CESC

Preliminary Observations on the Applications filed by the CESC for approval of APR for FY21 and ARR for FY23-FY25 & Retail Supply Tariff for FY23 under MYT Framework

1. **Annual Performance Review for FY21**

   1. **Observations on Sales:**

      A. Sales- Other than IP sets:

      The category-wise sales approved by Commission and the actuals for FY 21 are indicated in the table below:

Energy in MU

Category Col-1	Approved Col-2	Actuals Col-3	Diff –MU Col-4 = Col3 - Col2
BJ/KJ Consuming more than 40 units/month	39.39	30.77	-8.62
LT-2a	1066.96	1074.06	7.10
LT-2b	11.07	6.55	-4.52
LT-3	337.86	283.70	-54.16
LT-4b	0.52	1.34	0.82
LT-4c	24.33	19.98	-4.35
LT-5	153.15	150.24	-2.91
LT-6 WS	300.41	265.33	-35.08
LT-6 SL	132.65	116.50	-16.15
LT-7	21.70	16.11	-5.59
HT-1	475.07	471.25	-3.82
HT-2a	802.89	576.80	-226.09
HT-2b	149.80	86.19	-63.61
HT-2c	57.83	44.27	-13.56
HT-3a & b	114.57	99.35	-15.22
HT-4	4.35	3.79	-0.56
HT-5	2.34	3.40	1.06
Sub total	**3694.90**	**3249.63**	**-445.27**

BJ/KJ Consuming less than or equal to 40 units/month	98.17	98.91	0.74
IP	2815.67	2948.86	133.19
Sub total	**2913.84**	**3047.77**	**133.93**
Auxiliary	**5.38**	**5.40**	**0.02**
Grand total	**6614.12**	**6302.80**	**311.32**

The Commission notes that there is reduction in all the categories except LT-2a, LT-4b and HT-5 categories. The major categories contributing to the reduction in sales are LT-3, LT-6, HT-2a, HT-2b and HT-2c categories.

CESC, in its filing has attributed the reduction in sales in the above categories to Covid -19 pandemic which is noted by the Commission. The Commission also notes that the sales in domestic category has increased perhaps due to work from home and use of gadgets owing to covid-19 lockdown.

The Commission notes that for BJ/KJ installations consuming more than 40units/month, the specific consumption per month works out to 78.37 units/installations which is considerably high when compared to LT-2a specific consumption of 43.68 units/month/installation. CESC shall analyze the reasons for such high specific consumption.

B. Sales to IP sets:

1. Sales for FY21:

a. The Commission, in the APR for FY20, vide its Tariff Order 2020 has approved the total sales to IP sets as 2934.98 MU with a specific consumption of 7579.23 unit per IP set per annum for 3,96,205 installations for FY20. CESC in its current filing has indicated the sales to IP sets as 2948.46 MU for FY21 with a specific consumption of 7193.22 units per IP set per annum for 4,23,695 installations. The Commission notes that there is a decrease in the specific consumption by 386.01 (7579.23 – 7193.22) units per IP set per annum, increase in consumption by 13.48 (2948.46 – 2934.98) MU with an increase of 27,490 (423695 – 396205) number of installations for FY21 as compared for FY20. The reasons for this decrease in the specific consumption for FY20 needs to be explained.

b. The details of sales to IP sets for FY21 as approved by the Commission in its Tariff Order 2020 and the actual sales as furnished by CESC Mysore in its Tariff Filing for FY21 are as follows;

Particulars	As approved by the Commission in ARR for FY21 in the TO	As submitted by CESC Mysore for APR of FY20
Number of installations	4,16,036	4,23,695
Mid-year number of installations	4,06,596	4,09,950
Specific consumption in units / installation / annum	6,925	7,193.22
Sales in MU	**2,815.67**	**2,948.86**

c. The Commission has noted the increase in specific consumption by 268.22 MU compared to the specific consumption approved by the Commission for FY21. Also, an increase in sales by 133.19 MU as compared to the approved value has been observed. CESC has to furnish the reasons for increase in specific consumption and sales when compared to the approved figures when there is an increase of insignificant number of installations of 7659.

d. It is found that, CESC has considered different values of distribution losses for all agricultural feeders for assessment of sales to IP sets in its submission in feeder wise, month wise calculations. CESC has to substantiate its claim for considering the distribution losses in the above pattern for assessing the sales to IP sets.

e. Based on the actual data of sales to IP set installations for FY20, the specific consumption of IP sets per annum for FY21 i.e., 7,193.22 units per IP per annum, the average monthly consumption works out to 599.44 units per IP per month. Whereas the specific consumption per IP per month in few of the O&M Sub-divisions of Hassan Circle is as high as 1529 units per IP per month, in Mandya Circle 2775, Mysore Circle 1898 and in Chamarajanagar & Kodagu Circle it is as high as 3201. CESC has to furnish the reasons for recording of such a high specific consumption per IP per month for all the feeders, where it is seen.

f. CESC shall furnish the data of GPS as on 31.03.2020 and 31.03.2021 by reconciling survey data with the number of installations in the DCB.

Based on the above observations, CESC shall re-submit the IP assessed consumption for FY21, duly furnishing clarity on the data in the following format by considering the Commission approved values;

Particulars	FY-17		FY-18		FY-19		FY-20		FY-21	
	April 2016 to Sept 2016	Oct. to Mar 2017	April 2017 to Sept 2017	Oct. to Mar 2018	April 2018 to Sept 2018	Oct. to Mar 2019	April 2019 to Sept 2019	Oct. to Mar 2020	April 2020 to Sept 2020	Oct. to Mar 2021
LT4a – Installations (Nos)										
Midyear installations (Nos)										
LT4a – sales (MU)										
Specific consumption in units / IP/ annum										

2. Capex Observations for FY21:

1. The Commission, in its Tariff Order dated 4th November 2020, had recognized the capex of Rs.650 Crores for FY21 and directed CESC to regulate the capital expenditure within the approved limits and if any expenditure incurred in excess of the approved amount without the approved, the corresponding financing costs will not be passed on in the tariff to the consumers.

2. CESC, in its tariff application, has indicated actual capital expenditure of Rs.955.89 in the Table 'Details of approved and actual capital expenditure for FY21 and in Page No. 62 the actual capex is shown as Rs.1030.42 Crores, whereas in Format D-17, it is shown as Rs.1150.79 Crores (includes capital expenditure of Rs.1030.42 Crores, capitalised interest and finance charges of Rs.7.12 Crores and Turnkey contractors control account of Rs.113.25 Crores). In view of the inconsistent figures of the actual capex incurred for FY21, CESC shall indicate the capex incurred for FY21 correctly vis-à-vis the Commission approved capex as per **Annexure-1,**

3. The Commission notes that, as per the data submitted by CESC, it has incurred the capex in excess of the approved capex by Rs.650 Crores for FY21, despite clear directions thereon. In view of this, Commission directs CESC to furnish justifiable reasons for exceeding the approved capex, in violation of the directions as per Commission's Tariff Order dated 4th November 2020.

   The Commission would like to reiterate that consequential costs towards capex incurred over and above the approved amounts, will not be allowed while determining the tariff.

4. CESC shall also furnish the following details for FY21:

   a. In page 63 and 64 of the filing, CESC has indicated Rs.729.50 Crores as internal source of funding and adjustment of advances paid in the previous years. Internal sources are the amounts pertaining to retained profits/earnings, depreciation and equity for the current year. CESC shall clarify as to how the advances paid earlier can be treated as internal source, since advances are adjusted and the asset categorized, when the contractors submit final bill after completion of work.

   b. CESC has indicated Rs.170.65 Crores as fresh borrowings in page no.63, pertaining to sources of funding together with cost for fresh borrowings. Whereas the same is shown as Rs.150.12 Crores in Format D-9. CESC shall confirm the correct amount of fresh borrowings for FY21.

   c. Division-wise abstract of number of BPL beneficiaries serviced under DDUGJY and Soubhagya scheme for having incurred capex of Rs.159.75 Crores and grants received and the balance of grants to be received from Govt. for the total project may be furnished.

   d. CESC has indicated that an amount of Rs. Rs.251.47 Crores has been incurred against service connection (WS, IP set, New connection). Division-wise abstract of number of installations serviced and cost thereon may be furnished. The breakup of funds received from the Government (towards water supply, UNIP) and the amounts spent from CESC funds may also be furnished.

e. Division-wise abstract of number of IP sets energized and cost thereon, under Ganga Kalyana scheme, TSP and SCP scheme for having incurred capex of Rs.44.31 Crores, Rs.0.94 Crores and Rs.4.20 Crores respectively may be furnished along with the amount of grants received from the GoK.

f. Reasons for not utilizing the amount in respect of DSM activities may be furnished.

3. Distribution Loss for FY21:

CESC, in its application has indicated the actual distribution losses for FY 21 as 12.75% against approved loss of 11.50% and the actual distribution losses of11.12% for FY20. The actual distribution losses for FY21 is higher by 1.63% over the actual distribution losses of FY20, which is not justifiable and acceptable. CESC shall submit details of Division-wise monthly loss computation with explanation for showing very higher losses during FY21.

4. Observations on Power Purchase -APR for FY21

1. The contents/details of D-1 format for FY-21 shall be in line with Annexure-2 of Tariff Order 2020, for facilitating comparison.
2. A separate statement showing the variable cost in the ascending order from different sources of power shall be attached. Any deviation from the merit order scheduling should be explained fully.
3. The Source-wise actual energy purchase and Cost for FY21 is different from approved energy purchase and Cost for FY21. The same needed to be explained Source wise.
4. There is increase in the PGCIL Charges by around 169%. The same needs to be explained.
5. The CESC has considered 642.34 MU and Rs. 316.01 Crores as Energy Balancing, as indicated in D1-Format. The basis for payment of this amount needs to be furnished besides submitting a reconciliation statement for the energy balancing.
6. The CESC in D-1 statement has indicated the capacity charges as Rs. 40.018 Crores and variable cost as Rs. 144.361 Crores for KPCL Hydro and 0.479 Crores and 5.998 Crores in respect of VVNL Hydro respectively. The details of the payment for this capacity/fixed charges amount, needs to be furnished.

7. The CESC shall explain the reasons for paying high average cost per unit for the following generating station/schemes:
    a) RTPS-1 to 2
    b) BTPS Unit-1
    c) BTPS Unit-3
    d) NTPC Vallur
    e) Kudgi
    f) UPCL
    g) NTPC VVNL Solar
8. The CESC has considered Rs. -107.131 Crores towards other Charges. The details/ break up for this amount need to be furnished.
9. The per unit cost recovered from IEX Sale is Rs 2.78 CESC shall explain how the energy of 114.954 MU sold through IEX at RS 2.78 per unit will earn profit to CESC taking into consideration the merit order dispatch.
10. Details regarding sale of surplus energy of 52.518 MU at Rs.24.843 Crores need to be furnished.

5. Tariff Subsidy to BJ/KJ and IP set installations for FY 21:

CESC in its filing for FY21, has claimed Rs. 93.65 Crores and Rs.1746.56 Crores as tariff subsidy from BJ/KJ and IP set installations for FY21 respectively. CESC shall submit the details of energy consumption and revenue demand raised as per the audited accounts and claims submitted to the government for release of subsidy for FY21.

2. Observations on ARR FY23-25

1. Category-wise sales other than IP sets for FY23 to FY25:

a. CESC in its filing has stated that energy sales estimates depend upon the population, Government policies and schemes, hours of supply and other factors like lockdown due to pandemic etc.,
b. CESC has stated that it has analyzed data of installations for the period FY16 to FY21 and has also considered disconnected installations. CESC has worked out 5 years CAGR and 3 years CAGR for all the categories for the purpose of estimating number of installations, CESC has adopted 3 years CAGR for LT4, LT5, LT6a, HT3 and HT4 categories. For all other categories 5-

years CAGR is adopted, except BJ/KJ. No growth is considered for BJ/KJ installations.

c. Similarly, CESC has adopted 3-year CAGR for estimating energy sales for LT4c, LT6, HT1, HT3, HT4 & HT5 categories and for all other categories CESC has adopted 5 year CAGR, excluding IP Sets and BJ/KJ. For IP Sets 2 years CAGR and for BJ/KJ, 5 year CAGR is considered.

d. The Commission notes that the Sales estimates for BJ/KJ, LT-4b & LT-4c is done considering CAGR. CESC shall estimate the sales to BJ/KJ, LT-4b & LT-4c based on FY21 specific consumption.

e. At page-20, the number of installation for LT3 for FY23 is indicated as 293280 whereas in D2 Format it is indicated as 293281. Further, the HT Total at page 20 is indicated as 2978, whereas as per D2 format it works out to 2979. Data shall be reconciled.

f. At page-20, the number of installation for LT4c for FY25 is indicated as 12678 whereas in D2 format it is indicated as 12679. Further, the HT-3 at page 20, number of Installation is indicated as 137, whereas as per D2 format it works out to 136. Data shall be reconciled.

g. At page 25 the LT Total, HT total & grand total of energy sales is indicated as 5429.50 MU, 1357.77MU &6793.01MU respectively, Whereas as per D-1 format. It works out to5429.48 Mu,1357.75 &6792.98 MU. respectively. The decimal points shall be reconciled.

h. For FY24 at page 25, the sales for FY24 for LT-total is indicated as 5539.56 MU whereas as per D2 format, it works out to 5539.54MU. The decimal points shall be reconciled.

i. In order to analyze HT sales, CESC shall furnish the breakup of sales data of HT2(a), HT2(b), HT 2(c) and HT-4 categories along with the consumption from open access / wheeling for the period 2019-20 and 2020-21 in the following format:

HT2A

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2019-20				
2020-21				

HT2B

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2019-20				
2020-21				

HT2C

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2019-20				
2020-21				

HT4

Year	Sales by HESCOM	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2019-20				
2020-21				

j. The table indicating the growth rates for the no. of installations is furnished below:

Category	Percentage Growth Rates					
	2015-16 to 2020-21 CAGR	2017-18 to 2020-21 CAGR	FY21 growth over FY20	Growth rate proposed by CESC for FY23	Growth rate proposed by CESC for FY24	Growth rate proposed by CESC for FY25
LT-2a	3.82%	3.88%	3.53%	3.82%	3.82%	3.82%
LT-2b	2.77%	2.39%	1.33%	3.81%	3.84%	3.80%
LT-3	4.55%	4.27%	4.41%	4.55%	4.55%	4.55%
LT-5	3.45%	3.06%	2.42%	3.06%	3.06%	3.06%
LT-6 WS	6.22%	4.78%	3.23%	4.78%	4.78%	4.78%
LT-6 SL	4.86%	4.94%	4.15%	4.86%	4.86%	4.86%
HT-1	8.03%	6.35%	4.09%	7.77%	7.69%	8.04%
HT-2 (a)	5.97%	5.52%	5.51%	6.02%	5.91%	6.03%
HT-2 (b)	7.52%	8.35%	5.87%	7.55%	7.58%	7.46%
HT-2 (c)	8.78%	8.39%	6.19%	8.73%	8.81%	8.81%
HT-3(a)& (b)	5.60%	5.81%	4.81%	6.09%	5.74%	5.43%
HT-4	11.84%	29.14%	27.27%	12.90%	11.43%	12.82%

It is noted that the growth rate considered is on the higher side for LT-2b, HT-2a and all HT-3 categories, when compared to the CAGR. **CESC may consider revising the figures for these categories.**

k. The table indicating the growth rates for the energy sales is furnished below:

Category	Percentage Growth Rates					
	2015-16 to 2020-21 CAGR	2017-18 to 2020-21 CAGR	FY20 growth over FY19	Growth rate proposed by CESC for FY23	Growth rate proposed by CESC for FY24	Growth rate proposed by CESC for FY25
LT-2a	3.84%	3.66%	3.93%	3.78%	3.78%	3.78%
LT-2b	-3.56%	-12.03%	5.53%	3.82%	3.68%	3.83%
LT-3	1.79%	-0.64%	7.47%	1.79%	1.80%	1.79%
LT-5	1.93%	2.24%	3.51%	1.92%	1.92%	1.94%
LT-6 WS	10.24%	3.86%	4.63%	3.86%	3.86%	3.87%
LT-6 SL	3.12%	1.56%	3.57%	3.12%	3.12%	3.12%
HT-1	2.31%	3.74%	4.36%	3.74%	3.74%	3.74%
HT-2 (a)	-5.12%	-4.83%	-13.06%	1.00%	1.00%	1.00%
HT-2 (b)	-4.26%	-10.82%	0.57%	1.00%	1.00%	1.00%
HT-2 (c)	-0.39%	-3.88%	7.83%	1.01%	1.00%	1.01%
HT-3(a)& (b)	3.80%	10.69%	-8.38%	10.69%	10.68%	10.68%
HT-4	-6.38%	1.64%	0.00%	1.56%	1.79%	1.51%

The Commission notes that the CAGR as well as FY21 growth rate for energy sales in most of the categories is negative, due to reduction in sales during FY21 on account of Covid-19. Thus, comparing with FY20 growth rate, the Commission observations are as follows:

a. Growth rate is lower for LT-2b, LT-3, LT-5 & HT-2c and
b. Growth rate is higher for HT-2a, HT-2b and HT-3.

2. Projected sales to IP Sets for the FY23 to FY25:

g. CESC has submitted that it has considered 3-year CAGR of 5.75% growth rate for projecting number of IP installations from FY22 to FY25. While projecting the number of installations, CESC has furnished number of installations for FY22 as 4,58,994, in page-19 of its ARR filing and 4,48,052 numbers of IP installations for FY22 in D2 form at page No 141. CESC has to clarify the difference in number of installations considered, and which value it has considered for projection for future years.

h. The average number of installations added per year since FY15 is about 19000. Whereas CESC has considered addition of about 28,000 installations while projecting the number of installations for the period FY23 to FY25. CESC shall furnish the rationale for considering addition of such number of installations.

i. Details of the number of consumers as per actuals added to the system during the period April 2021 to September 2021 and the sales during the same period appears to have not been considered for projection of IP sales for FY23 to FY25.

j. CESC has submitted that it has considered 2-year CAGR of 1.09% growth for projecting sales for the period FY23 to FY25. CESC shall furnish the basis for considering the 3-year CAGR, while projecting the number of installations and 2-year CAGR while projecting the energy sales.

3. Validation of Sales:

1. To validate the sales, category wise information in the following format shall be furnished:

a. No. of Installations:

	2019-20 Actuals		**2020-21 Actuals**		**2021-22**	
Category	**As on 30th Nov 2019**	**As on 31st March 2020**	**As on 30th Nov 2020**	**As on 31st March 2021**	**As on 30th Nov 2021**	**As on 31st March 2022 (Estimate)**
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)& (b)						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP)						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month.						
IP sets-LT-4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

b. Energy Sales

	2019-20 Actuals		2020-21 Actuals		2021-22	
Category	**1st April 2019 to 30th Nov 2019 (cumulative)**	**1st Dec 2019 to 31st March 2020 (cumulative)**	**1st April 2020 to 30th Nov 2020 (cumulative)**	**1st Dec 2020 to 31st March 2021 (cumulative)**	**1st April 2021 to 30th Nov 2021 (cumulative actuals)**	**1st Dec 2021 to 31st March 2022 (cumulative Estimate)**
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)& (b)						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month						
IP sets LT 4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

4. Power Purchase FY23 – FY25:

a. As per the perspective plan, CESC has furnished the CAGR projection, to estimate the quantum of energy considered, for the control period FY23 to FY 25 is as detailed below:

Particulars	FY23	FY24	FY25
Sales(MU)	6582.93	6730.36	6883.05
Distribution loss in %	11.40	11.30	11.20
Transmission loss in %	2.978	2.978	2.978
Energy requirement at Generation point (MU)	7658	7820	7989

As per the tariff application filed by CESC, the projection filed for the control period FY23 to FY25 as shown below, is different from projection made in the perspective plan earlier submitted.

Particulars	FY23	FY24	FY25
Sales (MU)	6793.01	6942.56	7097.39
Energy available at interface points (MU)	7667.06	7827.01	7992.55
Transmission loss (%)	2.98	2.98	2.98
Energy available at generation points (MU)	7902.39	8067.25	8237.87

CESC shall furnish the reasons for the changed quantum of energy for the control period.

b. CESC has considered the same parentage of transmission loss for all the years of control period for which CESC shall furnish the reasons.

c. CESC shall furnish the detailed explanation for considering the energy as per D-1Statement, for analyzing the energy projected along with fixed and variable cost.

d. In respect of Renewable Energy (RE), month-wise break up of source-wise capacity and energy shall be furnished. This is essential to analyse the month-wise variations of requirement of energy and availability from different sources.

e. CESC, in its projection has not shown any sale of surplus energy. The planned for sale of energy may be furnished.

f. In respect of thermal energy, CESC has considered high rate of variable cost for the control period. CESC shall furnish the detailed analysis for projecting the variable cost source-wise for KPCL thermal, UPCL and CGS duly comparing it with the previous control period.

5. RPO Compliance

CESC furnishing the details of RPO compliance for FY-21, has stated that it has met both solar and non-solar RPO.

The observations of the Commission on RPO are as under:

1. The total power purchase quantum for FY21 as per D-1 format is 7545.49 MU. Net of hydro the power purchase quantum would be 5563.31 MU [7545.49-1884.57(KPCL-hydro)-75.43(VVNL)- 18.46(Jurala)-3.72(TB dam)]. Whereas, CESC at page 60, has indicated the same as 5356.39 MU. **CESC shall reconcile the data with respect to audited accounts of FY21. CESC shall also indicate how much of hydro energy is added or subtracted under energy balance. Also, the power procured from Shimsha shall be indicated separately.**

2. At page 61, the Non-solar energy procured is indicated as 683.89MU, whereas, as per D1 statement, the non-solar energy purchased is as follows:

Generation source	MU
Medium term co-gen	210.079
CO-gen others	22.886
Biomass	17.159
Mini-hydel	272.634
wind	134.562
banked	0.00
Total	657.32

The non-solar energy purchased shall be reconciled with final accounts data.

3. At page 60, the Solar energy procured is indicated as 1181.49 MU, whereas as per D-1 format the solar energy purchased is as follows:

Generation source	MU
Solar PPA	1009.423
NTPC VVNL	11.014
NTPC NSM	145.119
Solar Roof-Top	15.620
Solar-Banked	18.743
Total	1199.919

The solar energy purchased shall be reconciled with final accounts data.

CESC shall add power procured from Shimsha project to Non-solar RPO compliance, as it is a Mini-Hydel project and rework out the compliance.

4. For validating the RPO compliance and to work out APPC, CESC shall furnish the data as per the format indicated below, duly reconciling the

data with audited accounts for FY21 clearly indicating the banked energy etc., explicitly:

a. **Non-solar RPO:**

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Non–solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL		
3	Non –solar Short-Term purchase from RE sources, excluding sec-11 purchase		
4	Non –solar Short-Term purchase from RE sources under sec-11		
5	Non-solar RE purchased at APPC		
6	Non-solar RE pertaining to green energy sold to consumers under green tariff		
7	Non-solar RE purchased from other ESCOMs		
8	Non-solar RE sold to other ESCOMs		
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff		
10	Total Non-Solar RE Energy Purchased [No 2+ No.3+No.4+No.5 +No.7+No.9]		
11	Non-Solar RE accounted for the purpose of RPO [No.10- No.5-No.6-No.8]		
12	Non-solar RPO complied in % [No11/No1]*100		

b. **Solar RPO:**

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL		
3	Solar energy purchased under Short-Term, excluding sec-11 purchase		
4	Solar Short-Term purchase from RE under sec-11		
5	Solar energy purchased under APPC		
6	Solar energy pertaining to green energy sold to consumers under green tariff		
7	Solar energy purchased from other ESCOMs		
8	Solar energy sold to other ESCOMs		
9	Solar energy purchased from NTPC (or others) as bundled power		
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff		
11	Total Solar Energy Purchased [No2+ No.3+No.4+No.5+No.7+No.9+No.10]		
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]		
13	Solar RPO complied in % [No12/No.1]*100		

6. **Wheeling charges:**

CESC has proposed wheeling charges of 51.81 paise/unit and 120.89 paise/unit respectively for HT network and LT network and the applicable losses at HT & LT for wheeling purposes as 2.62% & 7.25% respectively.

Regarding the Orders of the Commission revising the wheeling charges & banking facility, CESC has stated that the same has been set aside by Hon'ble High Court & Hon'ble ATE respectively and that the ESCOMs have challenged the same before High Court & Supreme court respectively.

Regarding Banking facility, CESC has submitted the following:

a. CESC would incur loss of Rs. 1.86/Unit in FY 22 due to exemption of CSS to solar energy an account of standard assets and obligation to supply.
b. IPPs draw energy during peak hours resulting in Revenue loss to CESC in addition to incurring high cost of power purchase during peak hours.
c. Due to group captive, CESC in the last 7 years as incurred loss of Rs. 173.90 Crores on account of CSS and additional charge. Similarly, in last 4 years CESC has lost Rs. 68.65 Crores, due to exemption of CSS and additional surcharge.
d. The banking facilities affect planning and scheduling of energy.
e. Providing banking facility to solar would adversely affect ESCOMs as solar is generated duly non peak hours.

In view of the above CESC has opined that banking facility should not be provided and that the energy generated in peak hours should be utilized during peak hours only and not otherwise. It is also opined that the energy wheeled during a month should be divided into 96 blocks for each day of the month, so that wheeled energy is equally distributed. ToD hour wise scheduling is necessary. Therefore, CESC has propose the following:

a. To levy wheeling and banking charges to group captive consumers and CSS captive generators.
b. To levy wheeling and banking charges and CSS to solar power projects which are exempted for 10 years from the date of commissioning, for the projects achieving CoD between 1.04.2013 to 31.03.2018.

c. Wheeling and banking charges should be in cash and the banking facility should be on monthly basis.
d. Consumer should be directed to purchase compulsorily purchase 60% from ESCOMs.
e. To schedule captive generators under wheeling and not to allow banking. Additional energy over & above its usage may be allowed to wheel to non-captive consumers.
f. Government order to contain approval for either captive or group captive along with consumer list. Such Generators should be allowed to change the share certificate only once in a year.

The Commission notes that CSS cannot be levied on captive consumers as per EA,2003 and hence, the suggestion of CESC in this regard cannot be considered. Regarding the issues raised by CESC on wheeling charges and banking facility for RE sources, the Commission notes that the matter of banking is pending before the Hon'ble Supreme court of India and wheeling charges before the Hon'ble High Court of Karnataka. The Commission in the interim has continued the existing wheeling charges and banking facility, which is subject to the decision of the Hon'ble Courts mentioned supra.

7. Cross Subsidy Surcharge:

CESC has stated that it has worked out the CSS as per the formula specified in the KERC (Terms and conditions for OA) (First Amendment) Regulations,2006 and has proposed the following CSS:

Paise/unit

Voltage level	HT-1	HT-2a	HT-2b	HT- 2c (i)	HT- 2c (ii)	HT- 3-a	HT-3B	HT-4	HT-5
66kV & above	162.71	207.35	260.55	216.35	210.95	195.58	146.24	191.43	310.79
HT- 11kV &33 kV	162.71	207.35	260.55	216.35	210.95	195.58	146.24	191.43	310.79

The Commission in its Regulations has adopted the surcharge formula as per Tariff Policy,2016. As such CESC shall compute the CSS as per Tariff Policy-2016 and indicate the CSS, HT-sub category-wise. Also, if CSS is negative, it shall be made zero. CESC shall also furnish working details for arriving at cost of supply at 66kv & above and HT level.

8. **Additional Surcharge (ASC):**

CESC has worked out Additional surcharge of Rs.1.29/unit and has requested the Commission to continue levy of ASC for OA consumers procuring power from power exchanges and RE generators.

The Commission in its previous tariff order dated 04.11.2020, has computed ASC based on the estimated ARR of the year for which tariff is being revised. Hence, CESC shall confirm as to whether the ASC is proposed as per estimated ARR for FY23.

9. **Capital Investment plan for FY23-25:**

1. CESC has proposed the Capex of Rs.1138.37 Crores, Rs.1165.00 Crores and Rs.1333.00 Crores for FY23, FY24 and FY25 respectively for the control period, under MYT regime. The total capex proposed for the control period is Rs. 3636.37 Crores. Commission notes that the proposed capex for the control period in tariff filing is not in line with capex proposed under perspective plan. This shows that CESC is not planning its capex properly. These proposals are vague and no proper justification is given for taking up each category of works and not backed up with proper data to justify the huge capex. No specific strategy / plan is set to improve the performance efficiency of the CESC in terms of reduction in technical and commercial losses covering grey areas, to ensure reliable power supply, to increase operational performance, which intern gives the real benefits to the consumers are not furnished. The reasons given for the proposed capex are the repetition of the earlier filing and they are general in nature.

2. CESC in its ARR filling has projected / planned to reduce Distribution losses from 11.40%, 11.30%, 11.20% for FY23 to FY23 respectively (reducing 0.1% per year). The reduction of losses proposed is very meagre considering the capex proposed for the control period.
3. CESC has proposed huge capex, without analyzing the tariff impact to the consumers which is not justifiable/ acceptable. Hence, CESC is directed to propose capex in tune with the actual requirement duly backed up by justifiable data regarding load growth, loss reduction, improvement in the

system reliability etc., keeping in view the financial capability of CESC to meet the debt servicing obligations and also the tariff impact on the end consumers. CESC shall appreciate that huge capex investment will have a direct impact on the consumer tariff.

4. In the view of the above, CESC shall provide necessary justification on each of the following works in terms of its purpose, requirement, cost and timelines for completion along with Division-wise abstract of works no. of works proposed to be taken in each of the year of the Control Period: -
   i. Division-wise abstract of E & I works for the proposed capex of Rs.185.00 Crores, Rs.190.00 Crores and Rs.200.00 Crores for FY23 to FY25 respectively.
   ii. Division-wise abstract of works to be carried out under Revamped Reforms-Linked Results-Based Distribution Sector scheme for the control period for the proposed capex of Rs.300.00 Crores, Rs.400.00 Crores and Rs.500.00 Crores for FY 23 to FY25 respectively and furnish the details of approved action plan and DPR approved by the appropriate authority including grants/subsidy likely to be received from the GoI/ GoK.
   iii. List of works to be carried out under model sub-division for the proposed capex of Rs.200 Crores, Rs.150 Crores and Rs.200 Crores for FY23 to FY25 respectively along with progress of works achieved till date, in compliance with the directions issued in the Tariff Order dated 9th June 2021. Details of new works proposed to be taken may be separately furnished, which will be examined subject to CESC furnishing the detailed cost benefits achieved in respect of the works already taken up and completed/under completion, under this scheme.
   iv. Division-wise abstract of civil engineering works for the proposed capex of Rs.75.00 Crores (each year Rs.25.00 Crores) for the control period.
   v. Division abstract for proposed capex of Rs.60.00 Crores (each year Rs.20.00 Crores) towards DTC Metering for the control period
5. Sources of Funding: on page 38 in item 3.7, CESC has stated that except 10% contribution from DISCOM and 30% from borrowings, the remaining 60% amount is likely to come from Government grants. Hence CESC shall furnish the names of the capex schemes with complete details, for which 60% grant is anticipated.

6. Revised Capex for FY22: CESC has indicated revised capex for FY22 in its filing. It may be noted that while CESC shall incur the capex within the approved capex for FY22, the Commission would examine the truing up of actual capex during the course of APR for FY22.

10. Other Observations on APR FY21 ARR FY23-25

1. **Distribution Losses for FY23-FY25:**

   CESC has projected the distribution losses of 11.50%, 11.40%, 11.30% and 11.20% for FY22 to FY25, a meager reduction of 0.10% in each year of FY23 to FY25. Compared with the actual distribution loss achieved by CESC during the previous years up to FY20 and the amount of capex already invested and also the proposed higher amounts of capex for the next control period - FY23 to FY25, the projected distribution losses with year on year reduction of mere 0.10% for FY23 to FY25 is not desirable and acceptable. The Commission notes that, to achieve this level of the proposed reduction in the distribution losses, the requirement of capital investment as proposed by CESC under various capex schemes may not be required. To justify the proposed investment, CESC shall re-assess the loss estimation and submit the revised projected distribution losses for FY23 to FY25.

2. **Balances under GFA**:

   CESC, in its filing as per Format D-15, has projected the opening and closing balance of GFA for FY21 to FY25. CESC shall submit the details of GFA created out of consumers' contribution & grants and from internal resources & borrowings at the end of FY20 and FY21 and also the amount included in the projected closing balances of GFA for FY23 to FY25 to verify the compliance of the directive in terms of Hon'ble ATE Order in OP 46/2014.

3. **Depreciation on withdrawn Assets:**

   CESC as per Format D-4 and D-8, has indicated Rs.70.71 Crores towards depreciation withdrawn on the asset created out of consumer contribution and grants for FY21, as per Audited Accounts and projected Rs.77.96 Crores, Rs.81.86 Crores and Rs.85.95 Crores respectively for FY23 to FY25. CESC shall submit the details of assets created out of consumers' contributions and grants for claiming the withdrawal of depreciation on such assets for FY21 to

FY25 (OB, CB of GFA and depreciation rate and amount of depreciation thereon).

4. **Interest on Working Capital:**

   CESC, in its application, has claimed Rs.120.39 Crores, Rs.91.27 Crores and Rs.94.68 toward interest on working capital and Rs.25.58 Crores, Rs.27.37 Crores and Rs.29.28 Crores towards interest on consumer security deposits for FY23 to FY25, without submitting the basis and computation thereon. CESC shall submit the computation sheet for claiming the interest on working capital and interest on consumer security deposits, in accordance with the provisions of MYT Regulations and also taking into account the GoI circular issued to reduce the interest burden and also the trend of variation in the rate of interest in last 2 years.

5. **Terminal benefits**:

   CESC in its filing of APR for FY21 and ARR for FY23 to FY25 has projected Rs.148.89 Crores, Rs.161.93 Crores, Rs.176.11 Crores Rs.191.39 Crores and Rs.208.09 Crores respectively towards Terminal Benefits for FY21 and for FY22 to FY25. CESC shall furnish the basis and the computation details for having claimed the amount in respect of employees recruited prior to 31.03.2002 and those employees covered under NDCPS scheme separately.

6. **Tariff Subsidy to BJ/KJ and IP set installations for FY 21**:

   CESC in its filing for FY21, has claimed Rs. 93.65 Crores and Rs.1746.56 Crores as tariff subsidy from BJ/KJ and IP set installations for FY21.CESC shall submit the details of energy consumption and revenue demand raised as per the audited accounts and claims submitted to the government in release of subsidy for FY21.

7. **Sanctioned Load as per D-21 Format**:

   CESC under format D21 and D21(a) has considered the total sanctioned load under each slab in each of the tariff category. CESC shall submit the total sanctioned load under each slab of tariff category as on

30th September 2021, duly certified by the Zonal Chief Engineer along with slab wise consumption detail to estimate the revenue at both existing and proposed tariff.

8. **Levy of increased Fixed cost:**

BESCOM has proposed to levy Fixed / demand charges on slab wise sanctioned load basis. MESCOM shall submit its opinion on the proposal. CESC shall submit the following details certified by the senior officers of the company on the basis of the data available in the computerized billing system by considering the existing consumers as on 30th September 2021.

	No.of Consumers	**Total Sanctioned Load**	**Sanctioned Load/consumers**
LT2(a) up to 1 KW About 1KW up to 5 KW Above 5 KW up to 25 KW Above 25 KW up to 50 KW Above 50 KW			
LT2(b) Up to 1 KW Above 1 KW to 10 KW Above 10 KW to 50 KW Above 50 KW			
LT3 Up to 1 KW Above 1 KW to 10 KW Above 10 KW to 50 KW Above 50 KW			
HT2 (Separately for (a) (b) (c) Up to 200 KVA Above 200 KVA to 1000 KVA Above 1000 KVA			
HT2(a) Consumption up to 2 lakhs Above 2 lakhs			

11. Observations on Directives:

Directive No	**Directives Issued by the Commission**	**Observation made**
1	Consumer interaction meeting at Subdivision level.	It was directed to conduct consumer interaction meetings at sub-division level chaired by the jurisdictional Superintending Engineer (El) or the jurisdictional Executive Engineer (El) once in a quarter to redress the consumer complaints.

Directive No	Directives Issued by the Commission	Observation made
		As per the data submitted by CESC, it is observed that in few quarters of FY21, that the CIMs are chaired by the Assistant Executive Engineer (El) instead of the jurisdictional SE (El) or EE(El) as per the directives of the Commission. The CESC should take suitable measures to conduct the CIMs effectively in each of the sub-divisions and invite the consumers in advance so that the purpose of such meetings is well served. The CESC shall furnish compliance on this.
2	Directive on preparation of energy bills on monthly basis by considering 15 minute's time block period	CESC shall furnish the cost savings involved in respect of the inadvertently banked energy for FY21 and FY22 till September 2021.
3	Directive on Energy Conservation	CESC is not furnishing the compliance on quarterly basis as directed. CESC has not furnished in detail the implementation of the directive on energy conservation in its offices, number of offices covered, energy saved etc., CESC shall submit the compliance as per the directions.
4	Directive on implementation of Standards of Performance (SoP)	The CESC was directed to carry out effective supervision over the functioning of field offices particularly in rendering of services to the consumers, relating to restoration of supply of electricity and to submit the details of number of violations of SoP by officers, sub-division wise, month wise, amount of penalty levied on the officers and the amount paid to the consumers for any delay in service. Directed CESC to conduct awareness campaign at the Hobli levels for educating the public about the Standards of Performance prescribed by the Commission. CESC to conduct necessary orientation programme for all the field officers and the staff up to linemen to educate them on the SoP and the consequences of non – adherence to the SoP and submit the quarterly progress. But CESC is not submitting the compliance periodically. CESC has not reported anything on the conduct of awareness campaigns in the Hobli levels for educating consumers orientation programs for educating the officers and field staff

Directive No	Directives Issued by the Commission	Observation made
		up to the level of lineman. CESC shall submit the compliance regularly.
5	Directive on use of safety gear by linemen	CESC is not submitting the quarterly compliance report to the Commission.
6	Directive on providing Timer Switches to Street lights by ESCOMs	As per the data furnished in the Tariff Filing 22,877 SL installations are required to be provided with timer switches. Whereas, the numbers were 22,960 during the previous year's Tariff Filing. This shows that, in spite of the directives, CESC has not taken stringent action to service the SL installations after providing timer switches. CESC has also not submitted the compliance as to whether LED / energy efficient lamps are being used and timer switches are provided while servicing of new streetlight installations. CESC shall submit the compliance on the same.
7	Directive on Load shedding	It is observed that CESC has not taken action to update the entire consumer data into the application used for public information system on power system interruption etc., CESC Mysore shall furnish the timeline for updating the entire consumer data into the application The CESC Mysore shall submit compliance in this regard.
8	Directive on establishing a 24 X 7 fully equipped centralized consumer service centers	CESC was directed to reduce the consumer downtime to address the complaints. CESC is directed to report average time taken to attend to a complaint as at present and the efforts made to reduce the downtime further in future. The CESC shall furnish compliance in this regard. Comparison of the downtime analysis for FY20 and FY21 shall be furnished.
9	Directives on Energy Audit	**Energy Audit of cities / towns:** CESC shall furnish the comparative statement of losses recorded in Towns & Cities for the FY21 as against the FY20 and furnish the action taken to reduce the loss levels to less than 15%, wherever the same are more. **DTCs Energy Audit**: CESC was directed to furnish the details of energy audit conducted in respect of DTCs for which meters have been fixed and the remedial measures initiated to reduce losses in those DTCs every month to the Commission regularly. The CESC has furnished the details of energy audit conducted in respect of 20,000 DTCs only during the month of September

Directive No	Directives Issued by the Commission	Observation made
		2021, out of 52,465 DTCs for which meters are said to have been fixed. CESC shall furnish remedial measures initiated to reduce losses in those DTCs and the timeline by which all the balance DTCs will be metered, and audited. It has come to the notice of the Commission that, CESC has taken initiative and invested huge capital on remote reading of energy meters provided to various DTCs for achieving efficient energy auditing. CESC shall furnish the details on the number of meters provided to DTCs to have AMI in place by the earlier agencies, % of communication achieved, % age energy audit conducted with the AMI fetched readings etc., The CESC is directed to comply with the directives of the Commission issued in all the preceding Tariff Orders, in respect of energy audit of DTCs. CESC shall submit the details for not conducting energy audit of all the DTCs for which the meters are fixed along with the time line by which all the remaining DTCs will be metered and audited.
10	Implementation of NJY	CESC has submitted that it has taken up the work of segregation of 52 numbers of agriculture (IP) feeders under Deen Dayal Upadhyaya Gram Jyothi Yojana. CESC Mysore shall furnish the status of implementation of these feeders.
13	Directive on Implementation of Financial Management Framework	CESC shall submit the compliance in respect of implementation of Financial Management Framework **as per the directions issued considering all the parameters indicated in the Tariff Order 2021.** CESC Mysore shall also submit on quarterly basis regularly to the Commission. Shall furnish the data of analysis for FY21 & FY22 till September 2021 as well.
14	Prevention of Electrical Accidents	CESC shall furnish the details of hazardous locations identified, the balance number of hazardous locations to be rectified for FY21. CESC is required to furnish the action plan for rectification of balance hazardous locations / installations identified in its distribution network. CESC shall furnish the summary of the analysis made on the reports submitted by Electrical Inspectorate for FY21 and FY22 up to September, 2020, action taken to prevent such accidents in future.

Annexure-1

Break up of actual capital expenditure.

Sl. No.	Particular of the works under Major/ Minor heads	Commission approved Capex in Rs. Crores	Actual Capex incurred for FY21		Spill over works		Fresh/New works of FY21		Reasons/ justification for exceeding/underutilization of capex
			No. of works	Amount in Rs. Crores	No. of works	Amount in Rs. Crores	No. of works	Amount in Rs. Crores	
1	EXTENSION AND IMPROVEMENT (INCLUDES MODEL SUB-DIVISION WORKS, SDP)								
2	IPDS & IPDS PHASE-II								
3	DDUGJY & SOUBHAGYA								
4	RAPDRP								
5	NJY								
6	RGGVY								
7	REPLACEMENT OF FAILED TRANSFORMERS								
8	SERVICE CONNECTION(WS, IP SET, NEW CONNECTION)								
9	TSP-ENERGISATION OF IP SET								
10	SCP-ENERGISATION OF IP SET								
11	GANGAKALYANA-ENERGISATION OF IP SET								
12	TOOLS & PLANTS								
13	CIVIL ENGINEERING WORKS								
14	PROVIDING METERS TO DTC, BJKJ, STREETLIGHT, REPLACEMENT OF ELECTROMECHANICAL METERS, PROVIDING MODEMS TO METERS FOR COMMUNICATION								

15	IT INITIATIVES								
16	5 MODEL VILLAGES IN EACH MLA/MP CONSTITUENCY								
17	DSM ACTIVITIES								
18	NEW PROJECTS (ANY CENTRAL OR STATE GOVT. PROGRAMMES								
Total									