

CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY21

4.0 MESCOM's Application for APR for FY21:

The MESCOM has filed its application on 30th November, 2021, for the Annual Performance Review (APR)/ revision of ARR for FY21 based on the Audited Accounts, approval of the Annual Revenue Requirement (ARR) for the control period FY23- FY25, and revision of retail supply tariff for FY23.

The Commission had communicated its preliminary observations on the application of the MESCOM on 10th December, 2021. The MESCOM has furnished its replies to the preliminary observations of the Commission, vide its response dated, 23rd December, 2021.

The Commission in its Order dated 4th November 2020, had approved MESCOM's revised net Annual Revenue Requirement (ARR) of Rs.4011.33 Crores along with the revision of retail supply tariff for FY21.

The revised Annual Revenue Requirement (ARR) of the MESCOM as per annual performance review for FY21, based on the Audited accounts, is discussed in this chapter.

4.1 MESCOM's Submission:

The MESCOM has submitted its proposals for revision of ARR under APR for FY21 based on the Audited Accounts as follows:

TABLE – 4.1
APR for FY21 – MESCOM's Submission

Sl. No	Particulars	Amount in Rs. Crores	
		As approved in Tariff Order dated 04.11.2020	As Filed 30.11.2021
1	Energy at the Generation Bus (With MSEZ) (MU)	6097.10	5863.54
2	Transmission Losses - in %	3.039%	4.30%
3	Energy at Interface (MU)	5853.92	5611.33
4	Distribution Losses in %	10.00%	9.86%
	Sales in MU:		

Sl. No	Particulars	As approved in Tariff Order dated 04.11.2020	As Filed 30.11.2021
5	Sales to other than IP & BJ/KJ	3540.83	3337.71
6	Sales to BJ/KJ(consuming<40 units/month)	37.29	35.00
7	Sales to IP	1690.41	1685.25
	Total Sales	5268.53	5057.96
	Revenue at existing tariff in Rs. Crores		
8	Revenue from tariff and Misc. Charges	2908.51	2670.42
9	RE Subsidy to BJ/KJ	27.34	29.21
10	RE Subsidy to IP	951.24	
	Total Existing Revenue	3888.40	3649.87
	Expenditure in Rs. Crores		
11	Power Purchase Cost	2805.94	2813.79
12	Transmission charges of KPTCL	319.224	293.01
13	SLDC Charges	1.996	2.00
	Power Purchase Cost including cost of transmission	3127.16	3108.80
14	Employee Cost	702.32	467.61
15	Repairs & Maintenance		64.99
16	Administration & General Expenses		113.39
	Total O&M Expenses		645.99
17	Depreciation	153.53	193.14
	Interest & Finance charges		
18	Interest on Loans	109.84	100.19
19	Interest on Working capital	79.80	54.01
20	Interest on belated payment on PP Cost	0.00	0.00
21	Interest on consumer deposits	38.34	30.15
22	Other Interest & Finance charges	1.84	0.00
23	Less: interest and other expenditure capitalized	-2.10	0.00
	Total Interest & Finance charges	227.72	184.35
24	Other Debits/Extraordinary items (Rs.6.55 Crores of other debits Less extraordinary item of Rs.7.95 Crores)	0.00	-1.40
25	Net Prior Period Expenses/Income (Debit/Credit)	0.00	0.00
26	Return on Equity	167.04	135.24
27	Taxation/MAT Credit	0.00	0.00
28	Funds towards Consumer Relations/Consumer Education	0.50	0.41
29	Other Income	-133.38	-143.41
	ARR	4244.88	4123.12
30	Add surplus of previous years	-233.55	0.00
	Net ARR	4011.33	4123.12
31	Deficit in Revenue for FY21	-122.93	473.25

Sl. No	Particulars	As approved in Tariff Order dated 04.11.2020	As Filed 30.11.2021
32	Approved Regulatory Asset to be recovered during FY22 & FY23	122.00	0.00
33	Net Deficit for FY21	0.00	473.25

Considering the revenue of Rs.3649.87 Crores against a net ARR of Rs.4123.12 Crores, MESCOM has reported a revenue gap of Rs.473.25 Crores for FY21.

4.2 MESCOM's Financial Performance as per the Audited Accounts for FY21:

An overview of the financial performance of MESCOM for FY21, as per its Audited Accounts is indicated in the following Table:

TABLE – 4.2

Financial Performance of MESCOM for FY21

Amount in Rs. Crores

Sl. No.	Particulars	Amount
	Receipts:	
1	Revenue from Tariff and misc. charges	3650.285
2	Other Income	142.993
	Total Revenue	3793.28
	Expenditure:	
3	Power Purchase Cost:	2813.79
4	Transmission charges of KPTCL	293.01
5	SLDC & DSM(UI) charges	2.00
	Power Purchase Cost including cost of transmission	3108.80
6	Employee Cost & Benefit Expenses	467.61
7	Finance Cost	131.66
8	Depreciation	193.05
9	Other Expenses	215.58
10	Current Tax	0
11	MAT Credit Entitlement	0
12	Exceptional Items	-7.95
13	Less: Net movement of Regulatory deferred amount	-262.50
	Total ARR	3846.25
	Net Profits/-Loss	-52.97

As per the Audited Accounts, MESCOM has incurred a loss of Rs.52.97 Crores for FY21. The profit / loss reported by MESCOM in its audited accounts in the previous years are as follows:

TABLE – 4.3
MESCOM's Accumulated Profit / Loss

Particulars	Amount in Rs. Crores
Profit / Loss (-) as at the beginning of FY21	231.3958
Losses incurred during FY21	-52.9669
Accumulated balance of Profit / Loss (-) as at the end of FY21	178.4289

As seen from the above table, the accumulated profit as at the end of FY21 is Rs.178.4289 Crores.

Commission's analysis and decision:

As per the provisions of the MYT Regulations, the Commission has taken up the Annual Performance Review for FY21, duly considering the actual revenue and expenditure booked as per the Audited Accounts against the revenue and expenditure approved by the Commission in its Tariff Order dated 4th November, 2020. The item-wise review of expenditure and the revenue and the decisions of the Commission thereon are as discussed in the following paragraphs:

4.2.1 Sales for F21:

A. Sales- Other than IP sets:

- a. The Commission, in its Tariff Order 2020, dated 04.11.2020, had approved total sales of 5268.53 MU in respect of various consumer categories, as against MESCOM's proposal of 5554.25 MU, excluding the sales to MSEZ. The Actual sales of MESCOM, as per the current APR filing [D-2 FORMAT], is 4996.98 MU indicating a decrease in the sales to an extent of 271.55 MU, as compared with the approved sales.
- b. The category-wise sales approved by Commission and the actuals for FY21 are indicated in the table below:

TABLE - 4.4
Category wise Sales Approved Vs Actuals for FY21

Category Col-1	Energy in MU		
	Approved** Energy in MU Col-2	Actuals** Energy in MU Col-3	Difference (MU) Col-4= Col 3 – Col 2
LT-1 BJ/KJ greater than 40 units/month	12.08	18.91	6.83
LT-2a Domestic Lighting	1486.51	1529.78	43.27
LT-2b Pvt. Educational Institutions.	14.24	8.05	-6.19
LT-3 LT Commercial	408.52	349.98	-58.54
LT-4b IP sets above 10 HP	0.87	0.89	0.02
LT-4 (c) Pvt. Nurseries, coffee & Tea Plantations	8.11	8.70	0.59
LT-5 LT Industries	133.95	123.75	-10.20
LT-6 WS Water Supply	131.10	144.80	13.70
LT-6 SL Street Lights	72.11	66.79	-5.32
LT-7 Temporary Supply	20.41	18.32	-2.09
HT-1 HT Water Supply	109.04	100.79	-8.25
HT-2a HT Industrial	685.91	550.54	-135.37
HT-2b HT Commercial	220.55	140.44	-80.11
HT-2c Aided Edcl. Instns. & Hospital	159.93	89.81	-70.12
HT-3a & b HT Irrigation	48.86	95.59	46.73
HT-4 HT Residential Apartments	23.60	20.73	-2.87
HT-5 HT Temporary Supply	2.16	2.29	0.13
Sub total	3537.95	3270.16	-267.79
BJ/KJ less than/= 40 units/month	37.29	35.00	-2.29
IP Sets up to 10 HP	1690.41	1685.25	-5.16
Sub total	1727.70	1720.25	-7.45
KPCL	2.88	6.57	3.69
Grand total**	5268.53	4996.98	-271.55

**Excludes sales to SEZ.

The Commission had noted that the major categories contributing to the reduction in sales with respect to the estimates are LT-3, LT-5, HT-2a, HT-2b & HT-2c categories.

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

B. Sales to IP sets – APR for FY21:

- i. In its Tariff Order dated 04th November, 2020, the Commission had approved a specific consumption of IP-sets as 4,796 units / installation / annum for FY21. Whereas, as per the data of IP-set consumption submitted by the MESCOM, in its Tariff filing for APR of FY21, the specific consumption works out to 4,771.59 units / installation / annum. This shows a decrease in the specific consumption by 24.41 (4,796 – 4,771.59) units / installation / annum, as compared with the approved figures. This actually corresponds to a decrease by 0.51%.
- ii. The total IP-set consumption reported by the MESCOM for the FY21 in the prescribed formats of the Commission, for assessment of sales to IP sets, is 1,685.25 MU. Whereas, the Commission had approved 1,690.41 MU for FY21, in its Order dated 04th November, 2020. Thus, there is a decrease of overall sales by 5.16 (1,690.41 – 1,685.25) MU which corresponds to 0.31 per cent decrease in percentage terms.
- iii. Further, the Commission had approved 3,61,245 as the number of IP-set installations for FY21; whereas the actual number of installations serviced as reported by the MESCOM in its Tariff filing is 3,61,885. This indicates an increase in number of installations by 640 (3,61,885 – 3,61,245) and this corresponds to 0.18 per cent increase in the number of installations as compared to number of installations approved for the FY21.

The details of sales to IP sets for FY21, as approved by the Commission in its tariff order 2020 and as furnished by MESCOM, in its current Tariff Filing are as indicated below (FY21 approved Vs Actuals);

Particulars	As approved by the Commission	Actuals as submitted by MESCOM
Number of installations	3,61,245	3,61,885
Mid-year number of installations	3,52,481	3,53,184
Specific consumption in units / installation / annum in units	4,796	4,771.59
Sales in MU	1,690.41	1,685.25

- iv. The Commission, in the APR for FY20, vide its tariff order 2021 has approved the total sales to IP sets as 1,728.92 MU with a specific consumption of 5,156 units per IP set per annum for FY20. MESCOM in its current tariff filing has indicated the sales to IP sets as 1,685.25 MU for FY21 with a specific consumption of 4,771.59 units per IP set per annum. It is observed that, there is a decrease in sales by 43.67 MU [1,728.92 (FY20) – 1,685.25 (FY21)] corresponding to 2.52% and a decrease in the specific consumption by 384.41 (5156 – 4771.59) units per IP set per annum corresponding to 7.45% for FY21 as compared to FY21 actuals – approved.
- v. The Commission, in its preliminary observations had directed MESCOM to furnish the data of GPS as on 31.03.2020 and 31.03.2021 by reconciling survey data with the number of installations in the DCB. As per the data furnished by MESCOM in its replies to preliminary observations, it has completed 78.19% of survey as on 31.03.2020 and it is 98.47% as on 31.03.2021 and 100% as on 30.09.2021. From the data submitted, it is observed that, out of 3,61,885 numbers of installations as on 31.03.2021, 15,348 are defunct / dried up and 5,526 are not surveyed at all. Though the survey is said to be completed as on, 30.09.2021, MESCOM has reported 1,610 numbers as defunct / dried up. MESCOM has not reported the details of un-authorized IP installations in its area and the action taken to regularize such IP installations. In the previous tariff filings, the number of IP installations identified by MESCOM in GPS survey was more (authorized and unauthorized) than the number of installations in the DCB. Hence, the Commission observes that, MESCOM has not furnished the information of IP set installations as per GPS survey as desired by the Commission and there is an ambiguity in the data.
- vi. The Commission notes that, MESCOM, has not reported the precise details of actual number of IP installations existing in the field, working IP sets, permanently disconnected IP sets in respect of both the authorized and unauthorized categories, action taken to regularize the unauthorized IP sets etc., and the action taken to reconcile the data of the GPS survey with the DCB figures. The Commission hereby finally directs MESCOM to submit the

clear data of IP sets as per survey without any ambiguity in the data within 3 months from the date of this Order.

- vii. In the preliminary observations, the Commission has directed MESCOM to furnish the status of segregation the agricultural feeders to assess the sales to IP set installations based on the energy meter readings provided to such agricultural feeders. MESCOM has submitted that, out of 124 number of agricultural feeders, 120 feeders are commissioned. Along with these feeders, MESCOM also has aligned 252 numbers of rural mixed feeders as exclusive IP feeders. The Commission appreciates the progress of MESCOM in commissioning 372 (120 + 252) segregated IP feeders in the O&M Division areas of Shivamogga, Bhadravathi, Sagar, Shikaripura and Kadur. The Commission also directs MESCOM to take necessary action to commission the balance 4 numbers of segregated agricultural feeders at the earliest. MESCOM shall start furnishing the data of assessment of sales to IP installations in the area of above Divisions on the basis of the energy meters provided to these 372 feeders from the date of commissioning of these feeders.
- viii. The Commission, in its previous Tariff Orders, had directed MESCOM to submit the monthly IP-set consumption by considering the meter readings of individual IP-set installations which were said to be metered. MESCOM was also directed not to assess the IP-set consumption as per the meter readings of sample DTCs feeding predominantly IP-set loads. Though, MESCOM has completed the bifurcation of agricultural feeders, MESCOM has not submitted the assessment of sales to IP-sets neither on the basis of the meter readings of individual IP sets nor based on the consumption recorded in energy meters provided to the bifurcated agriculture feeders. Instead, MESCOM has submitted the abstracts of the IP- sets' consumption, based on the energy meter readings of sample DTCs supplying power predominantly to IP installations. MESCOM is directed to furnish the data of assessment of sales to IP installations on the basis of the readings of energy meters provided to segregated agriculture feeders while submitting the data for APR of FY22.

- ix. Based on the above discussions, even though the average consumption recorded in few of the predominant DTCs are higher than the MESCOM's average, since the sub-division average considered is found to be in acceptable range. On detailed verification of the data, it is noted that the overall sales of 1,685.25 MU as submitted by MESCOM for FY21 in its Tariff application which is acceptable. Therefore, the Commission hereby considers the IP set consumption of 1,685.25 MU for FY21.

Hence, the Commission hereby decides to allow the consumption of 1,685.25 MU claimed by the MESCOM in its tariff filing for FY21 with the details as follows;

Particulars	Approved sales of IP sets for FY20
Number of installations	3,61,885
Mid-year number of installations	3,53,184
Specific consumption in units / installation / annum	4,771.59
Sales in MU	1,685.25

In the light of the above discussions, based on the audited accounts, the Commission hereby approves energy sales for FY21 as indicated in the following table, including sales of 6.57 MU to KPCL and excluding wheeled energy and sales to MSEZ:

TABLE - 4.5

Category-wise Sales Approved for FY21 as per APR

Category	Actuals** Energy in MU
LT-1 BJ/KJ greater than 40 units/month	18.91
LT-2a Domestic Lighting	1529.78
LT-2b Pvt. Educational Installations	8.05
LT-3 LT Commercial	349.98
LT-4b IP sets above 10 HP	0.89
LT-4 (c) Pvt. Nurseries, coffee & Tea Plantations	8.70
LT-5 LT Industries	123.75
LT-6 WS Water Supply	144.80
LT-6 SL Street Lights	66.79
LT-7 Temporary Supply	18.32
1 HT Water Supply	100.79
HT-2a HT Industrial	550.54

HT-2b HT Commercial	140.44
HT-2c Aided Edcl. Instns. & Hospital	89.81
HT-3a & b HT Irrigation	95.59
HT-4 HT Residential Apartments	20.73
HT-5 HT Temporary Supply	2.29
Sub total	3270.16
BJ/KJ less than/= 40 units/month	35.00
IP Sets up to 10 HP	1685.25
Sub total	1720.25
KPCL	6.57
Grand total**	4996.98

**Excludes sale to SEZ.

Thus, the Commission approves 4996.98 MU excluding sales to MSEZL. The Sales to MSEZL is discussed in the relevant Chapter of the MSEZL Tariff Order.

4.2.2 Power Purchase for FY21:

MESCOM's Submission:

The Commission in its Tariff Order dated 4th November 2020, had approved power purchase quantum of 6,097.10 MU for MESCOM at a cost of Rs.3,127.157 Crores, indicating source-wise quantum of power purchase and cost thereon, for FY21. MESCOM, in its application has submitted the details of actual power purchase for FY21 vis-à-vis the approved figures, for the purpose of Annual Performance Review as under:

TABLE - 4.6
Power Purchase for FY21 - Approved and Actuals

Source of Generation	Approved for 2020-21			Actuals as per filing for 2020-21			Difference			% increase (+)/decrease (-) over approved figures	
	Energy in MU	Amount in Crs.	Avg. cost in Rs/kWh	Energy in MU	Amount in Crs.	Avg. cost in Rs/kWh	Energy in MU	Amount in Crs.	Avg. cost in Rs/kWh	Energy	Amount
KPCL Hydrel Stations	1081.57	91.82	0.85	1155.76	123.68	1.07	74.19	31.86	0.22	6.86	34.70
KPCL-Thermal Stations	1199.46	758.55	6.32	760.53	558.64	7.35	438.93	199.91	1.03	-36.59	-26.35
CGS	1859.45	842.39	4.53	1924.52	861.87	4.48	65.07	19.48	0.05	3.50	2.31
Major IPPs	468.00	318.24	6.80	280.34	228.03	8.13	187.66	-90.21	1.33	-40.10	-28.35

Minor IPPs(RE Projects)	1473.20	570.17	3.87	1638.17	680.78	4.16	164.97	110.61	0.29	11.20	19.40
Other State Hydro Projects	15.42	5.19	3.37	19.11	3.30	1.73	3.69	-1.89	-1.64	23.93	-36.43
Transmission Charges (KPTCL/PGCIL)	0.00	538.61	-	0.00	538.69	-	-	0.08	-	-	0.01
SLDC charges	0.00	2.00	-	0.00	2.00	-	-	0.00	-	-	0.20
POSOCO Charges	0.00	0.19	-	0.00	0.27	-	-	0.08	-	-	42.11
ENERGY Balancing	0.00	0.00	-	240.46	130.03	5.41	240.46	130.03	5.41	-	-
UI Charges	0.00	0.00	-	-24.10	-5.53	2.29	-24.10	-5.53	2.29	-	-
Other Charges	0.00	0.00	-	0.00	30.77			30.77		-	-
Energy Sales (Overarching/IEX/Others)	0.00	0.00	-	-131.25	-43.73	3.33	131.25	-43.73	3.33	-	-
Total	6097.10	3127.157	5.13	5863.54	3108.80	5.30	-233.56	-18.36	-	-3.83	-0.59

Commission's analysis and decisions:

1. Approved and Actual quantum & Cost of energy for FY21:

The actual power purchase quantum for FY21, as per annual accounts submitted by MESCOM is 5,863.54 MU purchased at a cost of Rs.3,108.80 Crores, as against the approved quantum of 6,097.10 MU at a cost of Rs.3,127.157 Crores. This indicates that there is a decrease in the quantum of power purchased to an extent of 233.56 MU and decrease in the power purchase cost by Rs.18.36 Crores.

The decrease in quantum and cost of power purchase is to the tune of 3.83% and 0.59% respectively as compared with the approved figures.

On decrease in power purchase quantum to an extent of 233.56 MU, MESCOM has submitted that due to COVID-19 restrictions which prevailed in the year FY21, there is decrease in sales in respect of high revenue yielding categories (industrial & commercial installations).

2. Merit Order Dispatch:

On the deviation from the merit order scheduling, MESCOM has submitted that, based on the load requirements, the SLDC is scheduling the power in order to balance the load-generation. This is a dynamic exercise which SLDC is carrying out in respect of all time blocks. However, as can be observed from the statement (enclosed in the replies to the preliminary observations, showing variable cost in the ascending order of energy scheduled from

different sources), merit order dispatch has been complied with, while scheduling the energy.

3. Purchase of Energy from RE Sources:

As regards the reasons for variation in renewable energy consumption against the approved consumption, MESCOM has submitted that on a comparison of approved and actual RE, excluding bundled solar power, there is difference of 166.79 MU. Actuals of FY21 includes banked energy from mini-hydel (27 MU) & wind mills (2 MU) who are under wheeling & banking agreements and energy from solar rooftop purchases (7.71 MU) also. Otherwise difference would be about 130 MU. Since, the approved figures are estimations based on previous years' energy generation and keeping in view the infirm nature of generation, the variation of about 10% may be acceptable. Hence, the Commission is requested to approve the actuals as proposed in the petition.

4. Sale of surplus energy:

On Commission had observed that MESCOM has sold surplus energy of 131.25 MU energy at Rs.3.33 per unit and had desired to know as to whether there was profit/loss, MESCOM has submitted that, it is expected by the Commission that any surplus energy available from the tied up sources of energy would be traded by the ESCOMs through PCKL on commercial principles.

As informed by SLDC, the trading of excess power in any time blocks / time period is being done by PCKL on behalf of ESCOMs. In case such surplus energy is not traded then it would be considered in deviation settlement mechanism impacting negatively to ESCOMs attributing to UI charges which may be far less than the amount what would have been realized through trading. Hence, whatever the surplus energy traded and revenue realized in FY21 would have to be reckoned as reduction in such revenue loss.

In this regard, the Commission directs MESCOM/SLDC to make a critical analysis at each block on the energy sold and amount realized considering the merit order despatch, grid conditions and other relevant parameters, in order to know whether the amount realized from such sale results in profit or loss.

5. Increase in average cost of power supply:

On the Commission observation that the average cost of thermal stations like BTPS Unit-1, NTPC Vallur, Kudgi and UPCL, NTPC VVNL Bundle Power Solar, are on a higher side, MESCOM while keeping the Commission approved values as reference has replied that in respect of BTPS Unit-1, NTPC Vallur, and UPCL, the variable charges per unit are less than approved by the Commission. However, the capacity charges per unit are higher. This is because of non-scheduling of power to the extent of approved quantum from these sources by SLDC to balance the Load-Generation. In respect of Kudgi, the average cost is lesser than the approved cost due to sourcing higher energy than the approved quantum and Solar bundling in respect of NTPC-VVNL is being done considering the pooled cost. Hence, there is slight variation.

6. PGCIL Charges:

On the Commission's observation that, the PGCIL Charges have increased by around 12% and whether MESCOM has taken any initiative to address this issue of abnormal increase in the PGCIL POC charges, MESCOM has submitted that, the PGCIL is considering the SRPC data for sharing the central transmission charges under POC mechanism as per CERC sharing regulations and it is binding on the ESCOMs to bear the same. Further, the modified PoC charges sharing methodology, as per CERC (Sharing of Inter State Transmission charges and loss) Regulations 2020, have come into force with effect from 01.11.2020, by which it is expected that in FY22, the POC charges will come down considerably.

Taking note of the above submissions, the Commission directs MESCOM to ensure that the amount paid towards PGCIL charges are thoroughly verified as per the CERC approved methodology in terms of CERC (sharing of Inter State Transmission Charges and related matters) Regulations 2020 and make sure that such charges are arrived at prudently.

7. Source-wise Generation:

On an analysis of the source-wise approved and actual power purchases, it is observed that, there are deviations in the quantum of energy purchased and cost thereon. There is increase in supply of energy from the Central Generating Stations, Renewal energy sources of power and from energy supplied by the State Owned Hydel projects and other hydro projects. Whereas, there is decrease in the supply from the State owned Thermal Power Plants and Major Thermal IPPs as indicated below:

Source of Generation	Approved Energy for 2020-21 in MU	Actual Energy for 2020-21 in MU	Excess/ Shortfall (-) Energy in MU
KPCL Hydel Stations	1081.57	1155.76	74.19
KPCL-Thermal Stations	1199.46	760.53	-438.93
CGS	1859.45	1924.52	65.07
Major IPPs	468.00	280.34	-187.66
Minor IPPs(RE Projects)	1473.20	1638.17	164.97
Other State Hydro Projects	15.42	19.11	3.69

Source of Generation	Approved Amount for 2020-21 in Crores	Actual Amount for 2020-21 in Crores	Excess/ Shortfall (-) Amount in Crores
KPCL Hydel Stations	91.82	123.68	31.86
KPCL-Thermal Stations	758.55	558.64	-199.91
CGS	842.39	861.87	19.48
Major IPPs	318.24	228.03	-90.21
Minor IPPs(RE Projects)	570.17	680.78	110.61
Other State Hydro Projects	5.19	3.30	-1.89

The excess energy supplied from Renewable Energy Sources, State Owned Hydel projects and other hydro projects and reduction in the energy requirement has resulted in backing down of KPCL Thermal Power Stations and Major Thermal IPPs, but at the same time payment of fixed cost was made to the thermal station, though no energy was purchased from these thermal stations. Added to this, the PGCIL charges have increased by around 12% over the previous year. This has resulted in increase in per unit cost from Rs.5.13 Per unit (Approved) to Rs.5.30 per unit, as per actuals.

8. Variation in the Variable Cost of Thermal Generating Stations:

It was noted from the D- statement and details of Variable Cost (Rs/kWh) submitted in the ascending order, in the compliance of the Commission's preliminary observations, that there is variation in variable cost (Rs/kWh) of thermal generating stations among ESCOMs as indicated below:

Variable Cost (Rs/kWh) as noted from information provided by ESCOMS in D1 Format and in respect of preliminary observation on statement showing the variable cost in the ascending order w.r.t. Merit Order Despatch						
Sl. No.	Source/ESCOM Name	BESCOM	MESCOM	CESC	HESCOM	GESCOM
A	KPCL Thermal					
1	RTPS -1 to 7	2.96	3.15	3.18	3.18	3.18
2	RTPS-VIII	3.41	3.55	3.58	3.58	3.58
3	BTPS Unit I	2.84	2.94	2.98	2.98	2.98
4	BTPS Unit II	2.73	2.82	2.90	2.90	2.90
5	BTPS Unit III	2.86	2.74	2.88	2.88	2.88
6	Yeramarus TPS	2.85	3.17	2.97	2.96	2.95
B	Central Projects					
1	N.T.P.C-Ramagundam, St-I & II	2.38	2.49	2.55	3.87	2.39
2	NTPC-Ramagundam, St-III	2.37	2.35	2.40	1.10	2.20
3	NTPC-Talcher, St-II	1.98	2.01	1.97	1.97	1.98
4	NTPC-Simhadri	3.11	3.08	3.12	3.18	3.30
5	NLC TPS2-Stage 1	2.68	2.75	2.75		3.42
6	NLC TPS2-Stage 2	2.84	2.72	2.75	3.17	2.00
7	NLC TPS-2-Expn 1 &2	2.68	2.68	2.61		2.67
8	NLC TPS1-Expn	2.45	3.46	3.73	3.96	3.48
9	Tuticorin (NTPL) 1&2	3.07	2.95	3.10	Not Provided	3.00
10	Vallur TPS 1,2 &3	4.09	3.16	3.51	4.19	3.71
11	DVC Unit-1 & 2 Koderma	2.49	2.50		Not Provided	2.65
12	DVC Unit-7 & 8 Mejia TPS	2.76	2.77	2.61	Not Provided	2.77
13	Kudugi 1,2 &3	3.06	2.87	3.28	3.05	2.92
14	NNTPS	2.27	2.22	2.31	2.61	2.28
C	IPPs-Major-Thermal					
1	UPCL	3.48	3.07	3.53	3.54	3.37

Individually all the ESCOMs were requested to provide proper reasoning behind this variation in variable cost. The reasons provided by each of the ESCOMs are as below:

BESCOM: BESCOM has submitted that, in respect of variable charges of KPCL thermal stations, KPCL is claiming GCV on station weighted average basis i.e. GCV as fired basis. As per PPA, GCV is to be admitted "as received basis" at power stations. The same is pointed by AG Audit. As such 150 kCal/kg is added to the arrived GCV on received basis of KPCL Thermal Stations. KPCL is considering moisture correction factor only on quantity and not for cost. As per Coal Supply Agreements, the moisture correction factor is to be considered for both quantity and cost. As such, moisture correction factor is considered both for cost and quantity. Due to these factors, variable charges of KPCL Thermal Stations billed by BESCOM is on lower side compared to variable cost billed by other ESCOMs.

Regarding variable charges of Central Generating Stations, BESCOM has submitted that, it includes compensation charges, incentives, SRLDC Charges, FERV and revisions of previous months and has enclosed the Statement showing the details of variable charges considered by BESCOM and the variable cost per unit of other ESCOMs if same charges are proportioned to their share allocation. According to it, the resulting variable cost (Rs/kWh) in respect of all the thermal power plants for all other ESCOMs are in line with BESCOM.

MESCOM: MESCOM has submitted that, the variable cost indicated in the D-1 statement inadvertently includes certain other costs also. MESCOM separates these inadvertent costs and arrives at exclusive variable costs. Such separated exclusive variable costs will be subject to scrutiny by applying the energy charges of each of the generating stations to the monthly scheduled energy, wherein, monthly energy charges are arrived at based on the parameters and formula as per PPA / CERC norms. It is further submitted that, such a scrutiny endorses the correctness of variable charges being admitted by MESCOM in the monthly bills of generating stations.

CESC: The CESC has submitted that, in respect of KPCL thermal power plants except Yeramarus TPS, KPCL is raising monthly invoices on the basis of PPA's and tariff orders issued by the Commission from time to time. The Variable cost

in respect of RTPS stations 1 to 7, RTPS-8, BTPS-Unit 1 to 3 stations are worked out on the basis of Coal cost with moisture correction factor i.e. CESC is not deducting the cost related to excess moisture content of the coal received by KPCL in order to arrive at the weighted average cost of the coal in respect of thermal stations. Also, the year-end revision of the Power Purchase cost as furnished by KPCL on 23.08.2021, has been accounted by CESC.

Further as per the approval conveyed by Energy Dept., Govt. of Karnataka vide letter No. Energy/386/PSR/2019 dated 14.10.2020, joint verification of records and accounts of both KPCL and ESCOMs for the purpose of verification of bills and reconciliation of dues of KPCL is being carried out by M/s.Ramraj & Co., Chartered Accountants, Bengaluru, for the period from 2005-06 to current year. After the completion of this reconciliation work, issues relating to moisture content etc. will be resolved. It is further submitted that, in respect of Yeramaras TPS monthly invoices are raised on the basis of PPA and tariff filing.

In respect of Central Generating Stations and UPCL generating station, CESC has submitted that, the energy charges shown in the D-1 statement is inclusive of RLDC charges, Filing charges, Compensation charges, Cess and other Prior period claims received along with the invoices. It is further submitted that, while finalizing the energy and cost for the year 2020-21, the revisions pertaining to FY-21, received up to August-2021 have been included as per the observations of Statutory and AG auditors.

HESCOM: HESCOM has submitted that, Variable Charges of thermal stations includes Energy Charges Rate (ECR), Compensation Charges, SRLDC Charges, Incentive Claims, Foreign Exchange Rate Variation (FERV) charges. Hence, the rate per unit varies. Further, on not providing the variable cost in respect of Tuticorin and DVC units, HESCOM has replied that these units are not scheduling power to HESCOM, since HESCOM has not opened valid Letter of Credit (LC).

GESCOM: GESCOM has submitted that, in respect of KPCL thermal generating stations, the Variable Cost is taken into account as per KPCL Revised bill dated 23-08-21. It is further, submitted that, KPCL billing & reconciliation work has been assigned to M/s Ramraj & Co. Bengaluru.

In respect of other thermal generating stations, GESCOM has submitted that, in Format D-1, the Variable Cost is taken into account including other charges of the bill which is not part of the Variable Cost. Due to consideration of other charges in Variable Cost the per unit variable cost varies from other ESCOMs.

After examining the response from ESCOMs, the Commission is of the considered view that due to lack of proper scrutiny by ESCOMs (other than BESCOM), the variable charges payable to the generating stations tend to vary among the ESCOMs, whereas they should be uniform across all the ESCOMs, except for some specific reasons.

In view of the above, in respect of variation in variable charges among ESCOMs, the Commission directs BESCOM to convey a coordination meeting involving all the ESCOMs within Two weeks from the issuance of the tariff order. In the meeting the ESCOMs shall discuss in detail the reasons for variation of variable charges for FY21 and arrive at the following:

- a) 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.

Further, BESCOM shall submit the detailed minutes of the meeting involving the above details to the Commission within two weeks from the date of conduct of meeting, for further needful action.

In the circumstances explained above and in view of fact that the power purchase is un-controllable cost as per MYT Regulations, the Commission hereby decides to approve the actual power purchase cost of Rs.3,108.80 Crores towards purchase of 5,863.54 MU for FY21.

4.2.3 RPO Compliance for FY21:

MESCOM in its tariff filing has submitted the following RPO compliance:

a. Non-solar RPO (Actuals for FY21):

TABLE – 4.7
Non Solar RPO Compliance

Sl. No.	Particulars	Quantum In MU	Cost Rs.in Cr
1.	Total power purchase quantum from all sources excluding Hydro-energy	4690.20	2979.78
2.	Non-Solar RE purchased under PPA route at Generic Tariff including Non-Solar RE purchased from KPCL	785.08(*)	300.79(*)
3.	Non-Solar RE purchased at APPC	-	-
4.	Non-Solar RE (Green Energy) sold to consumers	-	-
5.	Non-Solar RE purchased from other ESCOMs	-	-
6.	Non-Solar RE sold to other ESCOMs	-	-
7.	Banked non-solar RE purchased @ 85% of Generic Tariff.	29.29(**)	9.72(**)
8.	Total Non-Solar RE Purchased [1+2+3-4+5-6+7]	814.37	310.51
9.	Non-Solar RPO Target (%)	13.00%	-
10.	Non-Solar RPO Complied (%)	17.36%	-

(*) Includes Mani 2.16 MU (Rs.0.38 Cr.) and Shimsha 5.01 MU (Rs.0.63 Cr.)

(**) Banked non-solar energy of 29.29 MU (Mini Hydel : 27.30 MU (Rs.9.17 Cr) and Wind Mill : 1.99 MU (Rs.0.55 Cr))

b. Solar RPO (Actuals for FY21):

TABLE – 4.8
Solar RPO Compliance

Sl. No.	Particulars	Quantum In MU	Cost Rs.in Crs.
1.	Total power purchase quantum from all sources excluding Hydro-energy	4690.20	2979.78
2.	Solar RE purchased under PPA route at Generic Tariff including Solar RE purchased from KPCL	830.32(***)	371.11(***)
3.	Solar RE purchased at APPC	-	-
4.	Solar RE (Green Energy) sold to consumers	1.26	0.06
5.	Solar RE purchased from other ESCOMs	-	-
6.	Solar RE sold to other ESCOMs	-	-
7.	Banked solar RE purchased @ 85% of Generic Tariff.	0.65	0.17
8.	Total Solar RE Purchased [1+2+3-4+5-6+7]	829.71	371.22
9.	Solar RPO Target (%)	8.50%	-
10.	Solar RPO Complied (%)	17.69%	-

(***) includes Solar Rooftop Energy of 7.06 MU (Rs.4.76 Crs.)

Commission's analysis and decision:

The Commission has approved the source-wise power purchase quantum and cost, as discussed above. Therefore, for the purpose of RPO compliance, the Commission has considered the power purchase quantum as per the approved APR for FY21. As per the D-1 Format submitted by MESCOM, the Commission has approved power purchase quantum of 4690.20 MU [5863.54 MU -1155.76 MU towards KPCL hydro and -19.11 MU of other hydro -5.64 MU of energy balancing+ 7.17 of Shimsha & Manij]., excluding procurement from hydro sources, based on the audited accounts.

The Commission notes that as per D-1 Format/audited accounts, the Non-Solar RE purchased is as follows:

Generation	MU
Shimsha & Mani Mini-Hydel as per MESCOM submission	7.17
Mini-Hydel	393.66
Wind	261.10
Co-Generation Medium Term	152.44
*Less : Energy Sold under APPC/75% of Generic tariff	0.00
*Less: Energy Sold under Green tariff	0.00
*Less: sold to other States/ESCOMs	0.00
*Less: Sold in IEX/market	10.45
Total- Non-solar	803.92

Note: Banked non-solar energy of 29.29 MU included in Mini-Hydel & Wind
*As per additional information furnished by MESCOM

Regarding the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 4690.20 MU, the Non-solar RPO target at 13.00% works out to 609.726 MU (609726 MWh after rounding off). MESCOM has purchased 803.92 MU (803920 MWh) of Non-solar energy. Thus, MESCOM has purchased 194.194 MU (194194 MWh) excess non-solar energy beyond the target specified. The Commission holds that MESCOM has met its Non-Solar RPO target of 13% for FY21, in terms of the prevailing Regulations.

As regards the Solar RPO, the details of solar energy purchased as per D-1 Format/audited accounts is as indicated below:

Generation	Million Units
NTPC bundled-Pavagada	98.71
NTPC-VVNL bundled	7.58
PPA**	724.67
*Less : Energy Sold under APPC/75% of Generic tariff	0.00
*Less: Energy Sold under Green tariff	1.26
*Less: sold to other States/ESCOMs	38.32
*Less: Sold in IEX/market	6.36
Total-solar	785.02

**Includes banked energy of 0.65MU & Solar Rooftop Energy of 7.06 MU

*As per additional information furnished by MESCOM

Considering the input energy (excluding procurement from hydro sources) of 4690.20 MU, Solar RPO target at 8.50% works out to 398.667 MU (398667 MWh after rounding off), MESCOM has purchased 785.02 MU (785020 MWh) of Solar energy. Thus, MESCOM has purchased 386.353 MU (386353 MWh) excess Solar energy beyond the specified target. The Commission holds that MESCOM has met its Solar RPO target of 8.50% for FY21, in terms of the prevailing Regulations.

4.2.4 Distribution Loss for FY21:

MESCOM's Submission:

MESCOM, in its tariff application has submitted the distribution loss as 9.86% for FY21, as against the approved distribution loss of 10.00% for FY21 with 10.25% being the upper limit and 9.75% being the lower limit, as per tariff Order 2020. The details for the actual distribution loss for FY21 are as follows:

1	Energy at Interface Points in MU	5611.33
2	Total Sales in MU	5057.96
3	Distribution Loss (%)	9.86%

Commission's Analysis and Decisions:

The Commission notes that, as per audited accounts the actual distribution loss is 9.86% as against the revised approved loss target of 9.67% as per Tariff Order 2021.

The Commission, in its Tariff Order dated 4th November, 2020 had approved distribution loss for FY21 as shown in the table below:

Particulars	FY21
Upper Limit	10.25%
Average	10.00%
Lower Limit	9.75%

The Commission in its Tariff Order dated 9th June, 2021 based on the actual distribution losses achieved in FY20, had approved the revised distribution loss for FY21 as shown in the table below:

Particulars	FY21
Upper Limit	9.92%
Average	9.67%
Lower Limit	9.42%

The performance of MESCOM in achieving the loss target fixed by the Commission in past nine years is as follows:

Particulars	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Approved distribution Loss	12.00	11.75	11.50	11.25	11.15	11.05	10.95	11.00	9.67 (revised)
Actual Distribution Loss	11.88	11.93	11.56	11.50	11.40	11.32	13.29	10.07	9.86

The Commission notes from the above table that the MESCOM has achieved distribution loss of 9.86% with 0.21% reduction from the previous year FY20. The Commission reiterates its direction to MESCOM for putting forth continuous efforts to reduce the losses for forthcoming financial years.

In the light of the above, based on the achievement made by the MESCOM in reducing the losses during the previous years and the capex incurred so far, the Commission decides to consider and approve the actual distribution losses at 9.86% for FY21.

As the approved revised distribution losses of 9.67% was fixed in the Tariff Order 9th June, 2021 after the completion of the financial years to approve the revised

distribution losses for FY22 the Commission considered the approved distribution target of 10% as per Tariff Order dated 4th November, 2020 for allowance / levy of incentive / penalty on the reduced / increased losses in approved of APR for FY21.

The actual approved distribution losses of 9.86% by the Commission for FY21 is well within the approved upper & lower range of 9.92% & 9.42% respectively, MESCOM is not entitled for any incentive/penalty for achieving the distribution losses for FY21.

4.2.5 Capital Expenditure for the FY21:

MESCOM Submission:

The MESCOM, in its Tariff application has indicated a capital expenditure of Rs.402.83 Crores for FY21 as against the Commission approved capex of Rs.914.75 Crores for FY21. MESCOM in its filing has furnished the breakup of category-wise expenditure of Rs.402.83 Crores for FY21 is as under:

TABLE - 4.9
Break-up of category wise Capital expenditure

Amount in Rs. Crores					
Sl. No.	Particulars	KERC Approved Capex FY21	Expenditure Relating to works sanctioned prior to FY21	Expenditure Relating to Works sanctioned in FY21	Total
A	Regular works				
1	Extension & Improvement (E&I) works (Additional Transformers, Link-Lines, HT/LT Re-conductoring, HVDS , UG/AB Cable etc.)	250.00	76.00	29.09	105.09
2	DTC metering	45.00	1.40	-	1.40
3	Replacement of Electromechanical meters by Static meters	5.00	0.26	1.75	2.01
4	Replacement of faulty Distribution Transformers	5.00	0.13	1.64	1.77
5	Service Connection	55.00	10.56	18.14	28.70
6	<u>Rural Electrification (General)</u>				
a	Electrification of Hamlets	2.00	(0.26)	-	(0.26)
b	Energisation of IP sets under general, Ganga Kalyana schemes etc	55.00	18.99	28.70	47.69
c	Electrification of BPL Households	0.25	-	-	-
7	<u>Tribal Sub-Plan</u>				
a	Electrification of Tribal Colonies	1.50	0.46	0.02	0.48
b	Energisation of IP sets	0.95	0.26	0.81	1.07
c	other improvement works	0.05	0.41	0.32	0.73

8	Special Component Plan				
a	Electrification of S.C Colonies	1.00	-	0.04	0.04
b	Energisation of IP sets	1.40	0.59	1.88	2.47
c	other improvement works	0.10	1.84	0.96	2.80
9	Tools & Plants & Computers	10.00	-	4.06	4.06
10	Civil Engineering Works	60.00	32.33	1.96	34.29
11	33 KV Station and Line Works	70.00	13.87	1.58	15.45
12	Solar Roof top on Company Buildings	1.50	0.17	0.21	0.38
	Total-A:	563.75	157.01	91.16	248.17
B	GoI/GoK Scheme works				
1	Deen Dayal Upadaya Grama Jyoti Yojana (DDUGJY)	50.00	49.68	12.19	61.87
2	IPDS: System improvement & Strengthening works in R-APDRP / statutory towns	20.00	16.33	10.80	27.13
3	IPDS:Gas insulated substations	55.00	5.55	12.07	17.62
4	IPDS (Integrated Power Development Scheme) Phase II-IT	6.00	-	-	-
5	Providing Infrastructure to regularized UIPand general IP sets -Phase-III	45.00	3.56	38.79	42.35
6	Improvement works for Model Electricity Village	30.00	-	-	-
7	Improvement works for Model Sub-division	140.00	3.11	2.58	5.69
8	Saubhagya	5.00	-	-	-
	Total-B:	351.00	78.23	76.43	154.66
	GRAND TOTAL:	914.75	235.24	167.59	402.83

Commission's Analysis and Decision:

1. The Commission, in its Tariff Order dated 4th November, 2020, had recognized the expected capital expenditure of Rs.914.75 Crores for FY21 and decided to reckon Rs.667.77 Crores for the purpose of while revising the ARR and retail supply tariff determination for FY21. MESCOM was directed to carry out the capital works without seeking any additional Capex during the middle of the year by making suitable re-appropriation within the capex amount approved by the Commission. MESCOM was also informed that if any capex is incurred without approval of the Commission, the corresponding interest on loans and depreciation will not be considered for the ARR of the respective years.
2. MESCOM, in its filing has indicated a capital expenditure of Rs.402.83 Crores in the Table in Page No.60 & 61, whereas in Format D-17, the Capital expenditure is shown as Rs.445.93 Crores. In view of the inconsistency in furnishing the details the Commission, in its Preliminary Observations, had directed MESCOM to indicate the correct actual capex incurred for FY21 as against the Commission approved capex.

In reply MESCOM has submitted that during FY21, 25,942 number of works have been carried out amounting to Rs.402.83 Crores. Further, MESCOM has submitted a revised Format D-17 duly tallying the amount with the Table as additional information, sought by the Commission.

In view of the above, the Commission directs MESCOM that in future, it should furnish data duly tallied with the audited accounts, by maintaining proper records of the physical and financial progress, for the capex incurred.

3. In Preliminary Observations, Commission had directed MESCOM to furnish the details of sources of funding (like grants, debt, equity and internal sources) besides loans raised to meet the capex towards the capex incurred during the FY21, against each of the category of works.

In reply, MESCOM has submitted the details of sources of funding (besides loans raised) utilized to meet the Capex of FY21 is as below:

Source of funding other than loan	Rs. in Crores
Equity	52.24
Govt. Grants	10.46
Other internal resources	58.15
Total	120.85

The Commission notes that MESCOM has not furnished the sources of funding for each category of works. In view of this Commission directs MESCOM to maintain the details of the sources of funding for each category of works and submit the same in future filing.

4. The Commission, in its Preliminary Observations, had directed MESCOM to furnish division-wise abstract of capacity-wise replacement of faulty transformers by new transformers with reasons for having incurred amount of Rs.1.77 Crores.

In reply MESCOM has submitted that it has changed the accounting policy from September-2018, wherein the faulty transformers released in the field are not being withdrawn from asset accounts in the books of accounts. The Asset value along with applicable accumulated depreciation is being withdrawn only in respect of scrapped assets. Therefore, when repaired good

transformers are utilized in the field for replacement of faulty transformers, no assets are created again.

Further, MESCOM has submitted that transformers released before September-2018 and repaired and utilized in the field in the current year, are again taken into asset account as the original value of asset was withdrawn while transformers were released (in the old method) and instructions have been issued to the field staff to draw only released/ repaired good transformers for replacement works. However, it is very rare that the repaired good transformers are not readily available in stores and good transformers are used to restore the power supply. It is submitted by MESCOM that during the year 2020-21 only 86 new transformers are used for replacement works.

Break up details for capex incurred of Rs.1.77 Crores as submitted by MESCOM, in addition to the reply to the preliminary observations of the Commission is as under.

Amount in Rs. Crores							
Released good transformers utilized for replacement works		New transformers utilized for replacement works		New transformers utilized for enhancement works		Total	
No.	Amount	No.	Amount	No.	Amount	No.	Amount
92	0.2823	86	0.8753	49	0.6121	227	1.7697

MESCOM, in its reply to the preliminary observations has considered amount Rs.0.2823 Crores as capital expenditure towards the cost of released good transformers utilized for replacement works, with an accounting entry in the book of accounts without any outflow of cash. Therefore, the cost of such assets cannot be treated as capital expenditure for the year. Hence, the Commission by excluding this amount has considered Rs.1.4874 Crores as capital expenditure for FY21 in the respective head of accounts.

- In the Preliminary Observations, the Commission, in respect Model sub division works for FY21, had directed MESCOM to furnish an abstract of number of works sanctioned, Completed, balance number of works to be taken up, details source of funding for capex incurred for Rs.5.69 Crores. In reply MESCOM has furnish the details pertaining to Model sub-division works as indicated below:

Division	No. of works sanctioned	Amount (Rs.in Crores)
Mangaluru	1	0.01
Shivamogga	3	5.68
Total:	4	5.69

Except the above, MESCOM has not furnished any other details including the Sources of funding for the said project.

- The Commission notes the list of works furnished by MESCOM in respect of 33KV station and line works for having incurred amount of Rs.15.45 Crores.
- The Commission in its Preliminary Observation had directed MESCOM to furnish Division-wise abstract of number of IP sets energized and cost thereon, under GK scheme and regularized under UNIP scheme for having incurred capex of Rs.47.69 Crores and Rs.42.35 Crores respectively.

MESCOM, in its reply to the additional clarification sought by the Commission on the subject matter, has furnished the details of IP sets energized under GK & UNIP as indicated below:

Division	Amount in Rs. Crores			
	Details of energization of IP under general & GK Scheme		Details of energization of IP under Regularization of UNIP Scheme	
	No. of IP sets	Amount	No. of IP sets	Amount
Mangalore	89	0.11	-	-
Kavoor	430	0.76	-	-
Bantwal	2375	3.70	-	-
Puttur	1847	1.91	-	-
Udupi	1210	2.32	-	-
Kundapur	1498	1.32	-	-
Shimoga	868	4.91	28	0.49
Bhadravati	609	2.50	-	-
Sagar	517	4.63	752	20.18
Shikariura	498	3.66	336	7.83
Chikmagalur	1026	7.72	36	0.63
Koppa	484	3.31	28	0.71
Kadur	1341	10.84	466	12.51
Total	12792	47.69	1646	42.35

Further, in respect of UNIP Scheme, MESCOM has submitted that these numbers are already included in DCB in previous years and only the expenditure is incurred during the year for providing infrastructure.

Thus, the Commission, by considering the replies submitted by MESCOM, and in view of the fact that the actual capex incurred is within the approved Capex, decides to approve the actual capex of Rs.402.83 Crores, for the purpose of

approval of APR for FY21, subject to Prudence Check. The Capex approved by the Commission for FY21, is outside the purview of any enquiry conducted / to be conducted by the department / any agency on the capital works.

4.2.6 Review of Prudence Check of Capital Expenditure incurred by MESCOM during FY19 and FY20 as per Tariff Order dated 9th June 2021.

The Commission vide letters dated 12.07.2021, 01.09.2021 and 30.09.2021, had directed and reminded MESCOM to furnish the Compliance on the prudence check final report submitted by M/s TERI, Bengaluru in respect of prudence check of capital expenditure pertaining to completed capitalized works categorized during FY19 and FY20. Accordingly, MESCOM vide its letter dated 09.10.2021, had submitted compliance on the prudence check final report submitted by M/s. TERI. Wherein, in respect of DTC metering works, MESCOM has stated that it has taken necessary measures for replacement of faulty / non-communicating DTC meters from 19.08.2021 onwards and further submitted that the Continuous monitoring is being done to check the performance of DTC metering including predominantly feeding IP set DTCs so as to achieve the envisaged benefit of energy audit.

After analyzing MESCOM replies on the DTC metering works and justifications furnished by MESCOM, the Commission has decided that, 7 works amounting to Rs.3.44 Crores do not qualify for being treated as prudent for FY21, as the above said works are not fully functional and reply provided by MESCOM is not satisfactory. Hence, the Commission has considered disallowance of the related costs on account of 7 imprudent works, in the APR of MESCOM for FY21. Which will be again reviewed in the next Tariff Order.

Accordingly, the expenses towards depreciation and interest incurred on capital works by MESCOM, on such imprudent works have to be disallowed, in APR of FY21, as indicated below.

Sl. No.	Name of the work	Work order No and date	Actual Cost (Rs. In Crores)	Period for which amount to be disallowed	Amount to be disallowed in Rs. Crores
1	Supply, installation, Commissioning and Maintenance of Composite Thread through type meter box of class 1.0 with LT Electronic Tri - Vector Meter having AMR Complaint with associated CT, Modem and other materials for DTC metering works : BAIKAMPADY SECTION in Kavoor Division (for FY19).	R-20405/ 31.03.2016	0.06	17 th July 2016 to March 2021	0.049
2	Supply, Installation, Commissioning and Maintenance of Composite Thread through Type Meter of Class 1.0with LT Electronic Tri-Vector meter having AMR compliant with associated CT's modem and other materials for DTC metering works under competitive bidding on Supply, Erection and 5 Years of Maintenance in Udupi Division (for FY19).	P-23502 / 31.3.2016	1.30	10 th December 2016 to March 2021	0.774
3	Supply, Installation, Commissioning and Maintenance of Composite Thread through Type Meter of Class 1.0with LT Electronic Tri-Vector meter having AMR compliant with associated CT's modem and other materials for DTC metering works under competitive bidding on Supply, Erection and 5 Years of Maintenance in Udupi Division (for FY19).	P-23504 / 31.3.2016	1.20	21 st June 2016 to March 2021	1.031
4	Estimate for supply installation, commissioning and maintenance of composite thread through type meter of class 1.0 having AMR compliant with associated CTs, Modem and other materials for DTC metering works in Haladi section in Kundapur Division (for FY19).	E-15204 / 31.03.2016	0.33	1 st April 2017 to March 2021	0.273
5	Estimate for supply installation, commissioning and maintenance of composite thread through type meter of class 1.0 having AMR compliant with associated CTs, Modem and other materials for DTC metering works in O&M1 section in Kundapur Division (for FY19).	E-15201 / 16.03.2018	0.55	13 th Jan 2017 to March 2021	0.285
6	Supply installation Commissioning and Maintenance of Composite Thread through Type Meter of Class 1.0 having AMR complaint with associated CTs Modem and other materials for DTC metering works for a period of 5 Years in Udupi O&M Circle Katapadi Section in Udupi Division (for FY20).	P-23505 / 31.3.2016	0.09	22 nd July 2016 to March 2021	0.051
7	Supply installation Commissioning and Maintenance of Composite Thread through Type Meter of Class 1.0 having AMR complaint with associated CTs Modem and other materials for DTC metering works for a period of 5 Years in Moodubelle Section of Manipal Sub-Division in Udupi Division (for FY20).	P-23510 / 31.3.16	0.04	21 st June 2016 to March 2021	0.022
Total amount to be disallowed for FY21					2.485

While arriving at the above amounts for disallowance, **the weighted average rate of interest on loans and depreciation of MESCOM** as below:

FY17		FY18		FY19		FY20		FY21	
Wt. Avg. Depreciation rate	Wt. Avg. Interest	Wt. Avg. Depreciation rate	Wt. Avg. Interest	Wt. Avg. Depreciation rate	Wt. Avg. Interest	Wt. Avg. Depreciation rate	Wt. Avg. Interest	Wt. Avg. Depreciation rate	Wt. Avg. Interest
4.47%	10.43%	5.10%	7.97%	4.79%	8.41%	5.27%	9.04%	5.24%	9.07%

In view of the above, the Commission hereby disallows Rs.2.485 Crores for FY21 towards depreciation and interest on loans allowed in respect of imprudent works. Accordingly, the same is ordered to be deducted in MESCOM's APR of FY21.

4.2.7 Operation and Maintenance Expenses:

MESCOM's Submission:

The MESCOM, in its application, has sought approval of O&M expenditure of Rs.645.99 Crores as per the audited accounts as against Rs.702.32 Crores as approved by The Commission in its Tariff Order dated 4th November, 2020 for FY21. The break-up of O&M expenses are as follows:

TABLE – 4.10
O & M Expenses - MESCOM's submission

Amount in Rs. Crores	
Particulars	FY21
Employee cost	467.61
Administrative & General Expenses	113.39
Repairs and Maintenance	64.99
Total O & M Expenses	645.99

Commission's analysis and decisions:

The Commission, in its preliminary observations, has noted that MESCOM in its filing of APR for FY21 had projected Rs.116.92 Crores towards Terminal Benefits for FY21. MESCOM was directed to furnish the basis and the computation details for having claimed the amount in respect of employees recruited prior to 31.03.2002 and those employees covered under NDCPS scheme separately. Accordingly, MESCOM in its reply to the preliminary observation, has furnished the details which is noted by the Commission.

The Commission in its Tariff Order dated 4th November, 2020 had approved O&M expenses for FY21 as under:

TABLE – 4.11
Approved O&M Expenses as per Tariff Order dated 04.11.2020

Amount in Rs. Crores	
Particulars	FY21
No. of installations as per actuals as per Audited Accts	2521607
Weighted Inflation Index (%)	8.2604%
CGI based on 3 Year CAGR	3.36%
Base year O&M expenses (Actuals for FY19 including the P&G contribution and the additional contribution of Rs.16.07 Crores to P&G trust) Rs. Crores.	574.82
Allowable O&M expense= O&M Index= O&M (t-1) * (1+WII+CGI-X) in (Rs. Crores)	702.32

The Commission notes that MESCOM has claimed O&M expenses of Rs.645.99 Crores as per the audited accounts, for the purpose of APR for FY21. MESCOM in tariff application, has submitted that it has incurred Rs.22.37 Crores towards earned leave encashment, Rs.0.41 Crores towards payment under Workmen's compensation, Rs.3.08 Crores towards staff welfare expenses and Rs.116.92 Crores towards terminal benefits for FY21.

The Commission, in accordance with the provisions of the MYT Regulations and the methodology adopted while approving the ARR for FY21 and earlier APRs, proceeds with the determination of normative O&M expenses, based on the 12 Year data of WPI and CPI, besides considering the three year compounded annual growth rate (CAGR) of consumers. Considering the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer Price Index (CPI) as per the data available from the Labour Bureau, Government of India and adopting the methodology followed by the CERC with CPI and WPI in a ratio of 80: 20, the allowable rate of inflation for FY21 is computed as follows:

TABLE-4.12
Allowable inflation for FY21

Year	WPI	CPI	Composite Series	Yt/Y1 =Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2009	81.9	54.5	59.98				
2010	89.7	61.1	66.82	1.11	0.11	1	0.11
2011	98.2	66.5	72.84	1.21	0.19	2	0.39
2012	105.7	72.7	79.30	1.32	0.28	3	0.84
2013	111.1	80.6	86.70	1.45	0.37	4	1.47
2014	114.8	85.7	91.52	1.53	0.42	5	2.11
2015	110.3	90.8	94.70	1.58	0.46	6	2.74
2016	110.3	95.3	98.30	1.64	0.49	7	3.46

2017	114.1	97.6	100.90	1.68	0.52	8	4.16
2018	118.9	102.4	105.70	1.76	0.57	9	5.10
2019	121.2	110.2	112.40	1.87	0.63	10	6.28
2020	121.8	116.3	117.40	1.96	0.67	11	7.39
A= Sum of the product column							34.05
B= 6 Times of A							204.28
C= (n-1)*n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.07
g(Exponential factor)= Exponential (D)-1							0.0696
e=Annual Escalation Rate (%)=g*100							6.9602

The Commission, while determining the normative O & M expenses for FY21, has considered the following:

- The approved normative O & M expenses for FY20, excluding contribution to Pension and Gratuity Trust.
- The three year compounded annual growth rate (CAGR) of the number of installations considering the actual number of installations as per the audited accounts up to FY21.
- The weighted inflation index (WII) at 6.9602% as computed above.
- Efficiency factor at 1% as considered during computing earlier APRs.

Thus, the normative O & M expenses for FY21 will be as follows:

TABLE - 4.13
Normative O & M Expenses

Particulars	Amount (in Crores)
	FY21
No. Of Installations	2504859
CGI based on 3 year CAGR	3.13%
Inflation index	6.9602%
Base Year O&M Cost (FY19 as per actuals without contribution to P&G trust)-Rs. Crores	484.96
Approved O&M expenses without contribution to P&G trust for FY20- Rs. Crores	534.41
Normative O&M expenses Index= O&M (t-1) *(1+WII+CGI-X)- Rs. Crores	582.98

The above normative O & M expenses have been computed without considering the contribution to the Pension and Gratuity Trust and the pay revision arrears for FY21. Thus, for computing the allowable O&M charges for FY21, the Commission has considered normative O&M expenses of Rs.582.98 Crores along with uncontrollable additional O&M expenditure of Rs.118.17 Crores towards P&G contribution which works out to Rs.701.15 Crores.

The Commission notes that MESCOM has incurred total O & M Expenses of Rs.646.24 Crores comprising of employee expenses of Rs.467.61 Crores, Repair

and Maintenance expenses of Rs.64.99 Crores and Administrative & General expenses of Rs.113.64 Crores (excluding the expenditure incurred towards consumer relation/education expenses of Rs.0.1552 Crores) as per the audited accounts.

The Commission, in its earlier Orders, has been consistently stressing the need to control the controllable O&M expenses and opines that allowing O&M expenses, beyond the actual amount of O&M expenses incurred and accounted in the audited accounts, will be a burden to the end consumers, if the same is passed on in the retail supply tariff, to be approved for FY23. Thus, based on the above, the allowable O&M expenses for FY21 are regulated as follows:

As per the audited accounts, MESCOM has incurred actual O & M expenses of Rs.646.24 Crores for FY21. Hence, the allowable O & M expenses of Rs.701.15 Crores for FY21 as computed above is more than the actual total O&M expenses incurred by MESCOM by Rs.54.91 Crores. The Commission notes that along with the APR revenue gap of Rs.341.96 Crores for FY23, the proposed ARR of Rs.4011.33 Crores, and projected revenue gap of Rs.473.25 Crores for FY23. This has resulted in the average tariff hike of Rs.1.69 per unit in retail supply tariff for FY23, which is going to be a huge burden on the end consumers. MESCOM has not properly exercised due diligence in controlling the O&M expenses during FY21. The Commission has been consistently stressing the need to control the O&M expenses and opines that allowing controllable O&M expenses beyond the actual amount incurred and accounted in the available accounts will be a burden to the end consumers in the tariff to be approved for FY23.

TABLE – 4.14
Allowable O & M Expenses for FY21

Amount in Rs. Crores		
Sl. No.	Particulars	FY21
1	Normative O & M expenses	582.98
2	Allowable uncontrollable additional O&M cost (P&G Contribution)	118.17
3.	Allowable O & M expenses for FY21	701.15
4	Actual expenses (With P&G Contribution)	646.24
5	Approved O&M Expenses for FY21	646.24

Thus, the Commission decides to allow actual O&M Expenses of Rs. 646.24 Crores incurred by MESCOM as per its Audited Accounts for FY21.

4.2.8 Depreciation:

MESCOM's Submission:

MESCOM in its application, has claimed an amount of Rs.193.14 Crores as per the audited accounts as against Rs.153.53 Crores approved by the Commission, towards depreciation for FY21.

MESCOM has submitted that the assets created out of Govt. Grants and Consumer Contribution till 31.03.2016 amounting to Rs.515.17 Crores and the depreciation of Rs.25.38 Crores charged and accounted in the books of the accounting units have been withdrawn in the corporate office and the balance of Gross Fixed Assets and the depreciation has been accounted in the MESCOM book of accounts for FY21. MESCOM has further submitted that the Govt. Grants and Consumer Contributions received after 01.04.2016 have been accounted under deferred income and depreciation of Rs.36.15 Crores on these assets are accounted under Other Income. Depreciation computed by MESCOM for FY21 is as detailed below:

**TABLE – 4.15
Depreciation for FY21- MESCOM's Submission**

Particulars	Amount in Rs. Crores		
	FY20	FY21	
	Closing Balance of GFA as on 31.03.2020	Closing Balance of GFA as on 31.03.2021	Depreciation
Land and rights	6.09	7.78	0.09
Buildings	122.80	157.84	4.88
Hydraulic Works	3.31	3.69	0.18
Other Civil	0.82	1.29	0.04
Plant & Machinery & Lines & Cables	3202.71	3728.88	182.20
Vehicles	12.96	13.44	1.10
Furniture Fixtures	8.56	9.07	0.49
Office Equipment	16.53	18.05	0.93
Leasehold Assets	2.72	2.72	0.00
Released Assets cable network & Intangible Assets	26.18	23.06	3.23
Total	3400.09	3965.83	193.14

Commission's analysis and decisions:

The Commission, in its preliminary observation had noted that MESCOM, in Format D-8 had indicated Rs.193.14 Crores as depreciation for FY21, as against Rs.193.05 Crores accounted as per Audited Accounts for FY21. Further, MESCOM in its audited accounts for FY21, had indicated that the depreciation for FY21 in respect of assets created out of government grants and consumer contributions up to 31.03.2016, is Rs.25.3750 Crores, which is reduced from the total depreciation chargeable on fixed assets, besides claiming Rs.36.1488 Crores towards assets created out grants and consumer contributions received from 01.04.2016 onwards during the year. MESCOM was directed to submit the asset-wise total Gross Fixed Assets, gross depreciation charged on the assets, depreciation on the assets created out of consumer contributions and grants up to 31.03.2016 and depreciation charged from 01.04.2016 onwards on such assets for FY21 and for the projection made for FY22 to FY25. MESCOM was also directed to submit the details of assets created out of consumers' contributions and grants for having claimed the depreciation on such assets for FY21 to FY25.

Accordingly, MESCOM in its reply to the preliminary observations, has submitted the amount of depreciation of Rs.193.14 Crores for FY21 indicated in D-8 Format which is in agreement with the annual accounts. MESCOM has informed that till FY16, they were following Accounting Standard-12 issued by ICAI for recognizing the grants and consumer's contributions received towards capital expenditure wherein the value of grants and consumer contributions utilized towards the capital expenditure have been reduced from carrying amount of the fixed assets.

From FY17 onwards with implementation of Indians Accounting Standards, the grants received from government or other authorities towards capital expenditure as well as consumers' contribution for capital works, are treated initially under deferred income and taken to income every year to the extent of depreciation that is charged during that year to the class of assets for which such grants/contributions are received. However, in respect of assets created out of grants/contributions up to FY16, old method is continued with respect of charging of depreciation. Accordingly, the depreciation charged by the

accounting units during FY21 for the assets created upto FY16 amounting to Rs.25.375 Crores was withdrawn at Corporate Office as the assets were reduced to the extent of grants/contribution received and hence the depreciation was not charged in the books for assets created out of grants and contributions upto FY16. Further, the depreciation charged by the accounting units during FY21 for assets created from FY17 onwards amounting to Rs.36.149 Crores were credited to other income by debiting deferred income at corporate office as the grants and contributions are treated as deferred income. The depreciation amount included in the depreciation schedule is nullified by considering the same amount under other income schedule. MESCOM has also furnished the details of assets created out of Consumers contribution and Grants, in its reply to preliminary observations which was noted by the Commission.

The Commission has noted, the replies furnished by MESCOM. In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and its subsequent amendments, the Commission has determined the depreciation for FY21 based on the opening and closing balances of gross blocks of fixed assets for FY21 and the depreciation for each asset as per annual accounts. The weighted average rate of depreciation works out to 5.24%.

Further, as per the Accounting Standards (AS) – 12, an amount of Rs.36.15 Crores of depreciation on the assets created out of consumers' contribution / grants reckoned in the audited accounts, has been considered by the Commission in allowing the net depreciation of Rs.156.90 Crores for FY21.

Accordingly, the approved asset-wise depreciation for FY21 is as follows:

TABLE – 4.16
Allowable Depreciation for FY21

Particulars	Amount in Rs. Crores	
	FY21	
	Depreciation	
Buildings	4.8867	
Civil	0.1743	
Other Civil	0.0442	
Plant & M/c	182.1964	
Vehicles	1.0951	
Furniture	0.4857	
Office Equipment	0.9309	

Lease hold land	0.0000
Released assets re-used to works	0.0000
Land	0.0000
Intangible Assets	3.2364
Total GFA	193.0497
Less: Depreciation on assets created consumer contribution / Grant	36.1488
Net GFA	156.90

Thus, the Commission decides to allow the net depreciation of Rs.156.90 Crores for FY21.

4.2.9 Interest and Finance Charges:

a) Interest on Capital loan:

MESCOM's Submission:

MESCOM in its application, has claimed an amount of Rs.100.19 Crores as against Rs.109.84 Crores as approved by the Commission towards interest on capital loans drawn from Banks/Financial Institutions for FY21 and has requested the Commission to allow the same for FY21. The details are as follows:

Amount in Rs. Crores	
Particulars	FY21
Long term secured & unsecured loans	998.81
Add new Loans	369.23
Less Repayments	158.50
Total loan at the end of the year	1209.54
Average Loan	1104.18
Interest paid on long term loans as per filing	100.179
Weighted average rate of interest based on the interest projected on average loans in %	9.07%

Commission's analysis and decisions:

The Commission has considered the status of opening and closing balances of capital, loans as per the audited accounts for FY21 and as submitted under Format D-9 of the filings, details of new loans borrowed and repayment of loans, while allowing the interest on capital loan as shown in the following Table:

TABLE – 4.17
Allowable Interest on Loans – FY21

Amount in Rs. Crores	
Particulars	FY21
Long term secured & unsecured loans	998.81
Add New Loans	369.23
Less; Repayments	158.50
Total loan at the end of the year	1209.54
Average Loan	1104.18
Interest paid on long term loans as per filing	100.19
Weighted average rate of interest based on the interest projected on average loans.	9.07%
Interest Rate allowed	9.07%
Interest Allowed	100.19

The Commission notes that as per the audited accounts, MESCOM has incurred an amount of Rs.100.19 Crores towards interest on capital loans. Considering an average loan of Rs.1104.18 Crores, the weighted average of interest rate works out to 9.07%. The Commission notes that the weighted average interest rate of 9.07% is comparable with the prevailing rate of interest for the long term loan.

Thus, the Commission decides to allow an amount of Rs.100.19 Crores towards interest on capital loans for FY21.

b) Interest on Working Capital:

MESCOM's Submission:

MESCOM in its application has claimed an expenditure of Rs.54.01 Crores as against Rs.79.80 Crores as approved by the Commission towards interest on working capital for FY21. MESCOM has submitted that the interest on working capital claimed by them is in accordance with the MYT Regulations. Interest on Working Capital computed by MESCOM is as follows:

TABLE – 4.18
Interest on Working Capital for FY21 -MESCOM's Submission

Particulars	As Filed (Rs.in Crores)
1/12th of O&M Expenses	53.81
Opening GFA	3379.31
1% of opening GFA	33.79
1/6th of Revenue	608.31
Total Working Capital	695.91
Normative Interest on Working Capital @ 11%	76.55
Actual interest on working capital incurred in FY21	31.47
Interest on working capital claimed	54.01

Commission's analysis and decisions:

The Commission notes that the as against an approved interest on working capital of Rs.79.80 Crores, the actual interest on working capital incurred by MESCOM during FY21 is Rs.31.47 Crores. Accordingly, on the basis of the opening and closing balance of working capital balance as per the audited accounts for FY21, the weighted average rate of interest works out to Rs.9.32%. The Commission has been computing the interest on working capital considering the MCLR the Marginal Cost of fund based Lending Rates (MCLR) effective from 1st July, 2020 with the spread of certain basis points as per the provisions of the MYT Regulations. Thus, for approving the rate of interest of working capital, the Commission in accordance with the MYT Regulations has considered the applicable MCLR of one year+250 basis points which works out to 9.50%. Therefore, the Commission has computed the normative interest on working capital loans, at an interest rate of 9.50% for FY21 and has allowed actual interest on working capital + 50% of the difference between normative interest on working capital and the actual interest on WC.

Accordingly, the Commission has computed the allowable interest on working capital as per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, for FY21 as in the following Table:

TABLE – 4.19
Allowable Interest on Working Capital for FY21

Amount in Rs. Crore	
Particulars	FY21
One-twelfth of the amount of O&M Expenses	53.85
Opening GFA	3379.31
Stores, materials and supplies 1% of Opening balance of GFA	33.79
One-sixth of the Revenue	608.38
Total Working Capital	696.03
Rate of Interest (% p.a.)	9.50%
Normative working capital Interest	66.12
Actual Interest on Working Capital incurred by MESCOM as per audited accounts for FY21	31.47
50% of the difference between normative and actual Working Capital	17.33
Allowable Interest on Working Capital	48.80

Since the actual interest on working capital is less than the normative interest on working capital, the Commission, as per the provisions of the MYT Regulations, decides to allow the actual interest on working capital of Rs.31.47 Crores plus

50% of the difference between normative interest on working capital and the actual interest on working capital i.e. Rs.16.70 Crores.

Thus, the Commission decides to allow Rs.48.80 Crores, towards interest on working capital for FY21.

c) Interest on Consumers' Security Deposits:

MESCOM's Submission:

MESCOM has claimed an amount of Rs.30.15 Crores as against Rs.38.34 Crores approved by the Commission, towards payment of interest on consumers' security deposits for FY21.

Commission's analysis and decisions:

The Commission notes that, there has been an increase of 7.84% in the consumer security deposits over the previous year and the opening and closing balance of consumer security deposits is Rs.674.09 Crores and Rs.712.61 Crores for FY21. Further, as per audited accounts, the interest on consumer security deposits amounting to Rs.30.15 Crores has been accounted and claimed by MESCOM for FY21.

As per the KERC (Interest on Security Deposit) Regulations, 2005, interest on consumer deposits shall be allowed as per the bank rate prevailing on the 1st of April of the relevant year. The Commission notes that the applicable RBI bank rate as per the provisions of the Regulations was 4.65%. The Commission therefore, decides to consider the actual interest on consumer security deposit booked on the basis of consumer's security deposit held by MESCOM and payment of interest thereon for FY21.

Thus, the Commission decides to allow an amount of Rs.30.15 Crores towards interest on consumer security deposits for FY21.

d) Other Interest and Finance charges:

MESCOM, in its Petition, has not claimed any amount towards other interest and finance charges for raising the loans for FY21.

Commission's analysis and decisions:

The Commission notes that MESCOM as per its audited accounts has actually incurred Rs.1.58 Crores towards Other Interest and Finance charges, which is included in other debits.

Accordingly, the Commission decides to allow Rs.1.58 Crores towards Other Interest and Finance charges for FY21.

e) Capitalization of Interest and other expenses:

MESCOM has not claimed any amount towards capitalization of interest on capital loans used during construction for FY21.

The Commission, as per the audited accounts, decides not to allow any amount towards capitalization of Interest and other expenses for computation of APR for FY21.

As per the above discussions, the total allowable interest and finance charges for FY21 are as follows:

TABLE – 4.20
Allowable Interest and Finance Charges

Amount in Rs. Crore		
Sl. No.	Particulars	FY21
1.	Interest on Loan capital	100.19
2.	Interest on working capital	48.80
3.	Interest on consumer deposits	30.15
4.	Other interest and finance charges	1.58
5.	Less; Interest and other expenses capitalized	0.00
	Total interest and finance charges	180.72

4.2.10 Other Debits:**MESCOM's Submission:**

MESCOM, in its application has claimed Rs.6.55 Crores towards other debits for FY21.

Commission's analysis and decisions:

The Commission, in its preliminary observations had observed that MESCOM in its Format-D11 has claimed Rs.6.55 toward Other Debits for FY21. Whereas, as per audited account, MESCOM has incurred Rs.6.0541 Crores towards 'Other Debits'

for FY21. Accordingly, MESCOM was directed to submit the details of expenditure under 'Other Debits'.

MESCOM in its reply to the preliminary observations, has furnished the details of Other Debits of Rs.6.05 Crores as indicated below:

Particulars	Amount (in Crores)
Asset decommissioning Costs	1.56
Losses relating to Fixed Assets/sale of scraped assets	3.04
Sundry debit balance written off	0.44
Compensation for injuries, death and damage-staff & outsiders	1.01
Total	6.05

The Commission notes that as per the audited accounts, MESCOM has made a provision of Rs.0.50 Crores for loss on obsolescence of stores. Thus, the allowable other debits excluding the provision for bad and doubtful debts for FY21 are as detailed in the following Table:

TABLE – 4.21

Allowable Other Debits

Sl. No	Particulars	Amount	Rs. Crores
		FY21	
1	Asset decommissioning Costs	1.56	
2	Losses relating to Fixed Assets/sale of scraped assets	3.04	
3	Sundry debit balance written off	0.44	
4	Compensation for injuries, death and damage-staff & outsiders	1.01	
5	Total	6.05	

Thus, the Commission decides to consider Rs.6.05 Crores as other debits for FY21.

4.2.11 Return on Equity:

MESCOM's Submission:

MESCOM in its application has claimed Return on Equity at Rs.135.24 Crores as against Rs.167.04 Crores approved by the Commission for FY21, as follows:

TABLE – 4.22
Status of Debt Equity Ratio for FY21

Amount in Rs. Crore

Particulars	FY21
Opening balance of the Share capital	558.68
Share Deposit	43.48
Reserve and Surplus	280.50
Less: Re-Capitalized Security Deposits	(-)26.00
Total	856.66
Rate of RoE	15.50%
RoE on opening equity of FY21	132.78
ROE on equity infused during FY21 (*)	2.46
Total ROE considered for APR	135.24

Commission's analysis and decisions:

Debt Equity Ratio Vis-à-vis Gross Fixed Asset:

The Commission in its preliminary observation, had directed MESCOM to submit the bifurcated figures of GFA created out of consumer's contribution & grants and from internal resources & borrowings at the end of FY20 and FY21 to verify the compliance of the directive in terms of Hon'ble ATE Order in OP 46/2014.

Accordingly, MESCOM in its reply to the preliminary observation, has submitted the bifurcated figures of GFA created out of consumer's contribution & grants and from internal resources & borrowings at the end of FY20 and FY21.

The Commission notes that the actual opening and closing balances of gross fixed assets along with break-up of equity and loan component per actual data as per the audited accounts are indicated as follows:

TABLE – 4.23
Status of Debt Equity Ratio for FY21

Amount in Rs. Crores

	GFA Actuals	Debt (Actuals)	Equity (Net-worth) Actuals	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
Opening Balance	3023.78	998.81	690.52	2116.65	907.13	33.03	22.84
Closing Balance	3834.17	1209.54	807.56	2683.92	1150.25	31.55	21.06

From the above table it is evident that the debt and equity amounts are within the normative debt equity ratio of 70: 30, on the opening and closing balances of GFA for FY21.

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the Commission has computed the allowable Return on Equity at 15.5% on the opening balance of net-worth of MESCOM for FY 21.

The Commission, as per the provisions of Clause 3.9.1 of the KERC (Terms & conditions for Determination of Tariff for Retail Sale of Electricity) (Second Amendment), Regulations, 2015, has allowed the RoE on the opening balance of equity (net-worth) amount at 15.5% and also has allowed the additional RoE on the equity amount infused by the GoK during the year as per Clause 3.9.2 of the Regulations, for FY 21.

Accordingly, as per the provisions of MYT Regulations as being followed in the previous Tariff Orders, the Commission has considered the opening balance of share capital and share deposit plus the accumulated balance of profit/loss as per audited accounts and also after factoring in the recapitalization of security deposit of Rs.26.00 Crores in compliance with the Orders of the Hon'ble ATE in appeal No.46/2014, in allowance of RoE, without grossing up with MAT for FY21 is determined as follows:

TABLE – 4.24

Allowable Return on Equity

Amount in Rs. Crores

Particulars	FY 21
OB: Paid Up Share Capital	558.68
OB: Share Deposit	43.48
OB; Reserves & Surplus	231.40
Less Recapitalized Security Deposit	-26.00
Total Opening Balance of Equity	807.56
RoE at 15.50 %	125.17
Additional RoE for the equity infused during the year	52.24
Allowable RoE on the additional equity infused during the year	1.79
RoE Approved by Commission for APR	126.96

Further, as reported by MESCOM, an additional equity of Rs.52.24 Crores has been received during the year from Government of Karnataka. Considering the actual date of receipt of this additional equity, the Commission as per provisions of the MYT Regulations, has determined the allowable return on additional equity as shown in the following Table:

TABLE – 4.25**Return on equity for the additional equity received during FY21**

Additional Equity received during FY21	Amount in Rs. Crores	Received on	No. of Months	RoE allowed Rs. Crores
EN321 PSR 2020 dated 29.08.2020	15.33	14.09.2020	6	1.19
EN322 PSR 2020 dated 29.08.2020	0.88	10.09.2020	6	0.07
EN353 PSR 2020 dated 29.08.2020	1.07	28.09.2020	6	0.08
EN322 PSR 2020 dated 05.01.2020	0.88	21.01.2021	2	0.02
EN322 PSR 2020 dated 05.01.2020	0.20	19.01.2021	2	0.01
EN321 PSR 2020 dated 05.01.2020	15.33	25.01.2021	2	0.40
EN353 PSR 2020 dated 05.01.2020	1.07	21.01.2021	2	0.03
EN353 PSR 2020 dated 19.03.2020	1.07	18.03.2021	0	0.00
EN8322 PSR 2020 dated 19.03.2021	0.88	17.03.2021	0	0.00
EN322 PSR 2020 dated 19.03.2021	0.20	18.03.2021	0	0.00
EN321 PSR 2020 dated 19.03.2021	15.33	17.03.2021	0	0.00
TOTAL	52.24			1.791
Return on Equity allowed on Additional Equity Infusion in FY21				

The allowable return on equity on the additional equity infused during FY21 is Rs.1.79 Crores.

Thus, the Commission decides to allow total Return on Equity of Rs.126.96 Crores for FY21.

4.2.12 Income tax:

MESCOM in its filing has not claimed any amount towards payment of income tax for FY21. (Rs. -7.95 considered in the filing towards taxes pertain to extraordinary items)

The Commission notes that, as per the audited accounts, MESCOM has not factored any amount towards Income Tax for FY21. Thus, the Commission decides not to allow any amount towards payment of income tax FY21.

4.2.13 Other Income:**MESCOM's Submission:**

MESCOM in its application has claimed an amount of Rs.143.41 Crores as against Rs.133.38 Crores as approved by the Commission towards Other Income for FY21.

MESCOM has submitted that as per its audited accounts, the income under the head 'Other Income' is Rs.186.54 Crore. MESCOM has considered Delayed Payment Charges from consumers as tariff income and 'SRTPV facilitation fees', Supervision charges collected from National High Authorities', Application fee, 'Supervision charges and other charges collected from IP set consumers using tube wells for irrigation' which are consider under the head 'Other Operating Revenues' in the annual accounts are considered under 'Other Income'. Hence, 'Other Income; reckoned for APR is as below;

Particulars	FY21
'Other Income' as per Annual Accounts for 2020-21	186.54
Less: 'Delayed Payment Charges from Consumers'	(43.55)
Add: Certain sub heads considered under 'Other Operating Revenues' head of account	0.42
'Other Income' considered for APR	143.41

Accordingly, MESCOM has requested the Commission to approve Rs.143.41 Crores towards 'Other Income' for FY21.

Commission's analysis and decisions:

The Commission notes that MESCOM as per the audited Accounts, has accounted Rs.186.54 Crores under other income account head for FY21. This includes income from sale of scrap, income from rent, rebate for collection of electricity duty, interest on Bank Fixed Deposits, Incentive received for early payment of Power purchase bills, other income relating to purchase of power, delayed payment charges from consumer depreciation on assets created out of consumer contribution / grants and miscellaneous recoveries. The Commission, while determining the Other Income, has excluded the following amounts:

- i. Rs.36.14 Crores towards depreciation on assets created out of consumer's contribution/grants;
- ii. Rs.3.25 Crores towards 10% of the incentive of Rs.32.456 Crores received on prompt payment of power purchase dues;
- iii. Rs.43.55 Crores towards delayed Payment charges for FY21.

Further, an amount of Rs.4.576 Crores being the difference of power purchase cost payable by MSEZ for FY21 is considered as other income to MESCOM.

Thus, the Commission decides to allow an amount of Rs.108.17 Crores as other income for FY21.

4.2.14 Fund towards Consumer Relations / Consumer Education:

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. MESCOM, in its filing has reported that an amount of Rs.0.41 Crores has been incurred towards Consumer Relations / Consumer Education and CSR for FY21. The Commission notes that, as per the audited accounts, the MESCOM has incurred an amount of Rs.0.16 Crores towards consumer relation/consumer education for FY21.

Accordingly, the Commission decides to allow an amount of Rs.0.16 Crores as expenditure towards Consumer Relations / Consumer Education for FY21.

4.2.15 Subsidy for FY21:

The Commission in its Tariff Order dated 4th November, 2020 has approved tariff subsidy of Rs.27.34 Crores and Rs.952.55 Crores towards the sale of power to BJ/KJ installations and IP sets for FY21 respectively, by considering the issue of Tariff Order which was effective from 01.11.2020, in accordance with the prevailing Policy of the Government of Karnataka, in the matter of free power supply to BJ/KJ installations and IP sets installations of 10HP & below. MESCOM, in its application has claimed an amount of Rs.28.21 Crores and Rs.951.24 Crores towards Tariff subsidy for BJ/KJ installations and IP sets respectively, keeping in view the provisions made for unbilled revenue for FY21.

The Commission notes that, as per audited accounts and the subsidy statement attached to the audited accounts of Rs.28.22 Crores and Rs.959.01 Crores has

been factored as tariff subsidy for BJ/KJ and IP Set installations respectively for FY21. Thus, the Commission while computing the revised ARR as per APR for FY21, has considered tariff subsidy of Rs.987.23 Crores, towards sale of power to BJ/KJ installations and IP sets for FY21, to be received from the Government. **Thus, the Commission decides to approve the subsidy of Rs.987.23 Crores towards free supply of power to BJ/KJ and IP installations for FY21.**

4.2.16 Revenue for FY21:

MESCOM, in its application has considered Rs.3649.87 Crores as revenue from sale of power from consumers and miscellaneous charges after including the delayed payment charges of Rs.43.55 Cores from Consumers for FY21.

As per audited accounts the Revenue from sale of power is Rs.3606.92 Crores. After considering an amount of Rs.43.5454 Crores towards delayed payment charges as revenue, the total Revenue from sale of power is Rs.3650.46 Crores for FY21.

Thus, the Commission decides to consider Rs.3650.29 Crores as revenue from sale of power to the consumers and other operating revenue for FY21.

4.3 Abstract of Approved ARR for FY21:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR for FY21 is as follows:

TABLE – 4.26

Approved revised ARR for FY21 as per APR

Sl. No.	Particulars	Amount in Rs. Crores		
		APR FY21		
		As Approved 04.11.2020	As Filed on 30.11.2021	As per APR
1	Energy at Gen Bus (With MSEZ) - MU	6097.10	5863.54	5863.54
2	Transmission Losses in %	3.039%	4.30%	6.687%
3	Energy at Interface in MU	5853.92	5611.33	5611.23
4	Distribution Losses in %	10.00%	9.86%	9.86%
	Sales in MU			
5	Sales to other than IP & BJ/KJ	3540.83	3337.71	3337.71
6	Sales to BJ/KJ	37.29	35.00	35.00
7	Sales to IP	1690.41	1685.25	1685.25
	Total Sales	5268.53	5057.96	5057.96
	Revenue at existing tariff in Rs. Crores			
8	Revenue from tariff and Misc. Charges	2908.51	2670.42	2663.06

Sl. No.	Particulars	APR FY21		
		As Approved 04.11.2020	As Filed on 30.11.2021	As per APR
9	RE Subsidy to BJ/KJ	27.34	28.21	28.22
10	RE Subsidy to IP	952.55	951.24	959.01
	Total Existing Revenue	3888.40	3649.87	3650.29
	Expenditure in Rs. Crores			
11	Power Purchase Cost	2805.94	2813.79	2814.73
12	Transmission charges of KPTCL	319.224	293.01	293.01
13	SLDC Charges	1.996	2.00	1.07
	Power Purchase Cost including cost of transmission	3127.16	3108.80	3108.80
14	Employee Cost		467.61	
15	Repairs & Maintenance		64.99	
16	Admin, & General Expenses		113.39	
	Total O&M Expenses	702.32	645.99	646.24
17	Depreciation	153.53	193.14	156.90
	Interest & Finance charges			
18	Interest on Loans	109.84	100.19	100.19
19	Interest on Working capital	79.80	54.01	48.80
20	Interest on belated payment on PP Cost	0.00	0.00	0.00
21	Interest on consumer deposits	38.34	30.15	30.15
22	Other Interest & Finance charges	1.84	0.00	1.58
23	Less: interest and other expenditure capitalised	-2.10	0.00	0.00
	Total Interest & Finance charges	227.72	184.35	180.72
24	Other Debits/Extraordinary items	0.00	-1.40*	6.05
26	Net Prior Period Expenses/Income (Debit/Credit)	0.00	0.00	0.00
27	Return on Equity	167.04	135.24	126.96
28	Taxation/MAT Credit	0.00	0.00	0.00
29	Funds towards Consumer Relations/Consumer Education	0.50	0.4062	0.16
30	Other Income	-133.38	-143.41	-108.17
	Net ARR	4244.88	4123.12	4117.66
31	Surplus of FY 19 Carried forward	-233.55	0.00	0.00
32	Less: Disallowance towards Imprudent Capex for FY17 to FY20			-2.49
33	Net ARR for FY21	4011.33	4123.12	4115.18
34	DEFICIT in Revenue for FY21	0.00	-473.25	-464.89
35	Approved Regulatory assets to be recovered during FY22 & FY23 as per T.O dated 04.11.2020	-122.93	0.00	122.93
36	Net deficit to be carried forward to ARR of FY23	0.00	473.25	-341.96

4.3.1 Gap in Revenue for FY21:

The Commission after Annual Performance Review of MESCOM for FY21, decides to allow a net ARR of Rs.4115.18 Crores as against the approved ARR of Rs.4011.33 Crores, for FY21. The Commission has issued the Tariff Order, 2020 dated 4th November 2020, which is effective from 1st November,2020. Due to

total lock down declared by the GOI/GOK on account of Covid-19 pandemic, pendency of Appeal No. 97 of 2020 filed by KPTCL before the Hon'ble Tribunal against the Commission's Order dated 16.01.2020 and the disposal of the Appeal on 05.10.2020 and the applicability of the Code of Conduct on account of announcement of bye-election to the Assembly Constituencies, the Tariff Order could not be issued in time. While issuing the Tariff Order to reduce the burden on the end consumers particularly during the adverse financial situation due to the setback of economic activities during the lock down period, the Commission decided to give effect of the revision in Retail Supply Tariff with effect from 1st November, 2020 which has resulted in recovery of additional revenue only for a period of 5 months during FY25. The remaining unmet gap of 7 months of Rs.122.93 Crores has been kept as Regulatory Asset, which is allowed to be recovered during FY22 and FY23.

The Commission while carrying out the Annual Performance Review of MESCOM for FY21, based on the actual revenue and expenditure earned/incurred as per the audited accounts has arrived the net Revenue Deficit of Rs.464.89 Crores for FY21. As the Regulatory Assets of Rs.122.93 Crores created by the Commission in the Tariff Order dated 4th November, 2020 was allowed in the approved revised ARR and allowed to be recovered in the revised Retail Supply Tariff for FY22 and to be allowed even for FY23, the question of carry forward of the same amount of the Regulatory Assets once again to the approved ARR and recovery in Retail Supply Tariff for FY23 does not arise. Hence, the Commission after accounting the Regulatory Assets amount of Rs.122.93 Crores to be recovered during FY22 and FY23 the remaining gap that has to be allowed for recovery will be Rs.341.96 Crores for FY21. Thus, the Commission decides to carry forward the net revenue gap of Rs.341.96 Crores of FY21 to the ARR for FY23 as discussed in the subsequent Chapter of this Order.