

BESCOM

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

1. Observations on Annual Performance Review for FY22 ARR for FY24

a. Observations on Sales other than IP Sets:

i. Data inconsistency:

- a. In Table-3.1 (pg.14) the consumption of BJ/KJ consuming more than 40 Units is indicated under subsidized category and less than 40 Units under metered category, this needs to be interchanged and correspondingly the sub-total shall also be changed.
- b. At Page-23, the LT energy sales should be 19223.27 MU and not 12871.83 MU and the total number of Installation should be 13308453 and not 12324066, when compared to D-2 format.
- c. In Table-3.15 (Pg.25) LT 2(a)(i) Sales is shown as 6489.34 MU where as in D2 format it is 6493.57MU and for LT2(a) (ii) it is 840.66MU in Table-3.15 and in D2 it is 836.12MU This shall be rectified.
- d. In Table-3.15 LT 3(a)(i) Sales is shown as 1610.39 MU where as in D2 format it is 1613.20 MU and for LT3(a) (ii) it is 219.42 MU in Table-3.15 and in D2 it is 216.60 MU This shall be rectified.
- e. In Table-3.15 HT 2 (a) (i) Sales is shown as 2382.75 MU where as in D2 format it is 2363.04 MU This shall be rectified.
- f. For LT-3 (ii) the sales are indicated as 227.88 MU in D21 Format and as 252.92 MU in D2 Format.
- g. As per D2 Format the total sales are 30289.60 MU. Where as in D21 Format it is 30264.56 MU.
- h. The total number of installation for FY24 as per D2 Format is 14420130, whereas in Table 4.37 it is indicated as 14416925.

b. Sales-Annual Performance Review for FY22

The category-wise sales approved by Commission and the actuals for FY22 is indicated in the table below:

Category 1	Actual Sales –MU 2	Approved Sales-MU 3	Difference –MU 4=2-3
LT1 BJ/KJ <=40 units/month	181.13	174.09	7.04
LT1 BJ/KJ >40 nits/month	64.71	62.18	2.53
LT-2a	7329.99	7746.65	-416.66
LT-2b	40.03	59.41	-19.38
LT-3	1829.80	2240.82	-411.02
LT-4 (a)	6351.44	7004.55	-653.11
LT-4 (b)	1.48	1.35	0.13
LT-4 (c)	5.48	6.33	-0.85
LT-5	1211.49	1217.67	-6.18
LT-6 WS	1412.22	1612.49	-200.27
LT-6 SL	576.45	526.86	49.59
LT-6 EV	0.33	0.00	0.32
LT-7	218.72	197.90	20.82
HT-1	846.90	829.58	17.32
HT-2 (a)	4358.91	3937.23	421.68
HT-2 (b)	1628.96	2281.23	-652.27
HT-2(c)	298.65	331.51	-32.86
HT-3(a) & (b)	116.18	157.61	-41.43
HT-4	84.78	107.76	-22.98
HT-5	127.07	70.35	56.72
Grand total	26684.73	28565.57	-1880.85
Sales to categories other than BJ/KJ <= 40units/month & IP sets	20152.16	21386.93	-1234.78
Sales to BJ/KJ <= 40units/month & IP sets	6532.57	7178.64	-646.07

From the above table, the Commission notes that there is considerable reduction in sales in LT-2a, LT-3, LT-4a, LT-6 WS and HT-2b categories, whereas sales have increased considerably in HT-2a category.

BESCOM in its Tariff Petition has attributed the reduction in sales to the following:

- a. LT-2a sales reduction is attributed to online working by software companies, saving of 207.18 MU due DSM initiatives like lighting program, fan replacement and solar water heaters during the year.

- b. The reduction in HT-2b & HT-2c category is attributed to covid-19, stating that Covid norms were relaxed from July,2021. It is also stated that online working by software companies has contributed to HT-2b reduction in sales.

While noting the reply submitted by BESCO, the Commission observations are as follows:

- a. LT-2a sales should have increased during Covid-19, as most of the people were working from home and there was increased usage of gadgets like TV, computers etc. BESCO may analyze the reasons for drastic reduction in sales to LT-2a category during FY22.
- b. BESCO shall analyze the reasons for decrease in sales in LT-3 & LT-6 WS categories
- c. BESCO shall confirm as to whether the category-wise sales indicated in D-2 Format, is excluding unbilled sales. If unbilled sales are included, category-wise break up of unbilled sales shall be furnished.
- d. The FY22 specific consumption of LT-2a category works out to 68.41 units/installation/month, whereas the same for BJ/KJ installations consuming more than 40 units/month is 98.17 units/installation/month, which appears to be higher. BESCO shall furnish the reasons for such high specific consumption in BJ/KJ installations consuming more than 40 units/month.

c. APR- Sales to IP sets for FY22:

- i. The Commission approved sales to IP sets for FY21 in the APR for FY21, vide its tariff order April 2022 is 6910.20 MU with a specific consumption of 7,331unit per IP set per annum with 9,51,183 IP installations. BESCO in its current filing has indicated the sales to IP sets as 6,351 MU for FY22 with a specific consumption of 6,563 units per IP set per annum for 9,84,387 IP installations. The Commission notes that there is a decrease in the specific consumption by 768 units per IP set per annum for FY22 as compared to FY21 actuals. There is a decrease in sales by 559 MU. The reasons for this drop in the specific consumption and sales for FY22 despite an increase in numbers by 33,204 IP installations, needs to be explained.

- ii. 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 BESCOM in its Tariff Filing for FY 22 are as follows;

Particulars	As approved by the Commission in ARR for FY22	As submitted by BESCOM in its application for FY 22
Number of installations	9,73,441	9,84,387
Mid-year number of installations	9,60,941	9,67,785
Specific consumption in units / installation / annum	7,289	6,563
Sales in MU	7,005	6,351

BESCOM shall furnish the reasons for, decrease in specific consumption by 726 units / installation / annum and the decrease in sales by 654 MU when compared to the approved figures when there is an increase in number of IP installations by 10,946.

- iii. The total number of installations as submitted in D-2 Format and the Month-wise number of installations are not matching, BESCOM shall furnish the correct details.
- iv. Though the initial reading and final readings of few feeders are same in few feeders, and in few feeders the difference of final readings and initial readings is negative, consumption is shown and considered for assessment. The consumption recorded in few feeders does not match with the computations indicated as IR and FR and the multiplication factor. BESCOM shall furnish the reasons for assessing consumption in respect of such feeders.
- v. BESCOM has considered 11% distribution loss for the months of April 2020 to March 2021. The percentage loss in each feeder would differ based on many parameters such as length of feeder, load factor, no of IP sets on the feeder etc. BESCOM shall furnish the reason for uniformly considering 11% distribution loss for all the feeders during the year.
- vi. BESCOM shall furnish the data of GPS as on 31.03.2021 and 31.03.2022 by reconciling the survey data with the number of installations in the DCB.
- vii. Number of feeders taken for assessment of IP sets in the month of April 2021 is 2,198, whereas the number of feeders in the month of March 2022 is 2,295. BESCOM shall furnish the exact number of total 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.

- viii. BESCO has not indicated and deducted the number of installations of IP sets and their consumption in SURYA RYATA scheme. BESCO shall furnish the details of the same.

Based on the above observations, BESCO shall submit the assessment of sales to IP installations for FY22 giving complete clarity on the data in the following Format;

Particulars	FY18		FY19		FY20		FY21		FY22	
	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										

d. Category-wise sales (other than IP sets) for FY24:

- i. BESCO in its submission has informed that for most of the categories the sales estimate is based on 4-years' CAGR and wherever the growth rate is negative or 4-years' CAGR is not available, the sales estimates of FY23 is retained. Similarly, for estimation of number of installation BESCO has adopted 2-year CAGR except in case of BJ/KJ and LT-4(b) category. It is submitted that for LT 4 (b) category the growth rate is negative and therefore, the FY23 number of installation is retained for FY24 also and for BJ/KJ the number of installations as on September, 2022 is retained. Based on the above BESCO has estimated the total number of installations for FY24 as 14420130 and sales as 30289.60 MU
- j. The Commission's observations on sales estimate are as follows:

- a. In case of LT (1) – BJ/KJ category, BESCO may compute the BJ/KJ based on the specific consumption of FY22, instead of considering FY23 half-year consumption.
- b. In case of LT-4b, as the number of installations is 765 for FY23 and FY24, the sales for FY24 shall be retained at FY23 level.
- c. In case of LT6 (c), even though it is estimated that there would be increase in number of installations, the energy sales are retained at FY23 level. This shall be examined.
- d. In case of HT2 (b), though it is estimated that there would be increase in number of installations, the energy sales are retained at FY23 level. This shall be examined.
- e. In case of HT 3 (a) (iii) category, though one installation is indicated, the sales is estimates as zero.
- f. In case of HT-3 (b), as the number of installations of FY22 is retained for FY23 and FY24, the sales for FY24 shall be retained at FY23 level.
- g. 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 BESCO for FY24
LT-2a	4.54	4.22	3.88	3.89
LT-2b	2.56	1.92	1.49	1.40
LT-3	4.28	3.80	3.64	3.46
LT-5	3.75	3.58	3.59	3.40
LT-6 WS	6.09	4.56	3.43	3.76
LT-6 SL	5.09	6.27	10.99	7.20
HT-1	7.54	5.60	5.04	4.28
HT-2 (a)	4.83	4.16	3.58	3.70
HT-2 (b)	7.22	6.03	3.16	3.72
HT-2 (c)	10.02	8.83	8.08	8.28
HT-3(a)& (b)	13.63	11.46	10.77	10.71
HT-4	16.52	23.86	3.01	7.80

It is noted that the growth rate proposed by BESCO for FY24 is considerably lower as compared with the CAGR for all the categories, except LT6 Street lights. BESCO may consider revising the growth rates for

above categories, as the number of installations appears to be underestimated.

h. 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 BESCO for FY24
LT-2a	2.85	1.94	2.36	3.08
LT-2b	-2.87	-8.10	24.46	1.84
LT-3	-0.53	-4.24	9.59	2.07
LT-5	0.82	-0.85	16.66	2.85
LT-6 WS	19.40	5.77	14.05	6.38
LT-6 SL	8.27	4.86	17.17	6.24
HT-1	4.44	5.26	6.31	4.92
HT-2 (a)	-0.53	-1.30	23.80	2.89
HT-2 (b)	-9.06	-12.70	11.04	0
HT-2 (c)	2.03	-2.42	22.88	2.78
HT-3(a)& (b)	50.45	36.51	21.80	37.38
HT-4	-4.44	6.57	7.11	7.21

The Commission notes that the FY22 growth over FY21 is considerably higher except for LT2(a), HT1 and HT3 categories. The reasons for the same shall be analyzed.

Further, CAGR for energy sales in most of the categories is negative, due to reduction in sales during first half of FY22, on account of Covid-19. Thus, comparing with FY22 growth rate, the Commission observes that the growth rate considered is lower for all the categories except LT2 (a), HT1 and HT3 categories. BESCO shall furnish the reasons for the same.

i. 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						

	2020-21 Actuals		2021-22 Actuals		2022-23	
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						

e. Projected sales to IP Sets for the FY23 to FY24:

- i. Detailed calculations on number of installations projected for FY23 to FY24 is not furnished.
- ii. The number of IP set installations added to the system for FY23 is 30,000. Whereas, the numbers of IP installations estimated for FY24 is 20,000. BESCOM shall furnish the rationale for this.
- iii. Number of feeders taken for assessment of IP sets in the month of April 2022 is 2,327 whereas the number of feeders in the month of September 2022 is 2,376. BESCOM 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 2022 to September 2022.
- iv. The total number of installations submitted in D2 and month wise number of installations are not tallying, BESCOM shall furnish the correct details.

f. Distribution Losses for FY22:

1. BESCOM in its APR application for FY22 has indicated the actual distribution loss of 11.30% as against approved loss level of 11%. With the reduction in the energy purchase at IF point by 3399.85 MU and reduction in sales by 1880.84 MU for FY22 and keeping in view substantial capital investment BESCOM has made upto FY22, it should have reduced the Distribution loss to below 11.00%.

The loss target could have been achieved by properly monitoring the losses in the Cities and Towns. Hence BESCO shall furnish the reason for not achieving Distribution loss target for FY22.

2. BESCO shall furnish the month-wise actual data of Energy Audit in respect of 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				

3. BESCO shall also furnish the month-wise distribution loss for the year FY22 duly matching with the table 3.10 of BESCOs filing.

g. Distribution Loss for FY 24:

1. BESCO, in its ARR filing has sought fixing the distribution losses target of 10.40% for FY24 as against 10% approved by the Commission, in its Tariff Order dated 4th April, 2022. It is observed that, while proposing the capital investment plan for FY24, BESCO has allocated significant investment for the purpose of new lines for evacuation of power, replacing 11 KV overhead lines by UG Cables and other improvement works. Considering, the proposed and anticipated Capex plan of Rs.4896.48 Crores for FY24, the loss level projected for FY24 is not commensurate with the proposed investments. Any investment on improving the infrastructure should result in improvement in the quality and reliability of supply which in turn result in reduction in technical as well as financial losses. The reasons stated by BESCO for increased technical loss are not acceptable. **Hence, BESCO shall conduct a study from a third party to find out the reasons for higher technical losses and submit a report thereon by the end of February 2023.**
2. Keeping in view huge Capex proposed by BESCO, it shall reassess and submit revised distribution loss target for FY24.

3. Further, while projecting the capital expenditure, BESCO 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 in those feeders/ areas and improve reliability of distribution system. But no such details are indicated in the filing. BESCO 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.

BESCO should have planned towards bringing down the distribution system losses below 10% and therefore BESCO shall furnish a detailed action plan in reducing the loss levels to below 10%.

h. Power Purchase for FY22:

- 1) In the Tariff Order 2022, regarding variation in variable charges among ESCOMs in respect of Thermal Power Stations, the Commission had directed BESCO to convene a coordination meeting involving all the ESCOMs within Two weeks from the issuance of the Tariff Order. In the meeting the ESCOMs were expected to discuss in detail the reasons for variation of variable charges for FY21 and had to arrive at appropriate conclusions as to:
 - a) The actual variable cost to be paid in respect of each of the power plant by the respective ESCOM.
 - b) Deviations in payment of variable cost made by respective ESCOM as against actual variable cost in respect of each of the power plant.
 - c) Further, BESCO was directed to submit detailed minutes of the meeting containing the above details, to the Commission within two weeks from the date of conduct of meeting, for further needful action.
- d) It is to be noted here that, the directions issued by Commission was in respect of all Thermal Power Stations inclusive of KPCL Thermal Power Stations. A coordination meeting should have been convened as per the directions of the Commission and minutes of the meeting could have been submitted to the Commission by BESCO. But, it appears no action has been taken in

this regard and therefore BESCO shall clarify as to the steps taken by it to comply with the directions.

- e) The variation in variable charges in respect of Thermal Power Stations among ESCOMs has been continued this time also, as it was noted from the Tariff filings of ESCOMs for truing up of FY-22 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	BESCO	MESCO	CESC	HESCO	GESCO
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	Yearamurus 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 among ESCOMs in respect of Thermal Power Stations other than KPCL also. The above comparison indicates that in respect of a few Central Generating Stations, BESCO and GESCOM are allowing the highest rates of VC. BESCO is directed to look into this aspect and provide proper justification in this

regard. It is indicated in the filing that BESCO was not able to utilize the energy left unutilized from cheaper sources of energy and has purchased power from other costlier sources. For example, BESCO could have further reduced/avoided utilization of energy from UPCL (variable cost: Rs.4.54/unit and total cost: Rs.11.54/unit, as indicated in actuals,) by utilizing energy from MAPS (2X220MW) (variable cost/total cost: Rs.2.49/unit, as indicated in actuals), Raichur Thermal Power Station_Rtps 1-7 (7x210) (variable cost: Rs.3.13/unit and total cost: Rs.4.770/unit, as indicated in actuals) 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 BESCO observed this and advised SLDC to ensure drawal of power from unutilised cheaper power.

- 2) The BESCO in D-1 Format has claimed capacity charges of Rs. 45.00 Crores and variable cost of Rs. 456.46 Crores for KPCL Hydro. Whereas Commission in its approval has allowed only variable charges of Rs. 546.96 Crores. The reason for consideration of payment under capacity charges needs to be furnished.
- 3) The Commission had not approved any energy for purchase under Co-generation under Medium Term. However, BESCO has shown purchase of 601.98 MU at a cost of Rs. 272.84 Crores. In this regard, BESCO has to provide clarification as to whether term of PPAs entered under Co-generation medium term still exists and for how long and if it exists what is quantum of energy?
- 4) BESCO in the D-1 statement has indicated, DSM charges of Rs. -29.73 Crores against -93.13MU. whether BESCO is analysing the reasons for the Deviations on regular basis and what is the action being taken/recommended by BESCO for reducing such Deviations, in consultation with SLDC?
- 5) What was the accuracy of Demand-Supply projections in the following cases for FY-22:
 - a) Yearly/Quarterly LGBR prepared by CEA/SRPC.
 - b) Monthly basis LGBR prepared by SLDC.
 - c) Week/Day ahead demand supply projections prepared by SLDC/PCKL.

- 6) The BESCOM has considered 14.60 MU and Rs. 7.82 Crores under the head 'inter-ESCOM' as indicated in D1-Format. The basis for utilization of above energy and payment of the corresponding amount needs to be furnished.
- 7) The BESCOM has considered Rs. 772.52 Crores under the head 'prior periods'. The details for the payment of this amount need to be furnished.
- 8) As per Annual Accounts, the revenue from inter ESCOM exchange of energy charges 11 kV & LT-CESC is indicated as Rs.5.20 Crores as against Rs. 7.82 Crores indicated under the head 'inter-ESCOM' in D1-Format. The same needs to be clarified by BESCOM.

i. Power Purchase for FY24:

1. BESCOM, in its ARR filing has indicated its requirement of power at 34776.29 MU at a cost of Rs. 24187.36 Crores, at a per unit cost of Rs.6.96 for the FY24. The Commission, under MYT Tariff Order 2022, had approved the energy requirement and power purchase cost at 34638.577MU at a cost of Rs. 20983.74 Crores at a per unit cost of Rs.6.06 for FY24. The source-wise difference between the Commission's approved power purchase quantum and cost and the projection made by BESCOM for FY24 are as under:

Sl. No	Source	KERC Approved for FY 2023-24			BESCOM Projections for FY 2023-24		
		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	2546.98	331.17	1.30	1905.48	212.25	1.11
2	KPCL-Thermal	11518.466	6676.312	5.80	11630.65	8373.93	7.20
3	Central Projects	10916.56	5187.666	4.75	11738.31	6467.97	5.51
4	Major IPP(UPCL)	949.70	933.31	9.83	730.56	1436.10	19.66
5	Renewable Energy & Bundled Power	8638.631	3616.333	4.19	8703.53	3829.08	4.39
6	Other Hydro	68.24	18.64	2.73	69.30	2.41	0.34
8	PGCIL & POSOCO Charges		1429.328			1076.96	
9	KPTCL transmission charges and SLDC		2790.981			2790.98	
10	Energy Balancing				-11.54	-2.32	2.01
11	Deficit/Surplus				-3.77		
	Total	34638.577	20983.74	6.06	34766.29	24187.36	6.95

2. BESCO shall furnish the basis for projecting the source-wise energy for FY24 with the explanation for having projected reduced/increased quantum of energy/rates per unit with significant increase in the total cost of power purchase cost.
3. BESCO, shall furnish the basis with reason for considering the projection of energy/cost for balancing/deficit /surplus energy available during the year.
4. BESCO shall furnish the basis and the computation sheet of the fixed cost and variable charges in respect of each of the thermal generating stations and other stations along with necessary documents in support of computation of fixed cost and variable costs, in respect of BTPS unit-3
5. BESCO shall furnish source-wise capacity and quantum of energy to be procured from RE projects, for which it has executed the PPAs.
6. BESCO shall furnish the methodology for forecasting the RE energy from different sources for FY24.

j. Capital Expenditure for FY22:

The Commission, in its Tariff Order 2021 dated 09.06.2021 had recognized the revised expected capital expenditure of Rs.2200 Crores for FY22, which also includes the capex of Rs.1000 Crores for carrying out the Conversion of OH lines into UG/AB cable for FY22. However, in order to avoid the front loading of interest and depreciation on the capex in the retail supply tariff to the consumers, the Commission had decided to recognize capex of Rs.2000 Crores for the purpose of approval of revised ARR/retail supply Tariff for FY22.

BESCO, vide its letter dated: 19.07.2022 had requested the Commission to re-allocate the additional Capex of Rs.1000.00 Crores for Conversion of 11 kV OH line into UG cable system, Running of new feeder for bifurcation of load and conversion of LT OH line into UG/AB cable system and laying of Optic Fiber Cable (OFC) along with UG cable in BMAZ jurisdiction of BESCO for FY22.

In reply to the Commission's observations, the BESCO vide its email dated 25.08.2022, had submitted work-wise abstract for having incurred capex of Rs.3057.46 Crores for FY22. The Commission, vide its letter dated 29.11.2022, has communicated the approval for the additional capex of Rs.856 Crores to be considered in APR of FY22, subject to truing up, which was allowed to be

considered as per the DPR.

BESCOM, in its filing of APR of FY22, has indicated the actual incurred capex of Rs.3310.18 Crores in Table-3.38, on Page No.53 & 54, whereas in Format D17, the Capital expenditure is shown as Rs.4162.91 Crores. Whereas, in the work-wise brake up details furnished to the Commission, vide email dated 25.08.2022, the Capital expenditure is shown as Rs.3057.46 Crores.

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

In view of the above, BESCOM shall furnish the following details with justification:

1. The Commission, in its Tariff Order 2022 dated 4th April 2022 had directed the not to compare the capex incurred with BESCOM **Board approved Budget and to compare it only with Commission approved amount**. Approving the capex more than the approved amount leads to incurring the consequential costs not factored in the ARR/ Retail tariff, burden on BESCOM in meeting its cash flow requirements and burden on consumers. The directions issued by the Commission in respect of capital expenditure and the implication of incurring capex without Commission's approval need to be explained to the Board of Directors. BESCOM was also directed not to incur expenditure in anticipation of the approval of Commission without the amounts having been factored in the tariff during the tariff proceedings. BESCOM is directed to take note of that BESCOM will be solely responsible for incurring any capex without the approval of the Commission. In view of the directions issued earlier by the Commission as cited above, the BESCOM is directed to furnish the justification for violating the said directions for comparing capex incurred for FY22 with BESCOM board approved capex for FY22.
2. Details of sources of funding (like grants, debt, equity and internal sources) for the capex incurred during the FY22, against each of the category of works.
3. Break up details of the CWIP in D-17 Format i.e., consumer contribution/grants.

4. Reasons for including the inter unit accounting transfers of Rs.422.74 Crores in Format D-17.
5. details of capex incurred by diversion of revenue amount for FY22.
6. Division-wise abstract of work progress pertaining to UNIP for the capex incurred of Rs.239.38 Crores and the amount of Government grant received thereon.
7. Division-wise abstract of work progress pertaining to HVDS for the capex incurred Rs.35.83 Crores and reason for incurring expenditure despite commission's earlier directions not to incur any capex on HVDS.
8. Details of replacement of faulty transformers by new transformers with reasons for having incurred such a huge amount of Rs.208.44 Crores during FY22.
9. Division-wise abstract of Pump sets energized under Ganga Kalyana Schemes, amount spent, amount of capital grants received from the Government of Karnataka and the balance amount to be received from the Government of Karnataka and the action taken thereon with documentary evidence.
10. Reasons for showing negative capex amount in respect of TIC and SG & EV.
11. Reasons for not achieving the capex in respect DSM.
12. Details of works carried out under Corporate reserve fund for incurring expenditure of Rs.74.06 Crores, without Commission's approval.
13. Division-wise/feeder-wise abstract of work progress pertaining to conversion of over headlines into UG/AB cable for incurring the capex of Rs.1971.47 Crores and reason for exceeding the capex with justification quantified analysis on below indicated parameters in respect of UG cable works with respect to DPR proposal before and after implementation of the project.
 - a) Benefits to the consumers due to reduction of distribution Losses and interruptions;
–average energy savings due to reduction in Hours of interruption.
 - b) Benefit to the consumers due to energy conservation;
–total Energy conserved after the commissioning of the Feeders.

- c) Improved Reliability due to reduction in interruptions and improvement in quality of power supply vis-à-vis DPR.
- d) Benefit due to reduction of transformer failure.
- e) Reduction of Electrical Accidents.
- f) Reduction of T&D Losses.
- g) Earnings from leasing the optic fiber cable as envisaged in the DPR.

14. Physical progress as well as the financial progress, in **respect of the all the schemes taken up by BESCO in the format annexed at Annexure-1, 2 ,3.**

15. **Revised Capex proposal for FY23:** BESCO shall take a note that this Tariff Application is for APR of FY22 and ARR of FY24 and no review of expenditure of FY23 is taken up during these proceedings. The Commission will take a view on FY23 during the course of APR of FY23.

k. Capital Expenditure for FY24:

The Commission, in its MY Tariff Order 2022, based on the previous years' achievements and the projected works to be undertaken as per the GoI/ GoK schemes, to be partly met by the capital grants and the available internal resources, the Commission had recognized the expected capital expenditure proposed by BESCO for Rs.2200 Crores for FY24. However, to avoid front-loading of the elements like Interest on Loans and depreciation on the capex, in the retail supply tariff, the Commission had decided to recognize the capex of Rs.1900 Crores for FY24, subject to prudence check. Considering BESCO's projected availability of capital grants from GoI / GoK and the internal resources by BESCO, for the execution of capex, the Commission considers Rs.750 Crores for the purpose of ARR, as capital borrowings for FY24.

BESCO, in its tariff filing of ARR for FY24 has proposed the anticipated annual capex requirement of Rs.4896.48 Crores for FY24 as against Rs.2200 Crores approved in the Order dated 4th April, 2022. In view of the this, BESCO shall furnish the following details with justification:

- a. The proposed capex is more than twice the approved amount which is not reasonable and would result in heavy tariff burden to the end consumers. BESCO is therefore directed to provide necessary justification on each of the works, in terms of its purpose, benefits to the consumers from such works, ,

timelines for completion along with the no. of works proposed to be taken in FY24.

- b. Provide justification for proposing capex of Rs.247.91 Crores in respect of DAS works which has been in progress for the last one decade, and the Commission is not aware of the current status of DAS work already undertaken at huge cost. BESCOM shall furnish the details of works completed and the benefits derived therefrom from venturing into taking up fresh works.
- c. Regarding RDSS Scheme, BESCOM has proposed a capex of Rs.1065 Crores. Whether, the GoK has accorded specific approval for BESCOM for implementing this scheme and if so a copy of the Government Order may be furnished.
- d. Complete details of individual/ specific works to be carried out under **Industrial upgradation** for the proposed capex of Rs.300 Crores for FY24 including need for the project and the likely benefits to the consumers, with justification.
- e. Break up details for the proposed capex of Rs. Rs.350 Crores towards meters and commercial i.e., for Replacement of MNR, Electro Mechanical meters etc.
- f. Complete details with cost benefits, towards proposed capex of Rs.548 Crores for FY24 under Smart Grid & EV.
- g. under UNIP/providing infrastructure to general IP set, capex of Rs.600 Crores is proposed, to create infrastructure. BESCOM shall furnish complete details of no. of beneficiaries and the anticipated grant from the Government.
- h. Details of works to be carried out for projected capex of Rs.500 Crores towards conversion of OH lines into UG/AB cable for FY24 along with progress of works achieved till date and the benefits derived therefrom.

I. O & M Expenses as per APR for FY22:

- 1) BESCOM in its filing of APR for FY22 under table 3.42 has indicated the total A&G expenses of Rs.465.48 crores whereas in D7 it is Rs.487.23 Cr. BESCOM to

reconcile and furnish the appropriate data as per the Audited Accounts for FY22.

- 2) In the format D-15, opening and closing balance of GFA are indicated. However, the GFA created out of consumer contribution & grants are not mentioned. BESCO to 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 in terms of Hon'ble ATE Order in OP 46/2014 and allowance of net depreciation on the GFA thereon.
- 3) BESCO in its filing has indicated Rs.1377.52 Crores as the internal resources in meeting the capital expenditure of Rs.4162.52 Crores for FY 22 as per D-17 format. BESCO shall submit the source wise detail for the same.
- 4) BESCO in claiming the O& M expenses, has included the additional employees' costs towards contributions to P&G Trust for Rs.327.90 Crores (as per audited accounts for FY22), Rs.550.81 Crores and Rs.572.27 Crores for FY22-23 and FY23-24. BESCO shall submit the computation sheet for having claimed this amount under O&M expenses in support of its claims along with the actual valuation report for the relevant period.

m. Revenue/ Expenses for FY24:

- 1) BESCO under Format D-2 has indicated an amount of Rs.346.71 Crs as "wheeling charges recovery /CSS" and Rs.181.28 Crs as "unbilled" revenue. Whereas for FY24, no such revenue is considered. The revenue from such sources shall be quantified / estimated and considered in the filing for FY24.
Hence, BESCO shall estimate the revenue from such sources and submit the same to the Commission for FY24.
- 2) BESCO has claimed Rs.350 Crs stated to be the impact of revision of pay scales w.e.f. 01.04.2022. In this regard, BESCO shall submit the orders issued by the Competent Authority in support of its claims besides submitting the Actuarial Valuation report applicable for FY22 and FY24.
- 3) BESCO has stated that as per Electricity (Late Payment Surcharge and Related Matters) Rules 2022, it has frozen the power purchase dues as on 03.06.2022 as Rs.7526 Crs. that is to be paid in 48 monthly instalments along

with current bills. BESCOM shall furnish the details of portion of interest on loan account included in the ARR for FY22, FY23 and FY24.

- 4) BESCOM has proposed for withdrawal of Solar Rebate for LT-2a consumers. BESCOM shall furnish the revenue impact on this account.
- 5) BESCOM 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.7.10 per unit. As such, BESCOM shall explain as to how the DER scheme will benefit BESCOM.
- 6) BESCOM has indicated Rs.4896.48 Crores as the proposed Capex and out of which, projected the expected expenditure of Rs.4360.60 Crores for FY24. While projecting the Capex, BESCOM has indicated Rs.2160.48 Crores as fresh borrowing of capital loan, Rs.1154 Crores as the internal resources and the balance amount as GoK / Gol capital grant for FY 24. BESCOM shall submit the details of internal resource and GoK / Gol grants as sources of funding to meet the Capex for FY24.
- 7) BESCOM shall submit the GO-wise additional equity received from the GoK during 2022-23 for having considered the amount under share of deposit in claiming the RoE for FY24.
- 8) BESCOM, in its filing under Format-D8, has indicated the depreciation of Rs. 251.49 Crores for FY22 and projected depreciation of Rs.196.10 Crores and Rs 215.21 Crores for FY23 and FY 24 on the assets created out of consumer contribution / grants. The amount of depreciation on the assets created out of consumer contribution/ grants is found to be less than the actual depreciation withdrawn for FY22. As the assets to be added on the works to be undertaken under consumer contribution / grants are showing an increasing trend and will be added to the existing categories of assets, the question of reduction in the depreciation for such assets will not arise. BESCOM, by the considering the additional assets to be added by executing

the works under consumer contribution / grants, shall submit the revised depreciation amount, on such assets for FY23 and FY24.

- 9) BESCOM, while proposing the revised retail supply tariff for FY24 has projected the Irrigation pump sets tariff subsidy of Rs 4727.94 Crores for FY24 at the abnormal rate of Rs 7.55 per unit as against the existing approved CTD of Rs 4.55 per unit. The tariff increase proposed by BESCOM is 65.82%. BESCOM shall submit the commitment letter from the GoK in support of the subsidy to be received from the GoK.
- 10) BESCOM has proposed increase in fixed / demand charges for both LT and HT categories. In this regard, BESCOM shall furnish the position of fixed / demand charges in FY22 (Actual), FY24 (with the current tariff) and FY24 (with 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,(as per Format D-21	% of fixed cost in the tariff %
FY22 (Actuals)			
FY24 (as per current tariff)			
FY24 (as per the proposed revised tariff)			

- 11) BESCOM shall submit category-wise, sub-category-wise contract / sanctioned load and slab-wise consumption details of all the category of consumers as on 31.10.2022, since the data furnished in Format D-21 is relating to FY22.

12) New Proposals:

As regards Parallel operation charges/grid Support charges claimed by BESCOM, the following needs to be clarified:

- a. Whether Grid Support charges proposed in accordance with Regulation 11(xi) of the KERC (Terms and Conditions for Open Access) Regulations, 2004 (as amended from time to time), are being collected from all the Open Access (OA) consumers.

- b. Parallel operation charges/grid Support charges as computed (in Page 267) have been proposed only for captive consumers and not from other OA consumers.
- c. Under which Regulations, BESCOM has claimed the Parallel operation charges/grid Support charges from captive consumers;
- d. Whether the proposed charges are to be collected from captive generators having wheeling and banking agreement with the ESCOMs or from solar generators also, which are connected to the grid only for taking grid reference.

2. RPO Compliance:

- i. BESCOM has furnished the details of RPO compliance of solar and non-solar RPO for 2021-22 and has submitted that it has complied with both solar & Non-solar RPO.
- ii. In Table-3.8 the cost pertaining to serial No.3, 8 &9 is not furnished. BESCOM shall submit a revised table indicating all the costs duly agreeing with the audited accounts.
- iii. In Table-3.30, the energy of 27.17MU procured from Shimsha & Mani Hydro Station shall be added as the same is treated as from RE source.
- iv. The reasons of purchasing RE power (solar & Non-solar) from IEX shall be furnished.
- v. BESCOM shall clarify regarding the accounting of Green energy sale in the audited accounts.

3. Cross subsidy surcharge:

For FY24, BESCOM has proposed the following CSS:

Voltage level	HT-1	HT-2a(i)	HT-2a(ii)	HT-2b(i)	HT-2b(ii)	HT-2C(i)	HT-2C(ii)	HT 3a(i)	HT 3a(ii)	HT 3b	HT-4	HT-5
66kV & above	0.00	223.38	220.62	291.80	273.50	202.42	238.62	0.00	0.00	0.00	136.77	323.56
HT-11kV or 33 kV	0.00	223.38	216.37	291.80	273.50	141.91	238.62	0.00	0.00	0.00	76.25	323.56

BESCOM shall furnish the working sheet of cost of supply at 66kV and at HT -level

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

- a. BESCO has stated that it has worked out the additional surcharge of Rs.2.46/unit considering the ARR of FY24. However, it is also stated that the Additional surcharge is worked out as per the methodology adopted in KERC order dated 30.05.2019. It may be noted that in the above tariff order, the Commission had worked out additional surcharge based on APR data of FY18, whereas as per the subsequent orders, the Commission has considered the approved ARRs for computation of ASC. **In view of the above BESCO shall clarify as to whether the computations are done as per latest orders of the Commission.**

In Appeal No. 260/ 2018 and 43/2021 the Hon'ble APTEL in its order dated, 15.09.2022 has 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 APTELs Website. **Keeping in view the observations of the Hon'ble ATE, BESCO 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 below:

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."*

5. Wheeling charges:

BESCOM has proposed wheeling charges of 37.45 paise / unit for HT network and 87.38 Paise / unit for LT network and the corresponding distribution loss of 3.05% and 7.09% respectively.

BESCOM has requested to levy the above charges to all OA/wheeling transactions including RE sources.

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 has been 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.

6. Compliance of Commission's Directives:

Directive No	Directives Issued by the Commission	Observation made
4	Directive on implementation of Standards of Performance (SoP)	BESCOM shall furnish the details of awareness campaigns in the Hobli levels for educating consumers and orientation programs for educating the officers and field staff up to the level of linemen, conducted during FY22 as reported in its tariff filing.
5	Directive on use of safety gear by linemen	BESCOM is not submitting the quarterly compliance report to the Commission and has not furnished the details of the number of regular and contract basis field staff working and the number of staff provided with the safety gear. BESCOM shall submit the information and the definite timeline for providing complete set of safety gear to all the linemen if any are still not provided. Details of the action taken on erring staff also may be furnished.
7	Directive on Load shedding	BESCOM has not reported the extent of (percentage) of updating of the consumer data into the application used for public information on power system interruption etc., BESCOM shall furnish the timeline for updating the entire consumer data into the application.
8	Directive on establishing a 24 X 7 fully equipped centralized consumer service centers	BESCOM was directed to reduce the consumer downtime to address complaints. Comparison of the downtime analysis for FY21 and FY22 shall be furnished.

Directive No	Directives Issued by the Commission	Observation made
		BESCOM shall submit compliance on the same.
9	Directives on Energy Audit	<p><u>Energy Audit of cities / towns</u></p> <p>BESCOM shall indicate a definite timeline by which it will complete the consumer indexing for taking up energy auditing effectively.</p> <p>BESCOM shall also furnish the comparative statement of losses recorded in Towns & Cities for the FY22 as against the FY21.</p> <p><u>DTCs Energy Audit:</u></p> <p>BESCOM 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 which are showing abnormally high losses, every month to the Commission regularly.</p> <p>BESCOM has not submitted the details of energy audit conducted in respect of DTCs for which meters are stated to have been fixed.</p> <p>BESCOM shall furnish the details of no. of consumers tagged to DTCs during FY21, FY22 & FY23 (up to October 22), along with number of DTCs existing, the number of meters provided to DTCs, percentage of energy audit conducted etc.</p> <p>BESCOM Shall confirm as to whether the consumer tagging work has been completed or still in progress. The timeline for completely tagging the consumers with DTCs across BESCOM, need to be furnished.</p> <p>BESCOM shall submit the details of energy audit conducted for the metered DTCs for FY22 and till October 2022 and the timeline for conducting the EA of all the DTCs.</p>
14	Prevention of Electrical Accidents	<p>BESCOM shall furnish the details of hazardous locations identified, the balance number of hazardous locations to be rectified for FY22 and till October 2022 along with an action plan to rectify them.</p> <p>BESCOM shall furnish the summary of the analysis made on the reports submitted by Electrical Inspectorate for FY22</p>

Directive No	Directives Issued by the Commission	Observation made
		and FY 23 up to September 2022 and the action taken to prevent such accidents in future.
	New Directive issued in Tariff Order 2022	The KPTCL and ESCOMs were directed to comply with the timelines prescribed by the Commission on issue of NOC for wheeling and banking of energy in respect of Open Access Consumers. BESOM is yet to furnish compliance thereon.
