

CESC

Preliminary Observations on the Applications filed by the CESC for approval of APR for FY22 and ARR & Retail Supply Tariff for FY24 under MYT Framework

1. Observations on Sales:

A. Sales- Other than IP sets:

1. Annual Performance Review of Sales for FY22:

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

Category Col-1	Approved Col-2	Actuals Col-3	Energy in MU
			Diff –MU Col-4 = Col3 - Col2
BJ/KJ Consuming more than 40 units/month	48.56	29.27	-19.29
LT-2a	1097.90	1109.25	11.35
LT-2b	10.70	7.91	-2.79
LT-3	348.25	317.07	-31.18
LT-4b	0.87	1.02	0.15
LT-4c	21.78	19.20	-2.58
LT-5	156.43	167.35	10.92
LT-6 WS	285.94	276.55	-9.39
LT-6 SL	123.46	117.44	-6.02
LT-7	19.33	17.41	-1.92
HT-1	485.36	497.33	11.97
HT-2a	747.39	754.19	6.80
HT-2b	136.22	103.87	-32.35
HT-2c	61.02	53.42	-7.60
HT-3a & b	96.08	130.64	34.56
HT-4	4.15	4.17	0.02
HT-5	2.68	6.13	3.45
Sub total	3646.12	3612.22	-33.90
BJ/KJ Consuming less than or equal to 40 units/month	95.33	95.12	-0.21
IP	3064.87	2971.38	-93.49
Sub total	3160.20	3066.50	-93.70
Auxiliary	5.39	5.45	0.06
Grand total	6811.71	6684.17	-127.54

The Commission notes that there is marginal increase in sales to LT-2a, LT-5, HT-1 & HT-2a categories and considerable increase in HT-3 category, with respect to the

approved sales. However, the Commission notes that there is considerable reduction in sales in LT-3, LT-4a and HT-2b categories

CESC in its filing has attributed the reduction / increase to the following:

- a. Reduction in sales in BJ/KJ category to the reduction in the specific consumption.
- b. Increase in LT-2a sales to the increase in number of installations.

The Commission notes that CESC has not furnished the reasons for decrease in sales in case of LT-3 category and HT-2b category. The same shall be analyzed and submitted to the Commission.

The sales for BJ/KJ installations consuming more than 40units/month, the specific consumption per month works out to 58.44 units/installations which is high as compared to specific consumption LT-2a of 43.06 units/month/installation.

CESC shall analyze the reasons for high BJ/KJ specific consumption.

2. Category-wise sales- other than IP sets for FY24:

- a. CESC, in its filing has stated that the number of installations and energy sales for FY23 and FY24 is based on the CAGR for the period FY19 to FY22, FY17 to FY22 and the previous year growth rate.
- b. It is submitted that the number of installations for LT-2a, LT-2b, LT-3, LT-5, LT-6a, LT-7, HT-2a and HT-3 is estimated based on three-years' CAGR and for other categories, based on five-years' CAGR. In case of EV charging stations, it is submitted that the Government has allocated 155 numbers to CESC and therefore, CESC has estimated 175 numbers for FY24. Further, in case of BJ/KJ as there is no new scheme, the numbers as on 30.09.2022 is retained.
- c. Regarding energy sales, it is submitted that three-years' CAGR is considered for LT-4b, LT-5 and HT-1 categories. For other categories excluding BJ/KJ, IP Sets, LT-2b and HT-2b, five-years' CAGR is adopted. For BJ/KJ 1% growth is considered, for IP Sets the energy sales for estimated based on specific consumption. In case of LT-2b and HT-2b, CESC has considered 1% and 2% growth as under these categories CAGR is negative.

- d. **The observations of the Commission on the sales forecast are as follows:**
- i. The BJ/KJ sales shall be estimated based on specific consumption of FY22 instead of considering 1%. Further, it is observed that, even though the number of installations in FY24 is same as FY23, the sales has been marginally increased.
 - ii. The number of BJ/KJ installations for FY24 in page no. 51 is indicated as 445124 & 43018 instead of 448285 and 44869.
 - iii. In page no.56, the sales for LT3 for FY24 is indicated as 335.92 MU whereas, as per D2 Format it is 336.05 MU and for LT-7 it is indicated as 18.82 MU against 18.69 MU in D2 Format.
 - iv. In D2 Format, the breakup for LT-5a & 5b for FY24 is not indicated.
 - v. The LT-2b sales may be estimated considering the specific consumption of FY22.
- e. 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, in the following format:

HT2A

Year	Sales by CESC	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2020-21				
2021-22				

HT2B

Year	Sales by CESC	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2020-21				
2021-22				

HT2C

Year	Sales by CESC	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2020-21				
2021-22				

HT4

Year	Sales by CESC	Energy procured by HT Consumers under open access / wheeling	Total of HESCOM Sales & OA/Wheeling consumption	% share of OA energy to Total energy
2020-21				
2021-22				

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

Category	Percentage Growth Rates			
	2016-17 to 2021-22 CAGR	2018-19 to 2021-22 CAGR	FY22 growth over FY21	Growth rate proposed by CESC for FY24
LT-2a	3.90	4.27	4.75	4.27
LT-2b	3.89	4.70	10.14	4.70
LT-3	4.76	5.02	6.30	5.19
LT-5	4.77	5.45	11.07	5.45
LT-6 WS	5.39	4.01	3.94	4.01
LT-6 SL	4.72	4.26	4.60	4.72
HT-1	8.96	6.27	7.87	9.09
HT-2 (a)	7.27	7.69	10.19	7.69
HT-2 (b)	8.60	9.46	10.18	9.51
HT-2 (c)	8.23	7.67	7.98	8.14
HT-3(a)& (b)	6.62	8.16	13.76	8.21
HT-4	27.86	39.82	46.43	26.92

It is noted that the growth rate considered is on the higher side for HT-1 & lower for HT-4 categories, when compared to the CAGR. **CESC may consider revising the figures for these categories.**

- g. The Table indicating the growth rates for the energy sales is furnished below:

Category	Percentage Growth Rates			
	2016-17 to 2021-22 CAGR	2018-19 to 2021-22 CAGR	FY22 growth over FY21	Growth rate proposed by CESC for FY24
LT-2a	3.30	4.15	3.28	3.30
LT-2b	-2.48	-6.80	20.73	1.00
LT-3	2.93	2.04	11.76	2.97
LT-5	3.55	4.64	11.39	4.65
LT-6 WS	4.66	3.35	4.23	4.23

LT-6 SL	2.56	-0.01	0.81	2.56
HT-1	3.52	3.77	5.53	3.77
HT-2 (a)	3.51	-0.49	30.75	3.51
HT-2 (b)	-2.39	-7.77	20.51	2.00
HT-2 (c)	2.13	1.42	20.67	2.13
HT-3(a)& (b)	14.63	12.33	31.49	14.62
HT-4	2.26	0.16	10.03	2.35

It is noted that the growth rate considered is on marginally higher side for HT-4 category, when compared to the CAGR. **CESC may consider revising the figures for these categories.**

h. Validation of Sales:

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

a. No. of Installations:

Category	2020-21 Actuals		2021-22 Actuals		2022-23	
	As on 30 th Nov 2020	As on 31 st March 2021	As on 30 th Nov 2021	As on 31 st March 2022	As on 30 th Nov 2022	As on 31 st March 2023 (Estimate)
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6 WS						
LT-6 SL						
Lt-6 EV Charging						
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

Category	2020-21 Actuals		2021-22 Actuals		2022-23	
	1st April 2020 to 30th Nov 2020 (cumulative)	1st Dec 2020 to 31st March 2021 (cumulative)	1st April 2021 to 30th Nov 2021 (cumulative)	1st Dec 2021 to 31st March 2022 (cumulative)	1st April 2022 to 30th Nov 2022 (cumulative actuals)	1st Dec 2022 to 31st March 2023 (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 sets)						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month.						
IP sets LT 4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

B. Sales to IP Sets:

I. APR: Sales for FY22:

a. The Commission, in the APR for FY21, vide its Tariff Order 2022 has approved the total sales to IP sets as 2,948.86 MU with a specific consumption of 7,193.73 units per IP set per annum for 4,23,637 installations for FY21. CESC in its current filing has indicated the sales to IP sets as 2,971.38 MU for FY22 with a specific consumption of 6829 units per IP set per annum for 4,46,535 installations. The Commission notes that there is a decrease in the specific consumption by 364.73 units per IP set per annum, increase in consumption

by 22.52 MU with an increase of 22,898 number of installations for FY22, as compared with FY21. The reasons for decrease in the specific consumption for FY22 needs to be explained.

- b. The details of sales to IP sets for FY22 as approved by the Commission in its Tariff Order 2021 and the actual sales as furnished by CESC Mysore in its current Tariff Filing are as follows;

Particulars	As approved by the Commission in ARR for FY22 in the TO FY 21	As submitted by CESC for APR of FY22
Number of installations	4,34,205	4,46,535
Mid-year number of installations	4,24,705	4,35,115
Specific consumption in units / installation / annum	7,216.46	6829
Sales in MU	3,064.87	2,971.38

- c. The Commission has noted the decrease in specific consumption by 387.46 units per IP set per annum compared to the specific consumption approved by the Commission for FY22. Also, decrease in sales by 93.49 MU as compared to the approved value has been observed. CESC has to furnish the reasons for decrease in specific consumption and sales when compared to the approved figures when there is an increase of insignificant number of installations by 12,330.
- d. It is found that, CESC in the submitted month wise data, the consumption is shown and considered for assessment few feeders having negative values from the difference of final readings and initial readings. CESC shall furnish the reasons for assessing the consumption in respect of such feeders.
- e. CESC has submitted the data of GPS as on March 2022 in Annexure -1. The Commission has noted that No. of IP sets existing as on March 2022 (DCB) figure as per Annexure -1 is 4,57,424 and in D2, page No. 08 & 48 the submitted No. of Actual IP Sets as per DCB (April 2021 to March 2022) is 4,46,535. CESC has to furnish the correct No. of IP sets by reconciling survey data with the number of installations in the DCB.
- f. Number of feeders taken for assessment of IP sets in the month of April 2021 is 935 whereas the number of feeders in the month of March 2022 is 978. CESC shall furnish the total exact number of feeders existing in its area and

the reason for not considering all the agricultural feeders for assessment of IP sets in all the months i.e., April 2021 to March 2022.

- g. **The Subdivision/ month/ feeder-wise break up details of Sales and number of installations of IP Sets are not tallying with the DCB data. CESC to submit the correct information considered for calculation.**
- h. **It is found that CESC has not considered the Number of Dried up IP sets for the calculation. CESC shall furnish the actual dried up IP sets in its jurisdiction.**

II. Projected sales to IP Sets for the FY24:

1. The average number of installations added per year since FY17 is 21570. Whereas CESC has considered addition of 24,064 installations while projecting the number of installations for the period FY23-24. CESC shall furnish the rationale for considering addition of such number of installations.
2. CESC shall furnish the number of installations, mid-year installations, specific consumption and the sales for the previous 5 years in the following format:

Particulars	FY-18		FY-19		FY-20		FY-21		FY-22	
	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	April 2021 to Sept 2021	Oct. to Mar 2022
LT4a – Installations (Nos)										
Midyear installations (Nos)										
LT4a – sales (MU)										
Specific consumption in units / IP/ annum										

The CESC, in its tariff application for FY24 has not furnished the consumption of IP sets based on the segregated Agricultural feeder meter readings as per the prescribed formats for the period April to September 2022. CESC shall furnish the data as above. If the data for the said period is not submitted, the Commission will not accept the assessment of IP consumption for FY24.

3. Observations on Capex:

a. Capex Observations for FY22:

1. The Commission, in its Tariff Order dated 9th June 2021, had recognized the capex of Rs.650 Crores for FY22 as approved in the MYT Order dated 30.09.2019.

CESC, in its tariff application, has indicated actual capital expenditure of Rs.595.81 in the Table 'Details of approved and actual capital expenditure for FY22' and in Page No. 23 and in Format - A3-Cashflow statement, the actual capex is shown as Rs.664.80 Crores, whereas in Format D-17 (Capital Works in Progress), it is shown as Rs.893.71 Crores (includes capital expenditure of Rs.664.80 Crores, capitalised interest and finance charges of Rs.6.80 Crores, other expenses capitalized of Rs.177.08 Crores and Turnkey contractors control account of Rs.45.03 Crores).

As per Format - D17, by considering opening balance and closing balance of the Capital Work in Progress and asset categorized the capex incurred during FY22 works out to be Rs.886.91 Crores. However, total capital expenditure as indicated in sl.no (i) to (v) of Format D-17 works out to be Rs.893.71 Crores, reasons for the discrepancies in the figure shall be explained.

In view of the inconsistent figures relating to the actual capex incurred for FY22, CESC is directed to furnish correct capex incurred under each sub-head of account code 14 series for FY22 duly agreeing with the figures in audited accounts, along with proper justification for exceeding approved capex.

2. If the actual capex of Rs.893.71Crores is considered for APR purposes, the excess capex incurred over and above the approved amount works out to Rs.243.71 Crores. The Commission directs CESC to explain as to why the consequential costs towards capex incurred over and above the approved amounts, should not be disallowed in tariff.
3. CESC shall also furnish the following details for FY22:

- a. Breakup details of actual capex incurred as per **Annexure-1**,
- b. Details of sources of funding (like Loans, grants, debt, equity and internal sources) for the capex of Rs. 893.71 Crores incurred during the FY22. CESC may also furnish the break up details for internal sources of funding.
- c. CESC has indicated Rs.123.27 Crores as fresh borrowings in page no.23, pertaining to sources of funding together with cost for fresh borrowings. Whereas the same is shown as Rs.625.22 Crores in Format D-9. CESC shall confirm the amount of fresh borrowings during FY22.
- d. Break up details of the other expenses capitalized-Rs.177.08 Crores, in CWIP Format D-17.
- e. Amount of capex paid through diversion of revenue amount for FY22.
- f. CESC has indicated that an amount of Rs.216.19 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 details of funds received from the Government (towards water supply, UNIP) and the amounts spent from CESC funds may also be furnished.
- g. 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.48.13 Crores, Rs.0.47 Crores and Rs.1.35 Crores respectively may be furnished along with the amount of grants received from the GoK.
- h. CESC, in its list of capitalized works furnished to the Commission to carry out Prudence Check, has indicated 22 no of works amounting to Rs.117.80 Crores towards Model Sub-Division / Conversion of overhead lines into UG/AB cable in Mysore City. In view of this, CESC is directed to submit Division-wise/feeder-wise abstract of work in progress and quantified analysis on following parameters, before and after implementation of the project.
 - i. Benefits to the consumers due to reduction of distribution Losses and interruptions, through energy savings due to reduction in Hours of

interruption.

- II. Improved Reliability due to reduction in interruptions and improvement in quality of power supply vis-à-vis DPR.
- III. Reduction of no. of Electrical Accidents.

b. Capital Expenditure plan for FY24:

- i. CESC has proposed the Capex of Rs.750 Crores for FY24 as per the capex approved in the MYT Order 2022, against the following works proposed to be taken in FY24:
- ii. E&I work of Crores, Rs.200.00 Crores;
- iii. Service connection works Rs.325 Crores;
- iv. GK works Rs.115 Crores.
- v. Other works Rs. 110.Crores.

CESC is directed to furnish division-wise abstract of works to be taken up along with cost.

c. Revised Capex for FY23: CESC has indicated revised capex of Rs.725 for FY23 in its filing, duly proposing head-wise re-appropriation as per the capex approved in MYT Order 2022. It may be noted that while CESC shall incur the capex within the approved capex for FY23, the Commission would examine the same during the truing up exercise (APR for FY23) to be taken up later.

4. Observations on Power Purchase -APR for FY22

- 1) The CESC has not submitted D-1 Format for FY22 and it is directed to submit the D1 Format, in the format as per Annexure-2 of the Tariff Order 2021 with approved, actual parameters and difference between the two along with soft copy, having formula reference wherever applicable (for example calculation of total cost, per unit variable and per unit total cost etc.). Further, the other observations listed below have been made based on the power purchase details provided in chapter-3 of the Tariff filing.
- 2) **It is submitted by CESC that, the energy reconciliation among ESCOMs for FY22 is finalized and all other ESCOMs have signed except CESC due to some discrepancies in Energy reconciliation statement** and a letter to this effect has

been addressed to O/o CEE, SLDC Bengaluru vide Ltr No: CESC/GM(Coml)/EBC/2022-23/11173-78 dated: 25.08.2022, enclosed as **Annexure-3** to the present tariff filings. These submissions are also included under Power Purchase details in the Director's report of CESC for FY 22 (Page no-8). **However, CESC has considered the energy quantum of 81.84 MU and cost of Rs.40.27 Crores under energy balance in the present tariff filing under true up of Power Purchase for FY22 which is in line with Energy Balance Statement enclosed at Annexure-5 to the Tariff filings, which is signed by all other ESCOMs except CESC.** The CESC stand in this regard needs to be made clear to the Commission.

Further, CESC in its letter enclosed at **Annexure-3** to the present tariff filings addressed to Chief Engineer (Ele), SLDC, KPTCL has put forth that, in the energy reconciliation statement, procurement of Co-generation energy under Medium Term up to Mar-2022 has been considered. However, CESC hereby states that procurement of Co-generation energy under medium term will be considered up to 01.01.2022 (except M/s Davanagere sugars Co, M/s Vishwaraj Sugars Industries Ltd., & M/s Indian Cane Power Ltd. whose PPA was terminated on 16.02.2022) and **remaining energy will be treated as unauthorized injection. In continuation to this, CESC has categorized 33.41MU of energy under 'unauthorized energy from Cogeneration under Medium Term' in its Directors report of FY22 without indicating any power purchase cost towards it.** However, on cross verification between present tariff filing under true up of Power Purchase for FY22 and Directors report, it is found that **in the present tariff filing under true up of Power Purchase for FY22, the above 33.41MU of energy is included in the total quantum of energy mentioned under energy from Cogeneration under Medium Term, totaling to 148.67 MU.** CESC has to clarify its stand on including this energy in tariff filing under true up of power purchase for FY22.

However, it is to be noted here that, the Commission had not approved any energy for purchase under Co-generation under Medium Term in the Tariff Order 2021.

a) In the Tariff Order 2022, regarding variation in variable charges among ESCOMs in respect of Thermal Power Stations, the Commission had directed

BESCOM to convene a coordination meeting involving all the ESCOMs within Two weeks from the issuance of the Tariff Oder and submit detailed minutes of the meeting to the Commission within two weeks from the date of conduct of meeting, for further needful action. It appears no action has been taken in this regard by BESCOM and no follow up action appears to have been taken by CESC either.

- b) The variation in variable charges in respect of Thermal Power Stations among ESCOMs has been continued this time also, as noted from the Tariff filings of ESCOMs for truing up of FY22, as indicated below:

Variable Cost (Rs/kWh) as noted from Tariff filings of ESCOMs for truing up of FY-22						
Sl. No.	Source/ESCOM Name	BESCOM	MESCOM	CESC	HESCOM	GESCOM
A	KPCL Thermal					
1	RTPS -1 to 7	3.13	3.39	3.39	3.75	3.37
2	RTPS-VIII	3.31	3.58	3.58	3.83	3.58
3	BTPS Unit I	3.05	3.17	3.17	3.22	3.17
4	BTPS Unit II	2.88	3.00	3.00	2.93	3.00
5	BTPS Unit III	2.98	3.10	3.10	2.90	3.10
6	Yeramarus TPS	3.35	3.11	3.07	3.00	2.90
B	Central Projects					
1	N.T.P.C-Ramagundam, St-I & II	2.83	2.81	2.84	-	2.62
2	NTPC-Ramagundam, St-III	3.29	2.76	2.95		3.79
3	NTPC-Talcher, St-II	1.68	1.77	1.77		1.83
4	NTPC-Simhadri	3.15	2.93	3.52		3.29
5	NLC TPS2-Stage 1	2.64	2.66	2.66	2.65	2.65
6	NLC TPS2-Stage 2	2.65	2.66	2.66		2.52
7	NLC TPS-2-Expn 1 & 2	2.57	2.56	2.57		2.54
8	NLC TPS1-Expn	2.27	2.42	2.45	1.57	2.41
9	Tuticorin (NTPL) 1&2	3.82	3.25	3.76	-	3.55
10	Vallur TPS 1,2 &3	3.36	3.37	3.45	3.40	3.33
11	DVC Unit-1 & 2 Koderma	2.76	2.90	2.65	-	2.75
12	DVC Unit-7 & 8 Mejia TPS	2.90	2.65	2.90		2.79
13	Kudugi 1,2 &3	3.98	4.02	4.21	-	3.99
14	NNTPS	2.19	2.19	2.20	2.18	2.18
C	IPPs-Major-Thermal					
1	UPCL	4.54	4.27	6.10	4.93	4.68

Further, it is noted that there is variation of variable charges of CESC as compared with other ESCOMs in respect of Thermal Power Stations other than KPCL also. CESC is directed to look into this aspect and provide proper justification in this regard. It is indicated in the filing that, CESC was not able to utilize the energy left unutilized from cheaper sources of energy and has purchased power from other costlier sources. For example, CESC could have further reduced/avoided utilization of energy from UPCL thermal generating station (variable cost: Rs.6.10/unit and total cost: Rs.13.11/unit, as indicated in actuals,) by utilizing energy from MAPS (2X220MW) (variable cost/total cost: Rs.2.61/unit, as indicated in actuals), NTPC's Talcher TPS (variable cost: Rs. 1.78/unit and total cost: Rs.2.92/unit) and NTPC's RSTP-I&II (variable cost: Rs. 2.84/unit and total cost: Rs.4.18/unit), etc. or even by utilizing the excess energy if available from other cheaper sources. **Since the drawl of power is based on the load management by SLDC, has CESC observed this and advised SLDC to ensure drawal of power from unutilized cheaper power.**

- 3) CESC shall explain the reason for increase in per unit cost of variable charges in respect of the KPCL, Central and UPCL thermal generating stations and in respect of Bundled power.
- 4) The CESC has claimed capacity charges of Rs. 19.35 Crores and variable cost of Rs. 179.96 Crores for KPCL Hydro. Whereas Commission in its approval, has allowed only variable charges of Rs. 208.77 Crores. The reason for payment under capacity charges needs to be explained.

Further, CESC has claimed capacity charges of Rs. 5.60 Crores in respect of Jurala Hydro Electric Station, whereas Commission, in its approval has allowed only variable charges of Rs. 5.71 Crores. The reason for consideration of payment under capacity charges needs to be furnished.

- 5) The reason for underutilisation of bundled power to an extent of 206.01MU compared to the approved quantum, needs to be furnished.
- 6) CESC has indicated that it has incurred DSM(UI) charges of Rs. -5.56 Crores against -20.72 MU, which works out to Rs. 2.68/unit. Whether CESC is analyzing the reasons for the Deviations on regular basis and what is the action being

taken/recommended by CESC for reducing such Deviations, in consultation with SLDC?

- 7) The CESC has claimed variable charges of Rs. -1.90 Crores for -2.40 MU against South western railways, Capacity charges of 2.21 Crores against Transmission charges (Open Access Charges) without mentioning the corresponding details of energy and Variable charges of Rs. 0.70 Crores for 0.89 MU against KSEB. These were not approved by the Commission in the Tariff Order 2021 and hence, CESC needs to provide clarification on this.
- 8) The CESC has indicated energy of -251.88 MU with Variable Charges of Rs. -99.48 Crores and energy of -14.29 MU with Variable Charges of Rs. -7.40 Crores against IEX and 'sale of surplus energy' respectively. CESC, has to clearly indicate the platform under which 'sale of surplus energy' is carried out and if it is under IEX only, why it is indicated separately instead of summing up with IEX.
- 9) The CESC has mentioned banked energy of 53.89 MU without mentioning any power purchase cost towards it. CESC has to clarify the same with reason.
- 10) CESC has shown Rs. -2.35 Crores towards Other Charges (LC, Reactive, etc.) and Rs. 1.82 Crores towards PCKL Charges. These were not part of the approval of Commission in the Tariff Order 2021 and hence, CESC needs to provide clarification in this regard.
- 11) CESC shall provide the reasons for reduction of PGCIL (Point of Connection) charges to Rs. 239.34 Crores from approved charges of Rs. 306.61 Crores even when there is increase in drawal of energy from Central generating stations from 2024.09 MU to 2336.66 MU, excluding bundled power.

5. ARR- Power Purchase for FY24:

- a. CESC, in its ARR filing has indicated its requirement of power at 8245.68 MU at a cost of Rs. 4603.20 Crores at a per unit cost of Rs.5.58 for the FY24. The Commission, in the MYT Tariff Order 2022, had approved energy requirement at 8137.858MU at a cost of Rs. 4095.737 Crores, at a per unit cost of Rs.5.03 for FY24. The source-wise difference in rates between the Commission's approved power purchase and the projection made by CESC for FY24 is as under:

Sl. No	Source	KERC Approved for FY 2023-24			CESC Projections for FY 2023-24			Difference
		Energy	Amount	Avg. cost	Energy	Amount	Avg. cost	
		in MU	In Crs	In Rs	in MU	In Crs	In Rs	
1	2	3	4	5	6	7	8	
1	KPCL-Hydro	2400.25	246.03	1.03	2322.24	223.89	0.96	0.07
2	KPCL-Thermal	1657.83	960.91	5.8	1665.42	1199.08	7.2	-1.4
3	Central Projects	2130.76	1012.56	4.75	2304.38	1269.74	5.5	-0.75
4	Major IPP(UPCL)	221.13	217.32	9.83	166.04	326.39	19.66	-9.83
5	Renewable Energy & Bundled Power	1696.518	711.467	4.19	1755.84	785.39	4.47	-0.28
6	Other Hydro	31.37	8.57	2.73	29.22	1.02	0.35	2.38
8	PGCIL & POSOCO Charges		354.52			211.41		0
9	KPTCL transmission charges and SLDC		584.36			585.04		0
10	Energy Balancing				2.54	1.24	4.87	-4.87
11	Deficit/Surplus							0
	Total	8137.858	4095.737	5.03	8245.68	4603.2	5.58	-0.55

CESC shall furnish the basis for projecting the source-wise energy for FY24 with the explanation for projecting the reduced/increased quantum of energy with relatively higher estimated cost per unit.

- b. CESC, shall furnish the reason and the basis with reason for considering the projection of energy/cost **for energy balancing**.
- c. The basis and the computation sheet for reckoning the fixed cost and variable charges in respect of each of the thermal generating stations and other stations shall be furnished.
- d. CESC shall furnish the basis of computations and the document in consideration of fixed cost and variable costs in respect of BTPS unit-3
- e. CESC shall furnish source-wise capacity and quantum of energy to be procured from RE projects, for which it has executed the PPAs.
- f. CESC shall furnish the methodology for forecasting the RE energy from different sources for FY24.

6. Distribution Losses:

a. Distribution Losses for FY22:

1. CESC, in its APR filing for FY22, has indicated the actual distribution loss of 10.40% as detailed below:

Sl. No	Particulars	FY22 Approved	FY22 Actuals
1	Energy Purchased at Generation point (in MU)	7866.43	8390.87
2	Energy at interface points (MU)	7632.17	7537.42
3	Total Sales (in MU) (considering DCB from May-21 to April-22)	6811.71	6753.27
4	Distribution loss as a percentage of input energy at IF point (considering input of April-21 to March-22)	10.75%	10.40%

From the above table the CESC has considered the sales from May 2021 to April 2022 by showing the energy as 6753.27. CESC shall submit the actual energy from April 2021 to March 2022, since Commission's target is based on the energy input from April, 21 to March, 22.

2. With substantial capital investment made by CESC upto FY22, the loss target could have been achieved at lesser than 10.40%, by properly monitoring the losses in the Cities and Towns. Hence CESC shall furnish the month-wise actual data of Energy Audit for Towns and Cities covered in its area of supply duly indicating the reason for higher loss of towns and cities in the following format:

Month:

Name of the Town/City	FY22			Reason for higher loss
	Energy Input in MU	Energy Sold in MU	Distribution loss in %	
Total				

b. Distribution Loss for FY24:

CESC, in its ARR filing has proposed to achieve the distribution losses of 10.60% for FY24 as approved by the Commission, in its Tariff Order dated 04.04.2022. It is observed that, the CESC has already achieved the distribution loss target of

10.40% during FY22. Therefore, CESC shall reassess and submit the revised distribution losses of less than 10.40%, for FY24. CESC has to give utmost importance to identify high loss making feeders, high loss making subdivision, division and circles and prioritize investments to specifically reduce losses and improve reliability of distribution system. But no such details are indicated in the filing. CESC should note that, the optimal distribution system loss should be less than 10% even to maintain the voltage regulations within the permissible limits of 9% for 11kV system and 6% for LT distribution system. CESC should have planned towards bringing down the distribution system losses below 10.00%. CESC shall furnish the action plan for reducing the loss for FY24.

7. Observations on Revenue Expenditure -APR for FY22:

- 1) CESC, in its filing has indicated opening and closing balance of GFA amounts under Format D-15. However, the GFA created out of consumer contribution & grants are not mentioned. CESC shall furnish the revised D-15 Format, duly indicating the opening & closing balances, additions, retirement of assets created out of consumer contribution & grants for the years FY22, FY23 and FY24 in order to verify the compliance of the directive of the Hon'ble ATE Order in OP 46/2014 and for allowing the net depreciation on the GFA thereon for FY22.
- 2) CESC, in Note No.22.1 of the Annual Accounts, has included the working capital loan amounts with the loans availed for capital works. CESC shall submit a revised statement bifurcating the loan for CAPEX and working capital separately for FY22 and FY24.
- 3) In page No.37 of the filing, CESC has claimed Rs.91,74,669/- towards interest on belated payment of power purchase cost which is stated to be on account of Change-in-Law condition. CESC shall furnish the details of the cases along with Petition No. and date of the order of the competent court.
- 4) In page No.38, CESC has claimed Rs.7.34 Crores as "Miscellaneous Losses & Write Offs" under the head 'Other Debits'. Compared to FY21

it is higher by 138%. CESC shall submit the breakup details for Rs.7.34 Crores.

- 5) Interest on Capital Loan: The CAPEX loan and interest details mentioned in page No.36 are not agreeing with the data given in D-9 Format. CESC shall reconcile the same and submit the revised data for the table indicated in page No.36.
- 6) In page No.37, CESC has indicated the opening balance of Consumer Security Deposits as Rs.782.52 Crores. Whereas in Note-24 of Annual Accounts for FY22, the balance of consumer's security deposit as at the end of 31.03.2021 is Rs.817.95 Crores. CESC shall submit the reconciled data in the table as per page No.37.

8. Observations on projected Revenue/ Expenditure -APR for FY22:

- 1) CESC shall submit the GO-wise details of additional equity infused by the GOK during FY23.
- 2) CESC, in its filing of ARR for FY24 has factored Rs.93.56 Crores and Rs.108.71 Crores towards additional employees cost on account of revision of pay scales with effect from 01.04.2022 for FY23 and FY24. CESC shall submit the order issued by the Competent Authority approving the revision of pay scales.
- 3) CESC, in its filing under Format D-6 – Employee Costs has indicated Rs.159.05 Crores and Rs.189.04 Crores towards terminal benefits for FY22 and FY24. CESC shall submit the computation sheet for claiming these amounts, along with the Actuarial Valuation Report, for the relevant period.
- 4) CESC has proposed for withdrawal of Solar Rebate for LT-2a consumers from FY24 onwards. CESC shall furnish the revenue impact on this account.
- 5) CESC has proposed to continue DERS scheme. However, it is observed that energy charges proposed for HT-2a, HT-2b and HT-2c category

ranges from Rs.6.60/unit to Rs.7.15 per unit. As such, CESC shall explain how the DERC scheme will benefit CESC/ consumers, by selling the energy at the proposed rates.

- 6) CESC in its filing, in para 4.6, has indicated the depreciation of Rs.84.89 Crores for FY22 and projected depreciation of Rs.89.13 Crores and Rs 91.70 Crores for FY23 and FY 24 on the assets created out of consumer contribution / grants. CESC shall submit the detailed calculation for the same.
- 7) CESC has proposed increase in fixed / demand charges for both LT and HT categories. CESC shall furnish the position of recovery of fixed / demand charges in FY22 (Actual), and for FY24 at the current tariff and for FY24 at the proposed tariff, in the following format

Year	Fixed Cost component in the ARR Rs.in Cr.	Portion of fixed / demand charges in the total revenue Rs.in Crs.	% of fixed cost in the tariff % as proposed in Format D-21
FY22 (Actuals)			
FY24 (as per current tariff)			
FY24 (with the proposed tariff)			

- 8) CESC shall submit the category / sub category wise contract demand / sanctioned load of the all the consumers as on 31.10.2022 along with slab wise consumption under each tariff category from April-2022 to October-2022.

9. RPO Compliance:

CESSC 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:

- i. CESC shall indicate how much of hydro energy is added or subtracted under energy balance.
- ii. CESC shall furnish the breakup details for arriving at 5956.06 MU as the power purchase quantum for RPO purpose.
- iii. At page 21, the Non-solar energy procured is indicated as 723.59 MU, whereas, as per Table-A page-12 to 17, the non-solar energy purchased is as follows:

Generation source	MU
Medium term co-gen	148.67
CO-gen others	47.80
Biomass	4.87
Mini-hydel	290.58
Wind	178.72
Banked	53.801
Total as per Table-A, page-12 to 17	724.441
Add Mani	2.15
Add Shimsha	4.607
Grand Total	731.198

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

- iv. At page 21, the Solar energy procured is indicated as 1052.66 MU, whereas as per Table-A page-12 to 17, the solar energy purchased is as follows:

Generation source	MU
Solar PPA	992.29
NTPC VVNL	10.39
NTPC NSM	143.51
Solar Roof-Top	12.14
Solar-Banked	0.089
Total as per Table-A, page-12 to 17	1158.419
Less APPC	3.19
Less Energy sold at Green tariff (3.189MU) & GTAM (102.562 MU)	105.751
Grand Total	1049.478

The solar energy purchased shall be reconciled with final audited accounts data. Also the quantum of 3.19 MU under APCC is not indicated in Table-A.

The breakup details of Green energy (Solar and Non-solar) sold and purchased in the market (through Energy Exchanges) for FY22, shall be furnished.

- v. For validating the RPO compliance and to work out APCC, CESC shall furnish the data as per the format indicated below, duly reconciling the data with audited accounts for FY22 clearly indicating the banked energy, IEX 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 APCC		
6	Non-solar RE pertaining to green energy sold to consumers under green tariff		
7	Non-solar RE purchased from other ESCOMs /Market		
8	Non-solar RE sold to other ESCOMs/ Market		
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 / Market		
8	Solar energy sold to other ESCOMs / Market		
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 [No.2+ 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 % [No.12/No.11]*100		

10. Wheeling charges:

CESC has proposed wheeling charges of 53.74 paise/unit and 125.39 paise/unit respectively for HT network and LT network and the applicable losses at HT & LT for wheeling purposes as 1.82% & 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. CESC has also referred to the Prayas report in the submissions.

Regarding wheeling charges and Banking facility, CESC has submitted the following:

- a. Impose minimum percentage of consumption to be consumed by OA consumers from ESCOMs.
- b. Quantum of generation by CPP's should be based on the requirements and additional generation above its usage may be allowed to be wheeled to non-captive consumers.
- c. CESC proposes to implement the proposed KERC (terms and conditions for GEOA) Regulations, 2022

As far as wheeling charges and banking facility for RE sources is concerned, the Commission notes that the 2018 order in the matter of banking is pending before

the Hon'ble Supreme court of India and the 2018 order on wheeling charges is pending before the Hon'ble High Court of Karnataka.

The Commission in the meanwhile had issued a discussion paper on wheeling charges and banking facility and considering the stakeholder's comments directed KPTCL/ ESCOMs to conduct a study in the matter. The study on Wheeling charges & Banking facility entrusted to Prayas, Pune by PCKL is completed and a public hearing on the above report was held by the Commission on 08.09.2022. Few of the stakeholders have requested for certain information and the Commission has directed PCKL to furnish the information requested by such stakeholders. The Commission would take appropriate action in the matter.

Further, the Central Government has notified the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, which has become effective from 06.06.2022 and as envisaged under Rule-5, this Commission has issued the draft Green Energy Open Access Regulations. The Commission has concluded the public hearing in the matter of GEOA Regulations and would finalise the same shortly.

11. Cross Subsidy Surcharge:

CESC has stated that it has worked out the CSS as per the formula specified in Tariff Policy, 2016 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	57.28	167.33	218.09	193.99	216.07	-	144.00	202.80	327.134
HT-11kV & 33 kV	-	63.77	218.09	193.99	216.07	-	-52.90	202.80	327.34

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.

12. Additional Surcharge (ASC):

CESC has worked out Additional surcharge of Rs.1.66/unit and has requested the Commission to continue levy of ASC for OA consumers procuring power from power exchanges and RE generators.

As regards to additional surcharge, the Commission notes that, in Appeal No.260/2018 and 43/2021, the Hon'ble ATE in its order dated, 15.09.2022, as directed the Commission to bear in mind the submissions made by the Appellants, as and when the Commission sets about to pass an order in the matter and also to keep in mind the guidance on the subject provided not only by the NTP but also the Regulations framed by the Commission, wherein the muster prescribed is "conclusive demonstration on existence of factors justifying such levy". The said order is available on the ATE's Website. **Keeping in view the observations of the Hon'ble ATE, CESC shall conclusively demonstrate and furnish the details of stranded costs involved to justify the claim of additional surcharge. In the absence of full details of the stranded costs to justify the Additional Surcharge, it would not be possible for the Commission to determine the Additional surcharge, so as to comply with the Orders of the Hon'ble ATE.**

The relevant extract of the orders of Hon'ble ATE is as follows:

7. *"It is the contention of the appellants that most basic data that is essential to be gathered examining whether or not there is any stranded capacity on account of the drawal of power by the open access customers from other sources comprises the information as to the extent to which the licensees were compelled to back down any long term power source during the time blocks when there was open access concession, the distribution licensees were constrained to procure power on short term basis, and the distribution licensee had to take resort to power cuts or regulate the power supply in the State this being indicative of insufficient availability of power to meet the actual demand.*
8. *In the submissions of the appellants, in order to examine and compute the claim of stranded capacity and computation of additional surcharge, information as to open access consumption, unscheduled capacity short term power purchase and power cuts imposed, if any, on time block basis is sine qua non. The submission is that since such exercise was not undertaken by the Commission, it cannot be said that the distribution licensees had conclusively*

demonstrated their case for approval of the rate proposed for determination of the additional surcharge."

13. Observations on Directives:

Directive No	Directives Issued by the Commission	Observation made
4	Directive on implementation of Standards of Performance (SoP)	<p>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.</p> <p>But CESC has not submitted the compliance on the above. CESC shall submit the compliance regularly.</p>
	Directive on Load shedding	<p>It is observed that CESC has not taken action to update the entire consumer data into the application used for public information system on interruptions in power supply etc., CESC Mysore shall furnish the timeline for updating the entire consumer data into the application</p> <p>The CESC Mysore shall submit compliance in this regard.</p>
8	Directive on establishing a 24 X 7 fully equipped centralized consumer service centers	<p>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.</p> <p>The CESC shall furnish compliance in this regard. Comparison of the downtime analysis for FY21 and FY22 shall be furnished.</p>
9	Directives on Energy Audit	<p>Energy Audit of cities / towns:</p> <p>CESC shall furnish the comparative statement of losses recorded in Towns & Cities for the FY22 as against the FY21 and furnish the action taken to reduce the loss levels to less than 15%, wherever the same are more.</p> <p>DTCs Energy Audit:</p>

Directive No	Directives Issued by the Commission	Observation made
		CESC shall submit the details for not conducting energy audit of all the DTCs for which the meters have been fixed along with the timeline by which all the remaining DTCs will be metered and audited.
14	Prevention of Electrical accidents	<p>CESC shall furnish the details of hazardous locations identified, the balance number of hazardous locations to be rectified for FY22. CESC is required to furnish the action plan for rectification of balance hazardous locations / installations identified in its distribution network.</p> <p>CESC shall furnish the summary of the analysis made on the reports submitted by Electrical Inspectorate for FY22 and FY 23 (up to September, 2022) and action taken to prevent such accidents in future.</p>