected additional revenue of Rs.264.56 Crores from revision of tariff, the Commission decides to create the unrecovered portion of the revenue gap of seven months amounting to Rs.154.33 Crores of FY21 as Regulatory Asset to be recovered in the tariff over the next two years (FY22 and FY23). The Commission also decides to allow carrying cost at 10% per annum (based on the current MCLR plus reasonable Basis points) on the amount of Regulatory Asset which will be assessed at the time of the Annual Performance Review (APR) of FY22 and FY23. The balance amount of Rs.110.23 Crores in gap in revenue for FY21 is proposed to be realized as additional revenue through the revision of tariff for the different category of consumers during FY21 from 01.11.2020.

The net ARR and the gap in revenue for FY21 is shown in the following table:

TABLE – 5.37
Revenue gap for FY21

Particulars	FY21
Net ARR including carry forward gap of FY19 (in Rs. Crores)	4821.226
Approved sales (in MU)	6614.12
Revenue at existing tariff (in Rs. Crores)	4556.66
Gap in revenue for FY21 (in Rs. Crores)	**264.56**
Regulatory Asset to be recovered over next two years (in Rs.Crores) in FY22 & FY23	**154.33**
Balance revenue gap to be collected over a period of five months during FY21 by revision of tariff (Rs.in Crores)	**110.23**

The details of revised retail supply tariff, on the basis of the above approved ARR, is discussed and approved in Chapter-6 of this Order.