

## CHAPTER – 5

### ANNUAL REVENUE REQUIREMENT FOR FY23-25

#### 5.0 Annual Revenue Requirement (ARR) for FY23-FY25 -MESCOM's Filing:

MESCOM in its application dated 30<sup>th</sup> November, 2021, has sought approval of the Commission for its ARR for the sixth control period of FY23-25 and the revision of retail supply tariff for FY23. The summary of the proposed ARR for FY23-25 is as follows:

**TABLE – 5.1**

**Proposed ARR for FY23-25**

Sl. No	Particulars	Amount in Rs. Crores		
		FY23 As Filed 30.11.2021	FY24 As Filed 30.11.2021	FY25 As Filed 30.11.2021
1	Energy at Generating Bus (With MSEZ) : in MU	6197.93	6421.66	6648.40
2	Transmission Losses in %	2.978%	2.978%	2.978%
3	Energy @ Interface in MU	6013.36	6230.42	6450.41
4	Distribution Losses in %	9.82%	9.80%	9.78%
5	<b>Sales in MU</b>			
	Sales to other than IP & BJ/KJ	3529.54	3639.22	3753.34
	Sales to BJ/KJ	35.54	35.81	36.08
	Sales to IP	1857.77	1944.81	2030.14
	<b>Total Sales</b>	<b>5422.85</b>	<b>5619.84</b>	<b>5819.56</b>
6	<b>Revenue at existing tariff in Rs. Crores.</b>			
	Revenue from tariff and Misc. Charges	2955.56	3044.88	3136.52
	Tariff Subsidy to BJ/KJ	28.22	28.43	28.65
	Tariff Subsidy to IP	1097.94	1149.38	1199.81
	<b>Total Existing Revenue including Miscellaneous Revenue</b>	<b>4081.72</b>	<b>4222.69</b>	<b>4364.98</b>
	<b>Expenditure in Rs. Crores.</b>			
7	Power Purchase Cost	2505.48	2595.22	2663.02
	Transmission charges of KPTCL	350.06	384.58	423.27
	SLDC Charges	2.90	3.25	3.64
	<b>Power Purchase Cost including cost of transmission</b>	<b>2858.44</b>	<b>2983.05</b>	<b>3089.93</b>
8	Employee Cost	556.48	607.06	662.24
	Repairs & Maintenance	77.35	84.38	92.06

Sl. No	Particulars	FY23	FY24	FY25
		As Filed 30.11.2021	As Filed 30.11.2021	As Filed 30.11.2021
	Admin & General Expenses	134.91	147.16	160.52
	<b>Total O&amp;M Expenses</b>	<b>768.74</b>	<b>838.60</b>	<b>914.82</b>
9	Depreciation	247.95	274.67	299.03
<b>10</b>	<b>Interest &amp; Finance charges</b>			
11	Interest on Capital Loans	155.20	165.78	163.13
12	Interest on Working capital loans	86.89	90.81	94.65
13	Interest on belated payment on PP Cost	0.00	0.00	0.00
14	Interest on consumer security deposits	50.08	52.58	55.08
15	Other Interest & Finance charges	1.58	1.58	1.58
16	<b>Less: Interest &amp; other expenses capitalised</b>	0.00	0.00	0.00
	<b>Total Interest &amp; Finance charges</b>	<b>293.75</b>	<b>310.75</b>	<b>314.44</b>
17	Other Debits	6.55	6.55	6.55
18	Net Prior Period Debit/Credit	0.00	0.00	0.00
19	Return on Equity	186.02	210.92	239.75
22	Funds towards Consumer Relations/Consumer Education	0.50	0.50	0.50
	Regulatory Assets as per T.O dated 04.11.2020	61.46	0.00	0.00
23	Other Income (Including income from MSEZ)	-96.73	-96.73	-96.73
	<b>ARR</b>	<b>4326.68</b>	<b>4528.31</b>	<b>4768.29</b>
24	Surplus/Deficit	<b>-244.96</b>	<b>-305.62</b>	<b>-403.31</b>
	Surplus / Deficit (-) for FY21 carried forward (APR)	473.25	0.00	0.00
27	<b>Net ARR</b>	<b>4799.93</b>	<b>4528.31</b>	<b>4768.29</b>
28	<b>Revenue Deficit(27-6)</b>	<b>-718.21</b>	<b>-305.62</b>	<b>-403.31</b>

MESCOM has requested the Commission to approve the Annual Revenue Requirement of Rs.4799.93 Crores for FY23 (including the deficit of FY21 of Rs.473.25 Crores), Rs.4528.31 Crores for FY24 and Rs.4768.29 Crores for FY25. Considering the estimated revenue of Rs.4081.72 Crores, Rs.4222.69 Crores and Rs.4364.98 Crores from sale of power to the consumers and miscellaneous revenue at the existing retail supply tariff, MESCOM has projected the revenue

gap of Rs.718.21 Crores, Rs.305.62 Crores and Rs.403.31 Crores for FY23, FY24 and FY25, respectively. In order to bridge the revenue gap of Rs.718.21 Crores for FY23, the MESCOM has proposed average increase in retail supply tariff by 132 paise per unit in respect of all categories of consumers, including BJ/KJ and IP set consumers for FY23.

## 5.1 Annual Performance Review for FY21 & FY22:

As discussed in the preceding chapter of this Order, the Commission has carried out Annual Performance Review for FY21 based on the audited accounts and other relevant records furnished by MESCOM. Accordingly, the net deficit of Rs.341.96 Crores of FY21, is required to be carried forward to the ARR of FY23.

As regards APR for FY22, it is noted that the audited accounts for FY22 are yet to be finalized, the Commission decides to take up the APR of FY22, while taking up the revision of ARR / Retail Tariff, if any, for FY24.

## 5.2 Annual Revenue Requirement for FY23-25:

### 5.2.1 Capital Investment Plan for FY23-25:

#### 1. MESCOM Proposal:

MESCOM has proposed the Capex of Rs.661.92 Crores, Rs.506.42 Crores and Rs.509.69 Crores for FY23, FY24 and FY25 respectively for the control period, under MYT regime. The total capex proposed for the control period is Rs.1678.03 Crores. The details of capex proposed under various heads for FY23 to FY25 are shown below:

**TABLE – 5.2**  
**MESCOM's Proposed Capex for FY23-25**

(Amount in Rs. Crores)				
SI No	Particulars	FY23	FY24	FY25
1	E&I Works (Addl. Transformers, Link-Lines, HT/LT Re-conductoring HVDS, UG/AB cable)	250.00	250.00	250.00
2	DTC metering.	13.65	0.00	0.00
3	Replacement of MNR/DC Electromagnetic meters by Static meters and SMART metering	29.70	32.67	35.94
4	Replacement of faulty Distribution Transformers	5.00	5.00	5.00
5	Service Connection including promoter vanished layout Works	60.00	60.00	60.00

<b>Sub-Total</b>		<b>358.35</b>	<b>347.67</b>	<b>350.94</b>
6	Rural Electrification (General)			
a	Electrification of Hamlets	2.00	2.00	2.00
b	Energisation of general IP sets including Ganga Kalyana	65.00	65.00	65.00
c	Electrification of BPL Households	0.25	0.25	0.25
<b>Sub-Total</b>		<b>67.25</b>	<b>67.25</b>	<b>67.25</b>
7	Tribe Sub-Plan			
a	Electrification of Tribal Colonies	0.50	0.50	0.50
b	Energisation of IP sets	1.00	1.00	1.00
c	Improvement works in Tribal Colonies	1.00	1.00	1.00
<b>Sub-Total</b>		<b>2.50</b>	<b>2.50</b>	<b>2.50</b>
8	Special Component Plan			
a	Electrification of S.C Colonies	1.00	1.00	1.00
b	Energisation of IP sets	1.50	1.50	1.50
c	Improvement works in SC Colonies	1.50	1.50	1.50
<b>Sub-Total</b>		<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
9	Tools & Plants & Computers	10.00	10.00	10.00
10	Civil Engineering Works	40.00	40.00	40.00
11	IT Infrastructure and Software, DSM	5.00	5.00	5.00
12	33 KV Station and Line Works (UG/AB Cable)	30.00	30.00	30.00
13	Solar Roof Top on Company Buildings	1.00	0.00	0.00
<b>Total</b>		<b>518.10</b>	<b>506.42</b>	<b>509.69</b>
<b>Schemes under progress</b>				
1	Deen Dayal Upadyaya Gram Jyoti Yojana (DDUGJY)	0.00	0.00	0.00
2	IPDS: System improvement & Strengthening works in RADRP/statutory towns	0.00	0.00	0.00
3	IPDS: Gas insulated substations	0.00	0.00	0.00
4	IPDS (Integrated Power Development Scheme) Phase II-IT	7.00	0.00	0.00
5	Providing Infrastructure to regularized UIP and general IP	16.72	0.00	0.00
6	Improvement works for Model Electricity Village	33.93	0.00	0.00
7	Improvement works for Model Sub-division	86.17	0.00	0.00
<b>Total</b>		<b>143.82</b>	<b>0.00</b>	<b>0.00</b>
<b>Grand Total</b>		<b>661.92</b>	<b>506.42</b>	<b>509.69</b>

## 2. Preliminary Observations and Replies of MESCOM:

- a. The Commission, in its preliminary observations had directed MESCOM to provide necessary justification on the proposed the Capex of Rs.661.92 Crores, Rs.506.42 Crores and Rs.509.69 Crores for FY23, FY24 and FY25 respectively on each of the following works in terms of its purpose, requirement, physical progress, cost and timelines of completion along with

Division-wise abstract of works, no. of works proposed to be taken in each of the year for the Control Period.

- b. MESCOM, in its reply to the observations of the Commission in respect of E&I works (Addl. Transformers, Link-Lines, HT/LT Reconductoring, HVDS, UG/AB cable) has submitted the details of proposed physical targets for the proposed capex of Rs.750 Crores (250.00 Crores each) for the three-year control period is as under.

Sl. No.	Particulars	FY23	FY24	FY25
1	No. of DTC's proposed to be added	1400	1400	1400
2	New 11 KV lines & Link-Lines in RKms	600.00	600.00	600.00
3	HT lines reconductoring in RKms	400.00	400.00	400.00
4	LT line	100.00	100.00	100.00
5	LT line reconductoring in RKms	1500.00	1500.00	1500.00
6	Providing intermediate poles	8000	8000	8000

- c. The Commission notes the reply submitted by MESCOM in respect of replacement of MNR / DC, Electromagnetic meters by static meters and smart metering. Wherein, MESCOM has stated that it has planned to replace 1,82,050 no's of Single phase meters and 36,410 no's of Three phase meters for proposed capex of Rs.98.31 Crores for the control period.
- d. In preliminary observations, MESCOM was directed to furnish the details for proposed capex of Rs.13.65 Crores for FY23 in respect of DTC metering.

In reply, MESCOM has submitted that anticipated maintenance bill amounting to Rs.13.65 Crores is required for FY23.

Further, the Commission notes from the M/s TERI prudence check report that 30% to 60% of the DTC meters are not working among the samples selected by the consultants for prudence check of completed and categorized works of pertaining to FY19 and FY20. MESCOM, in its compliance letter dated 09.10.2021 to the prudence check report of M/S TERI had submitted that it has taken necessary measures for replacement

of faulty / non-communicating DTC meters from 19.08.2021 onwards and also assured the Commission for continuous monitoring.

In view of the reply, the Commission concludes that DTC metering works are not fully functional. Hence, the Commission considers all the samples of FY19 and FY20 selected by consultant as imprudent for FY21. Accordingly, disallowance has been made in this Tariff Order.

**In view of the above, the Commission directs MESCOM to rectify the lacunae in the DTC metering works and to carryout 100% Energy Audit of metered DTCs. Further, the Commission directs MESCOM not to incur capex on these works, without realizing the benefits as envisaged in the DPR.**

- e. The Commission notes that the reply submitted by MESCOM in respect of 33 KV stations & line works, UNIP works, model village and civil works is not satisfactory. Whereas, MESCOM has not furnished the physical progress/target year-wise breakup along with timelines for completion and to be taken up works details in respect of above works.
- f. The Commission notes the reply submitted by MESCOM in respect of Model Sub- Division works for the proposed capex of Rs.86.17 Crores FY23. Wherein, MESCOM has stated that awarded work of Mangaluru and Shivamogga sub divisions works are expected to complete within FY22. Hence, provision has been made in FY23.

Further, the Commission observes that the details furnished in APR of FY21 and in ARR of FY23 in respect of these works differs. Hence, the Commission directs MESCOM to demonstrate the benefits achieved in already completed works and also not to take any fresh proposals without the approval of the Commission from FY23 onwards.

- g. The Commission notes the reply submitted by MESCOM in respect of sources of funding (like grants, debt, equity and internal sources) for the proposed capex. The details furnished by MESCOM is as under:

Amount in Rs. Crores

Year	Created out of Consumers Contribution and Govt. grants	Created out of borrowings and internal resources	Total
FY23 (Projected)	127.29	534.61	661.90
FY24 (Projected)	119.28	387.14	506.42
FY25 (Projected)	111.79	397.90	509.69

- h. The reply submitted by MESCOM in respect of tariff impact on consumers for the proposed capex to be met from borrowing is not satisfactory. MESCOM has submitted analysis only for FY23 and not for the control period. This shows that MESCOM has not properly analyzed the Tariff impact of the proposed capex for the control period.
- i. MESCOM, in its filing has stated that the Government of India has announced the RDS scheme, which is at the preliminary stage and the financial limitation/allocations are yet to be decided for the state. Hence, the projection for budget requirement are not done.

The Commission is the view that pending approval of scheme, and working out the detailed modalities for implementation, the Commission is unable to accept the proposal, since the amount to be considered for the ARR has not been submitted in the tariff filing.

### 3. Commission analysis and decision:

In light of the preliminary observations and the replies thereon, the Commission concludes that MESCOM has not justified the proposed capex in terms of its purpose, requirement, benefits in terms of reduction in losses, increase in revenue sales, impact of tariff etc.,

Commission notes that GOI has launched the RDS Scheme to improve the reliability and quality of power of supply, operational efficiencies and financial sustainability of the ESCOMs. In view of this, the Commission directs MESCOM to take up only result oriented prudent projects, which have already yielded real benefits to consumers. Keeping in view of technical constraints

i.e. network issues, adaption of new technologies in large scale and its challenges MESCOM shall wisely select the projects to be taken up under the scheme.

The Commission likes to point out that MESCOM has incurred huge capex towards schemes like DTC metering etc. in the past and has not shown any perceptible benefits or advantage coming out of those investments to the consumers, and these investments have resulted in stranded assets and a burden on the consumers.

Further, on a review of Energy Audit of DTC metering works for the month of April 2021 to June 2021, it is noticed that only 41.95% to 41.38% Energy Audit has been done out of metered DTCs. Further, the Commission notes that sample selected for prudence check of completed and categorized works of FY19 and FY20 have not been proved to be prudent expenditure for FY21. And even in the areas where the energy audit is done, no action appears to be taken to address the issue of high loss making areas and to reduce the losses.

The Commission would like to inform MESCOM that the for implementing the smart meters (AMI) on a large scale, there are many challenges like network issues, integration of MDMS software, existing data migration, procurement of smart meters in large scale, geographical constraints, consumer data privacy, Consumer engagement and participation etc. These challenges are yet to be addressed in the projects where the smart metering has been taken up. The project could only be implemented only after successful completion of pilot projects in one or two sub-divisions. **In view of these issues complete rollout of smart metering was not approved in BESCOM jurisdiction.**

MESCOM shall note that any investments to be made under Smart Grid works shall be in accordance with Smart Grid Regulations, 2015. **Hence, the Commission directs MESCOM not to violate the said Regulations. Otherwise,**

**the Commission will be constrained to take appropriate action as may be deemed necessary against MESCOM for violation of its Regulations.**

In view of the above observations, the Commission directs MESCOM to ensure that the investments made under any of the schemes, i.e. funding through grants, internal resources or through capital borrowings, should not become waste/futile expenditure resulting in creation of stranded assets.

The MESCOM's previous years' achievement of capex is shown in the following table:

**TABLE – 5.3**  
**Approved and Actual Capex incurred –MESCOM**

Particulars	Amount in Rs. Crores						
	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Capital investment filed	262.33	827.33	320.40	595.40	803.50	1091.44	914.75
Capital investment approved by the Commission	262.33	353.89	288.90	289.40	763.50	818.58	914.75
Actual capital investment incurred as per audited accounts	252.07	230.10	288.38	419.39	839.17	501.61	402.83
Percentage of actual capital investment to the approved capital investment	96.09%	65.02%	99.82%	144.92%	109.91%	61.28%	44.04%

Considering the actual capex as indicated above, the Commission notes that the average capex for the last Seven years is within Rs.419.07 Crores.

**Based on the previous years' achievements and the projected works to be undertaken, as per the GoI/ GoK schemes, to be partly met by the capital grants and the available internal resources, the Commission recognizes the capital expenditure of MESCOM. However, to avoid front loading of interest on capital loan and the depreciation thereon in the retail supply tariff, the Commission decides to reckon Rs.550 Crores, Rs.400 Crores and Rs.400 Crores for FY23, FY24 and FY25 respectively for the period of determination of ARR for FY23-25, as against proposed capex of Rs.661.92 Crores, Rs.506.42 Crores and Rs.509.69 Crores for FY23 to FY25 respectively. The capital expenditure**

**allowed is subject to prudence check to be taken up by the Commission. Considering MESCOM's projected availability of capital grants from Gol / GoK and the internal resources and the amount of works to be carried out under self-execution and deposit contribution by MESCOM, for the execution of capex, the Commission considers Rs.400 Crores, Rs.250 Crores and Rs.250 Crores for the purpose of ARR, as capital borrowings for FY23, FY24 and FY25 respectively.**

The Commission also directs MESCOM not to exceed the approved capex and carryout the capital works without seeking any additional capex during the middle of the year. If there is any excess expenditure in any head of expenditure, the same shall be met from the savings in any other head of expenditure within the capex approved by the Commission. The capex approved by the Commission to carry-out the Central / State scheme works shall not be re-appropriated to any other category of capital expenditure head.

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

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

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

1. Reducing distribution losses,
2. Reducing the HT:LT Ratio
3. Reduce Transformer failures
4. Segregate the loads in the feeders.

5. Reduce Power theft
6. Bring programs for the awareness among the people on usage and conservation of energy.
7. Improve the sales to metered category and
8. Improve the Power factor of the IP set loads by installing switched capacitors of suitable capacity to the secondary of the transformers.

## 5.2.2 Sales Forecast for FY23-FY25:

### A. Sales other than IP Sets

#### i. MESCOM's approach:

MESCOM, in its filing for the control period FY23 to FY25 has estimated the number of installations and energy sales as indicated below:

Year	No. of Installations	Sales-MU
FY23	2634668	5379.10
FY24	2700332	5576.09
FY25	2763453	5775.81

MESCOM has adopted the following methodology for making estimates of Number of installations and Energy Sales:

- a. The Number of installations has been projected based on trend analysis.
- b. Energy sales is estimated based on either 3-year CAGR or 5-year CAGR.
- c. Wherever the growth is negative, the estimates have been suitably modified.

#### ii. The Commission observations of the on sales forecast for FY23-FY25:

MESCOM was required to furnished the following clarifications on sales projections:

- a. In estimating number of installations for BJ/KJ, whether trend is applied individually for installations consuming less than or equal to 40 units/month and those consuming more than 40 units/ month? If not, it may be clarified as to how apportionment is done between installations consuming less than or equal to 40 units/month and those consuming more than 40 units/ month.

**MESCOM's Reply:**

MESCOM has submitted that the above two sub-categories are distinctly indicated in the DCB and that the trend forecasting is applied considering the past three year's data.

- b. Though estimate based on CAGR is higher, it is generally observed that for estimating the number of installations trend method is adopted. It would be advisable to estimate on the higher side, while making perspective plans.

**MESCOM's Reply:**

As the objective of forecast is to make reasonable estimate, MESCOM has adopted trend method.

- c. Working sheets for computation of sales/installations using CAGR method shall be furnished.

**MESCOM's Reply:**

MESCOM has furnished the details:

- d. While computing CAGR in certain cases, the data for FY20 & FY21 is considered. Since sales for FY20 & FY21 were affected by Covid-19, suitable corrections may be applied.

**MESCOM's Reply:**

MESCOM has observed that the growth rate in FY20 is 5.86%, whereas in FY21 it is -3.68%. Keeping in view the above extreme values of growth rate, MESCOM has considered moderately 3.50% growth rate for estimation of sales.

- e. In certain categories like HT-2b, HT-2c etc. though the Year-on-Year growth rate is considered for estimation, it is indicated as CAGR.

**MESCOM's Reply:**

MESCOM has clarified that for the above categories growth rate of FY20 over FY19 or that of FY19 over FY18 is considered.

- f. In case of LT-5 category though there is increase in number of installations, the sales are retained at 123.74 MU for all the years of control period. Considering the addition of new installations, there should be some increase in sales. MESCOM shall clarify.

**MESCOM's Reply:**

MESCOM has submitted that, during the period FY17 to FY21, even though there is increase in the number of installations, the sales remained almost same and that in FY19, there is reduction in sales in spite of increase in the number of installations. MESCOM has opined that the energy sales for this category may not be correlated with the number of installations.

- g. The number of HT-2a installations is indicated as 993 in D-2 Format for FY21, but the same is indicated as 994 at Page No.104. Similar discrepancy is observed for FY22 to FY25. Data shall be reconciled.

**MESCOM's Reply:**

MESCOM has clarified that the difference of one installation is attributable to MSEZ.

- h. The Commission had noted that the growth rate considered for the number of installations for the control period, by MESCOM is lower for all the categories, as compared with the CAGR. Hence, MESCOM may consider revising the same.

**MESCOM's Reply:**

As the forecast has to be reasonable, MESCOM has adopted trend method.

- i. The Commission had noted that the CAGR as well as growth rate in FY21 for energy sales in most of the categories is negative, due to reduction in sales during FY21 on account of Covid-19. Thus, comparing with FY20 growth rate, the Commission observations are as follows:
- Growth rate is lower for LT-2a, LT-2b, LT-5, LT-6 WS & HT-3 and
  - Growth rate is higher for LT-6 SL, HT-1 & HT-2c.

**MESCOM's Reply:**

MESCOM has submitted that the estimates have been made with due consideration, as it has bearing on tariff revision. As such, MESCOM has requested to consider the estimates, as filed in the tariff Petition.

- j. To validate the sales, MESCOM was directed to furnish category-wise information in the specified format.

**MESCOM's Reply:**

MESCOM has furnished the above details.

- k. The Commission had noted that the breakup of sales data for FY20 was not correct. MESCOM through e-mail has submitted the revised breakup for FY20, which is considered by the Commission.
- l. Sales to MSEZ as considered by MESCOM and MSEZ are as follows:

	In Million Units				
	FY21	FY22	FY23	FY24	FY24
MESCOM	60.98	43.75	43.75	43.75	43.75
MSEZ (Purchase from MESCOM)	60.98	46..21	42.50	43.15	43.56

MESCOM shall reconcile the above data and furnish the correct figures.

**MESCOM's Reply:**

MESCOM has submitted that it has considered 43.75MU of sales for MSEZ for FY22 as approved by the Commission and the same has been retained for the control period.

The Commission while noting the reply of MESCOM, has considered the sales to MSEZ for the control period as approved in the MSEZ current Tariff Order 2022.

**iii. The Commission's approach for estimating the number of installations and sales for FY23 to FY25:**

**1) No. of Installations:**

While estimating the number of installations for FY23 (excluding BJ/KJ and IP), the following approach is adopted generally:

- a. The Commission has validated both the number of installations and energy sales to various categories considering the actuals as on 30<sup>th</sup> November, 2021 and has estimated the number of installations and sales for the remaining period reasonably. Accordingly, the base year estimation has been revised which has an impact on the estimates on the number of installations and sales for the FY23.
- b. Wherever the number of installations estimated by the MESCOM for the FY23 is within the range of the estimates based on the CAGR for the period FY16 – FY21 and for the period FY18 – FY21, the estimates of the MESCOM are retained.
- c. Wherever the number of installations estimated by the MESCOM for the FY23 is lower than the estimates based on the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, the estimates based on the lower of the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21 are considered.
- d. Wherever the number of installations estimated by MESCOM for the FY23 is higher than the estimates based on the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, the estimates based on the higher of the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21 are considered.

- e. For LT-4b category, the number of installations is retained at FY21 level for the control period, as there is negative growth.
- f. For LT-7 and HT-5 category, the estimates of MESCOM are retained for the control period.
- g. For FY24 and FY25 (excluding LT-4b, LT-7 and HT-5 categories), the estimates are made based on the growth rate considered for FY23. For LT-7 and HT-5 categories, estimates of MESCOM is retained. As stated earlier, for LT-4b, the number of installations is retained at FY21 level.

**Based on the above approach, the total number of installations (excluding BJ/KJ consuming  $\leq 40$  units/month and IP installations) estimated by the Commission for the FY23 to FY25 is indicated in the table below:**

**Approved Number of installations**

FY23		FY24		FY25	
Filed	Approved	Filed	Approved	Filed	Approved
2088728	2096095	2143743	2161161	2196052	2228407

**2) Energy Sales:**

- (i) For LT-2a, LT-6 Water Supply, HT-1 and HT-4 categories, the sales are being estimated, considering the following approach for FY23:
- a. The base year sale for FY22 as estimated by the MESCOM has been validated, duly considering the actual sale upto November, 2021 and modified suitably as stated earlier.
- b. Wherever the sale estimated by the MESCOM, for FY23, is within the range of the estimates based on the CAGR for the period FY16 – FY21 and for the period FY18 – FY21, the estimates of the MESCOM, are considered.
- c. Wherever the sales estimated by the MESCOM for FY23 is lower than the estimates based on the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, the estimates based on the lower of the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, are considered.

- d. Wherever sale estimated by MESCOM for FY23 is higher than the estimates based on the CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, the estimates based on the higher CAGRs for the period FY16 – FY21 and for the period FY18 – FY21, are considered.
- e. In respect of LT-2b, LT-3, LT-4c and LT-6 SL, the sales are estimated based on FY21 specific consumption.
- f. For LT-4(b) category the sales of FY21 is retained, as there is negative growth.
- g. LT-5 category a nominal growth rate of 0.50% is considered as the sales growth is negative in the previous years.
- h. For HT-5 and LT-7 categories, the estimates of MESCOM are retained for the control period.
- i. In respect of HT-2(a) category, the Commission notes the sales and the growth rate from FY18 to FY21 are as follows:

Particulars	FY18	FY19	FY20	FY21
Sales in MU	596.27	624.26	635.20	550.54
% growth rate	---	4.6	1.75	-1.3

The Commission notes from the above table that, excluding FY21, the growth is positive in FY19 and FY20. The negative growth in FY21 is attributable to Covid-19 Pandemic. However, the economy is slowly picking up and therefore, the Commission has considered a nominal growth rate of 0.50% for this category for the control period.

- j. For HT-2(b), the Commission notes the sales and the growth rate from FY18 to FY21 are as follows:

Particulars	FY18	FY19	FY20	FY21
Sales in MU	193.17	200.43	205.72	140.44
% growth rate	-	3.7	2.6	-3.2

The Commission notes from the above table that, excluding FY21, the growth is positive in FY19 and FY20. The negative growth in FY21 is attributable to Covid-19 Pandemic. However, the economy is slowly picking up and therefore, the Commission has considered a nominal growth rate of 0.50% for this category for the control period.

- k. For HT 2(c) category, the Commission notes the sales and the growth rate from FY18 to FY21 are as follows:

Particulars	FY18	FY19	FY20	FY21
Sales in MU	137.07	144.58	139.87	89.81
% growth rate	-	5.4	-3.3	-35.7

In view of negative growth in last two years, the Commission has retained FY22 sales for the Control period.

- l. For HT-3 category, the Commission notes the sales and the growth rate from FY18 to FY21 are as follows:

Particulars	FY18	FY19	FY20	FY21
Sales in MU	23.61	48.86	69.68	95.59
% growth rate		6.9	43.2	37.18

The Commission notes from the above table that; the growth is positive. Therefore, the Commission has considered FY15 to FY20 CAGR of 24.58% rate for the control period.

- m. For FY24 and FY25 (excluding LT-2b, LT-4b, LT4c, LT-7 and HT-5 categories), the estimates are made based on the growth rate considered for FY23. For LT 2b & 4c estimates is based on FY21 specific consumption. For LT4b, sales are retained at FY23 estimates. For LT7 & HT5 estimates of MESCOM are retained.

**Based on the above approach, the sales (excluding BJ/KJ consuming ≤ 40units/month and IP sales) estimated by the Commission, for the FY23 to FY-25, is indicated in the following table:**

**Approved Energy Sales**

in Million Units					
FY23		FY24		FY25	
Filed	Approved	Filed	Approved	Filed	Approved
3479.22	3610.61	3588.90	3738.28	3703.02	3878.33

\*Excludes KPCL sales, MSEZ sales and additional sales due to DR Scheme

**(ii) Additional sales due to extension of Discounted Rate Scheme(DRS):**

As the Commission has extended the DRS, the following additional sales are also considered during the control period:

Year	FY23	FY24	FY25
MU	25.00	27.50	30.25

**(iii) Sales to BJ/KJ:**

The break-up of sales to BJ/KJ installations considered for FY21 is as indicated below:

Particulars	No. of Installations	Consumption in MU	Specific consumption per installation per month (kWh)
Installations consuming less than or equal to 40 units	161434	35.00	18.07
Installations consuming more than 40 units and billed under LT2(a)	17784	18.91	88.61

The Commission notes that, the specific consumption works out to 18.07 units /installation/month for BJ/KJ installations consuming less than or equal to 40 units per month and 88.61 units /installation/month for BJ/KJ installations consuming more than 40 units per month.

Since, there is no GoK policy to extend the benefit of free power to any new BJ/KJ installations, the number of BJ/KJ installations consuming less than or equal to 40 units per month and more than 40

units per month is retained as existing on 30.11.2021. Further, the specific consumption for installations consuming more than 40Units / Month is 88.61 Units which is higher than the specific consumption of LT 2a category at 78.37 Units. The Commission notes that the number of installations and consumption of BJ/KJ installations consuming more than 40 units/month varies from month to month. Therefore, considering the overall consumption and year end installations, the specific consumption would be higher. Thus, the Commission has considered the specific consumption of 78.37 units / Installation / Month for estimating the sales for the control period, for the installations consuming more than 40 Units / Month. Further, for installations consuming less than or equal to 40 Units / Month, specific consumption of 18.07 Units / Month is considered.

Accordingly, the sales approved for FY23 to FY25 is as indicated in the following Table:

Particulars	FY23		FY24		FY25	
	No. of Installations	Sales-MU	No. of Installations	Sales-MU	No. of Installations	Sales-MU
Installations consuming less than or equal to 40 units	152052	32.97	152052	32.97	152052	32.97
Installations consuming more than 40 units and billed under LT2(a)	24540	23.08	24540	23.08	24540	23.08

## B. Sales to IP sets – projections for ARR FY23 to FY25;

### MESCOM Proposal:

1) MESCOM, in its tariff application, has projected sales to IP set installations for FY23 to FY25 as follows:

Sl. No		FY23	FY24	FY25
1	No. of installations	3,98,743	4,16,413	4,34,507
2	Sales in MU	1,857.77	1,944.81	2,030.14

- 2) MESCOM, as per D-2 Format, has reported actual consumption of 1,685.25 MU against 3,61,885 number of IP set installations for FY21. MESCOM, in its current tariff filing, has considered addition of 18,045 installations for FY22, 18,813 installations for FY23, 17,670 installations for FY24 and 18,094 for FY25. MESCOM is submitting that, it has considered the trend method as appropriate for projection of the number of IP installations. MESCOM has failed to explain what is trend method in detail.
- 3) MESCOM has informed that, it has considered the specific consumption-based method as appropriate for projection of sales for FY23 to FY25 while estimating the energy sales to IP installations for FY22 and FY23 to FY25. MESCOM has not furnished method adopted in detail, how it has arrived on the value of sales to IP set installations using the method. Accordingly, the sales is projected for FY22 and FY23 to FY25 as indicated in the table above.

**Commission's Analysis and Decision:**

- a) While verifying the computations of IP set, it is found that, the actual sales to IP set installations for FY21 works out to 1,685.25 MU (as detailed in Chapter-4 Sales portion). Based on the actual sales to IP sets, the specific consumption works out to 4,771.59 units per installation per annum for the FY21, by considering the mid-year installations of 3,53,184 numbers.
- b) While estimating the energy sales to IP installations for FY22, MESCOM is informing that, it has considered the trend method for projection of number of IP installations without furnishing any details on the method. From the previous data, it could be seen that, the average number of installations added during the year from FY18 to FY21 is around 17,669. Since, the normal life during the FY21 was badly affected due to the pandemic Covid-19 which is continuing further, the number of IP installations considered to be added by MESCOM using an unknown method looks unscientific for projecting the energy sales for FY22 and FY23 to FY25 is not acceptable.
- c) Looking into the data of FY18, FY19 and FY20, the Commission has found an average addition of 17,669 number of IP installations and looking into the

circumstances, considers the addition of 17,500 number of installations during FY22 and FY23 to FY25. With the addition of this number, the projections of number of IP installations are 3,79,385 (3,61,885 + 17,500) for FY22, and 3,96,885 (3,79,385 + 17,500) for FY23, 4,14,385 for FY24 (3,96,885 + 17,500) and 4,31,885 for FY25 (4,14,385 + 17,500).

d) The Commission has considered the specific consumption-based method as appropriate for projection of sales for FY23 to FY25 while estimating the energy sales to IP installations for FY22 and FY23 to FY25. As per the data of assessment of sales to IP installations submitted by MESCOM, the specific consumption for FY21 is 4,771.59. The Commission by considering the actual data of assessment of sales to IP installations for the period from April 2021 to September 2021, estimated the sales to IP installations for the remaining 6 months i.e., October 2021 to March 2022. The specific consumption for revised sales works out to 4,411.83 units per IP installation per annum. The Commission by considering this specific consumption and based on the revised sales worked out for FY22 projected the energy sales to IP sets for FY23 to FY25. The Commission has decided to consider the data of actual sales to IP sets for FY22, till September 2021 as furnished by MESCOM in its replies to preliminary observations, only provisionally for making the estimates for FY22 and FY23 to FY25.

e) Based on the estimated number of installations and consumption for FY22, the details of energy sales projections to IP set consumers for FY23 to FY25, are as indicated below:

Particulars	FY23		FY24		FY25	
	As submitted by MESCOM in its Tariff Application	As approved by the Commission	As submitted by MESCOM in its Tariff Application	As approved by the Commission	As submitted by MESCOM in its Tariff Application	As approved by the Commission
No. of Installations	3,98,743	3,96,885	4,16,413	4,14,385	4,34,507	4,31,885
Mid-year number of Installations	-	3,88,135	-	4,05,635	-	4,23,135
Specific consumption in units/installation/annum	-	4,411.83	-	4,411.83	-	4,411.83
Sales in MU	1,857.77	1,712.39	1,944.81	1,789.59	2,030.14	1,866.80

- f) **Accordingly, the Commission approves 1,712.39 MU, 1,789.59 MU and 1,866.80 MU as energy sales to IP-sets for FY23, FY24 and FY25 respectively as against the MESCOM's projections of 1,857.77 MU, 1,944.81 MU and 2,030.14 MU for the FY23, FY24 and FY25 respectively. The number of installations approved are 3,96,885, 4,14,385, and 4,31,885 for FY23, FY24 and FY25 respectively.**
- g) **This approved IP set consumption for FY23 to FY25 is with the assumption that the Government of Karnataka would release full subsidy to cover the approved quantum of IP-sales. However, if there is any reduction in the subsidy allocation by the GoK, the quantum of sales to IP sets of 10 HP and below, shall be proportionately regulated. The MESCOM shall therefore, regulate the number of hours of power supply to exclusive agricultural feeders accordingly.**
- h) 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.
- i) Thus, the Commission observes that the data of GPS survey made available is incomplete, as well observes inconsistency in the GPS survey data furnished by MESCOM and hence the Commission is unable to accept the same.

- j) In view of fact that the GPS survey of IP-sets is incomplete, the number of installations reckoned for FY21 and estimates for FY23 to FY25 are subject to change based on the GPS survey results. Accordingly, after completion of the survey and finalization of the report, MESCOM shall furnish the correct number of IP set installations duly deducting the number of dried up / defunct IP sets from the total number. Thereafter, any variation in the sales due to change in the number of installations would be trued up during the Annual Performance Review for the FY22.
- k) While assessing the sales to IP sets for FY20, the Commission observes that the assessment is based on energy meters provided to the pilot DTCs. Though, MESCOM has taken up the work of bifurcation of agricultural feeders in its area, has not taken up stringent measures to complete the work early. In the preliminary observations, the Commission had 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 in its replies to preliminary observations, has informed that it has commissioned 120 numbers of NJY feeders and commissioning of 4 feeders are pending due to few statutory issues viz., railway crossing clearances etc., MESCOM also has taken action to align 252 more numbers of rural mixed load feeders as exclusive IP set feeders. MESCOM has contemplated to submit the data of assessment of sales to IP installations in respect of 372 feeders (120 + 252), as per the format prescribed by the Commission will be covered from FY23.
- l) The Commission directs MESCOM shall make arrangements and start assessing the sales to IP set installations on the basis of the energy meters provided to the bifurcated feeders from FY23 as contemplated by MESCOM. In view of the above, the Commission would consider revision of the same, based on the GPS survey data. **Hence, MESCOM is directed to submit the final survey Report within 3 (three) months from the date of this Order reconciling with the DCB Statement data and thereafter report the total IP-set consumption**

to the Commission, month-on month regularly, as per the format prescribed in the previous tariff orders of the Commission.

Based on the above discussions, the category-wise approved number of installations for the FY23 to FY25 vis-à-vis the estimates made by the MESCOM is indicated below:

**TABLE – 5.4**  
**Category wise approved number of installations**

	Category	Nos.					
		MESCOM FY23	MESCOM FY24	MESCOM FY25	KERC FY23	KERC FY24	KERC FY25
LT-1 (a)	Bhagya Jyoti < =40 units	147197	140176	132894	152052	152052	152052
LT-1 (a)	Bhagya Jyoti>40	23094	25745	28407	24540	24540	24540
LT-2a	Domestic AEH	1705005	1744920	1782754	1708608	1759180	1811248
LT-2b	Pvt. Institutions	3737	3795	3842	3746	3808	3871
LT-3	Commercial - Applicable to areas coming under VPs	243699	251472	259185	244476	253538	262936
LT-4 (a)	IP sets - Less than 10 HP - General	398743	416413	434507	396885	414385	431885
LT-4 (b)	Irrigation Pump sets - More than 10 HP	161	161	161	161	161	161
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	5208	5373	5538	5655	6060	6494
LT-5	Lt Industries	36328	37732	39094	36602	38038	39531
LT-6	Water Supply	18211	18976	19719	18550	19339	20162
LT-6	Street Lights	30085	32248	33909	30556	33126	35913
LT-7	Temporary Power Supply	20572	20572	20572	20572	20572	20572
	<b>LT Total</b>	<b>2632040</b>	<b>2697583</b>	<b>2760582</b>	<b>2642403</b>	<b>2724800</b>	<b>2809365</b>
HT-1	HT Water Supply	135	143	151	136	145	154
HT-2 (a)	HT Industries	1109	1161	1214	1103	1174	1250
HT-2 (b)	HT Commercial	904	945	985	900	962	1028
HT-2(c)		355	370	387	355	374	394
HT-3(a) & (b)	HT Irrigation & LI Societies	34	34	34	41	44	48
HT-4	Res. Apartments - Applicable to Mangalore Municipal Corporation Area	72	77	81	75	80	86
HT-5	Temporary	19	19	19	19	19	19
	<b>HT Total</b>	<b>2628</b>	<b>2749</b>	<b>2871</b>	<b>2629</b>	<b>2798</b>	<b>2979</b>
	<b>Grand Total</b>	<b>2634668</b>	<b>2700332</b>	<b>2763453</b>	<b>2645032</b>	<b>2727598</b>	<b>2812344</b>

IP sets and BJ/KJ consuming less than or equal to 40 units/month/installation	<b>2088728</b>	<b>2143743</b>	<b>2196052</b>	<b>2096095</b>	<b>2161161</b>	<b>2228407</b>
IP sets and BJ/KJ consuming less than or equal to 40 units/month/installation	<b>545940</b>	<b>556589</b>	<b>567401</b>	<b>548937</b>	<b>566437</b>	<b>583937</b>

Accordingly, the category-wise approved energy sales for the FY23 to FY25 vis-à-vis the estimates made by MESCOM is indicated in the following Table:

**TABLE – 5.5**  
**Category wise approved energy sales**

	Category	MUs					
		MESCOM FY23	MESCOM FY24	MESCOM FY25	KERC FY23	KERC FY24	KERC FY25
LT-1 (a)	Bhagya Jyoti < =40 units	35.54	35.81	36.08	32.97	32.97	32.97
LT-1 (a)	Bhagya Jyoti>40	21.47	22.87	24.36	23.08	23.08	23.08
LT-2a	Domestic AEH	1651.39	1715.93	1783.09	1651.39	1715.83	1782.78
LT-2b	Pvt. Institutions	8.99	9.50	10.04	8.28	8.42	8.56
LT-3	Commercial - Applicable to areas coming under VPs	374.34	387.16	400.41	374.90	377.93	380.98
LT-4 (a)	IP sets - Less than 10 HP - General	1857.77	1944.81	2030.14	1712.39	1789.59	1866.80
LT-4 (b)	Irrigation Pump sets - More than 10 HP	0.89	0.89	0.89	0.89	0.89	0.89
LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	9.30	9.60	9.90	10.09	10.81	11.58
LT-5	Lt Industries	123.74	123.74	123.74	129.57	130.22	130.87
LT-6	Water Supply	157.85	163.95	170.60	159.82	168.27	177.16
LT-6	Street Lights	67.95	68.54	69.13	76.80	84.94	93.94
LT-7	Temporary Power Supply	18.32	18.32	18.32	18.32	18.32	18.32
	<b>LT Total</b>	<b>4327.55</b>	<b>4501.12</b>	<b>4676.70</b>	<b>4198.51</b>	<b>4361.27</b>	<b>4527.94</b>
HT-1	HT Water Supply	108.26	112.20	116.28	109.62	113.42	117.34
HT-2 (a)	HT Industries	569.09	578.59	588.25	595.83	598.81	601.81
HT-2 (b)	HT Commercial	147.95	151.86	155.87	173.95	174.82	175.69
HT-2(c)		99.89	105.35	111.11	114.84	114.84	114.84
HT-3(a) & (b)	HT Irrigation & LI Societies	95.59	95.59	95.59	137.59	171.41	213.53

HT-4	Res. Apartments - Applicable to Mangalore Municipal Corporation Area	21.91	22.52	23.15	23.34	23.99	24.66
HT-5	Temporary	2.29	2.29	2.29	2.29	2.29	2.29
<b>HT Total</b>		<b>1044.98</b>	<b>1068.40</b>	<b>1092.54</b>	<b>1157.47</b>	<b>1199.58</b>	<b>1250.17</b>
<b>LT + HT Total</b>		<b>5372.53</b>	<b>5569.52</b>	<b>5769.24</b>	<b>5355.97</b>	<b>5560.84</b>	<b>5778.10</b>
<b>KPCL</b>		<b>6.57</b>	<b>6.57</b>	<b>6.57</b>	<b>6.57</b>	<b>6.57</b>	<b>6.57</b>
<b>Additional sales</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>25.00</b>	<b>27.50</b>	<b>30.25</b>
<b>Grand Total[excluding MSEZ]</b>		<b>5379.10</b>	<b>5576.09</b>	<b>5775.81</b>	<b>5387.54</b>	<b>5594.91</b>	<b>5814.92</b>
	<b>*Categories other than IP sets and BJ/KJ consuming less than or equal to 40 units/ month/installation</b>	<b>3479.22</b>	<b>3588.90</b>	<b>3703.02</b>	<b>3610.61</b>	<b>3738.28</b>	<b>3878.33</b>
	<b>IP sets and BJ/KJ consuming less than or equal to 40 units/ month/installation</b>	<b>1893.31</b>	<b>1980.62</b>	<b>2066.22</b>	<b>1745.36</b>	<b>1822.56</b>	<b>1899.77</b>

\* Excludes sales to KPCL, MSEZ & Additional sales

The above sales exclude sales to MSEZL. The sales to MSEZL is discussed in the relevant Chapter of the MSEZL Tariff Order.

### 5.2.3 Distribution Loss FY23-25

#### MESCOM's Submission:

As per the audited accounts for FY21, the MESCOM has reported distribution loss of 9.86% as against the approved revised loss level of 9.67%, as discussed in the previous chapter. MESCOM in its filing has proposed to achieve the following loss levels during FY23-25 with a meagre reduction of 0.02% every year:

Projected Distribution Loss-FY23-25 – MESCOM's Submission

Particulars	FY23	FY24	FY25
Projected Distribution Loss	9.82	9.80	9.78

**Commission's Analysis and Decisions:**

The performance of MESCOM in achieving the loss targets set by the Commission in the past nine years is as follows.

Particulars	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
Approved Distribution losses in %	12.00	11.25	11.50	11.25	11.15	11.05	10.95	11.00	9.67	9.27
Actual Distribution losses in %	11.88	11.93	11.56	11.50	11.40	11.32	13.29	10.07	9.86	-

The Commission in its preliminary observation has directed MESCOM to revisit to propose the reasonable/justifiable distribution target taking into consideration the capex plan proposed and to submit the revised projected distribution losses for FY 23 to FY25. The reply submitted by MESCOM in this regard is not satisfactory.

The MESCOM has requested the Commission to approve the distribution losses as proposed for FY23 to FY25.

The Commission notes that, in FY21, the distribution loss has come down by 0.21 percentage point over FY20. Overall, in the past years (with base year as FY13), MESCOM has been able to achieve distribution loss reduction of 2.02 percentage point. The Commission notes that MESCOM has proposed the Distribution loss of 9.82% for FY23, when the target for FY22 itself is 9.27% which is not acceptable. It is observed that, the Commission has been allowing capital expenditure as incurred by the MESCOM and it has also allowed substantial capex along with the RRDS scheme of the Gol for the ensuing control period for strengthening of its distribution network along with the RRDS scheme of the Gol aimed at further reduction of loss levels. Most of the capex spent on the works like E&I works such and Strengthening of HT and LT Line, should enable the MESCOM, not only to strengthen its infrastructure for improved reliability and quality of power supply but also to reduce the distribution loss considerably. Hence, in view of such substantial investment, the loss reduction of meagre 0.02% every year, proposed for the control period by MESCOM is not acceptable

as compared to the current loss levels. In the light of the above discussion and based on the achievement made by the MESCOM in the reduction of losses during the previous years and the capex incurred so far along with the proposed capex for FY23-FY25, the Commission decides to fix the following distribution loss targets for FY23-FY25:

Particulars	FY23	FY24	FY25
Upper Limit	9.35	9.10	8.85
Approved Distribution Loss level	9.10	8.85	8.60
Lower Limit	8.85	8.60	8.35

#### 5.2.4 Power Purchase for FY23-25:

##### Total Power purchase requirement of the ESCOMs:

The ESCOMs in their Tariff applications, have submitted the D-1 statement indicating the requirement of power purchase for the control period FY23-25. The consolidated statement showing the energy requirement, year-wise is shown hereunder:

**TABLE - 5.6**  
**Requirement of Energy as filed ESCOMs**

ESCOMs	Energy (MU)	Energy (MU)	Energy (MU)
	FY23	FY24	FY25
<b>BESCOM</b>	33688.73	34579.58	35505.05
<b>MESCOM</b>	6197.93	6421.66	6648.40
<b>CESC</b>	7902.39	8067.25	8237.87
<b>HESCOM</b>	14718.62	15402.06	16137.35
<b>GESCOM</b>	8899.01	9233.60	9592.52

##### MESCOM's submission:

The MESCOM has submitted its power purchase requirement for the control period FY23-25 based on the projected sales as follows:

TABLE - 5.7

**Energy Requirement as filed by MESCOM**

Particulars	FY23	FY24	FY25
Projected Sales (MU)	5422.85	5619.84	5819.56
Distribution losses (%)	9.82	9.80	9.78
Energy at IF point (MU)	6013.36	6230.42	6450.41
Transmission Losses (%)	2.978	2.978	2.978
Energy Required to meet the sales of MESCOM (MU)	6197.93	6421.66	6648.40

**5.2.5 Sources of Procurement of Power:****MESCOM's submission:**

MESCOM has furnished the sources of power available to meet the energy, for the control period FY23-25. The details of the sources of procurement of Power and the basis for the energy availability is indicated below:

- (i) From KPCL stations including RPCL energy is considered, as furnished by the Generating Company.
- (ii) Availability of power from the Central Generating Stations (ex-Bus generation) is based on the details of LGBR in respect of CGS Generating Stations.
- (iii) In respect of major IPPs (UPCL), RE and other sources such as Jurala Power & TB Dam Power, the availability is as per the contracted capacity, Energy actual supply during FY20-21 has been considered for FY23, FY24, FY25.

The Power Purchase requirement for FY23 to FY25 as filed by MESCOM is shown in the following table.

**TABLE - 5.8**  
**Power Purchase requirement of MESCOM for FY23 to FY25**

Sources	Financial Year FY 23			Financial Year FY 24			Financial Year FY 25		
	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.
KPCL Hydel Energy	1817.06	180.14	0.99	1817.06	182.8	1.01	1817.06	175.58	0.97
KPCL Thermal Energy	1461.11	849.63	5.81	1658.32	908.5	5.48	1859.38	963.48	5.18
CGS Energy + Bundled Power	1883.04	900.38	4.78	1883.04	913.71	4.85	1883.04	917.12	4.87
UPCL	-	58.43	-	-	58.43	-	-	58.43	-
Renewable Energy	1342.43	534.73	3.98	1342.43	534.73	3.98	1342.43	534.73	3.98
Other State Hydel	19.11	5.23	2.74	19.11	5.23	2.74	19.11	5.23	2.74
PGCIL & POSOCO Charges	-	205.42	-	-	210.55	-	-	215.68	-
KPTCL Transmission & SLDC Charges	-	352.96	-	-	387.83	-	-	426.91	-
Other Charges	-324.82	-228.48	4.19	-298.30	-218.73	4.19	-272.62	-207.23	4.15
<b>TOTAL</b>	<b>6197.93</b>	<b>2858.44</b>	<b>4.78</b>	<b>6421.66</b>	<b>2983.05</b>	<b>4.81</b>	<b>6648.40</b>	<b>3089.93</b>	<b>4.81</b>

**Commission's analysis and decisions:**

The energy requirement of the ESCOMs, including MESCOM, is being met by the following sources through long-term power purchase agreement:

1. Karnataka Power Corporation Limited (KPCL) Hydro & Thermal Generating stations,
2. Central Generating Stations (CGS),
3. Major Independent Power Producers (IPPs) and
4. RE sources.

The availability of energy has been considered by the Commission as per:

- i. In respect of KPCL Generating Station, energy as furnished by the KPCL
- ii. In respect of Central Government Stations (CGS) energy as furnished by the SRPC based on the Load Generation Balance Report (LGBR) prepared by the CEA. The availability of CGS stations is based on the share of Karnataka, as notified from time to time.
- iii. In the case of RE sources, the actual generation capacity contracted by the ESCOMs, as indicated in D-1 Format, as per the PPAs executed by them,

has been considered by comparing the actual energy supplied during FY21.

- iv. In respect of major IPPs the energy is considered based on the energy contracted by the ESCOMs in terms of the PPAs executed with the generators.
- v. The availability from the other sources such as Jurala Hydel Station and TB dam Power Stations of Telangana State is based on the share of the state in the installed capacity of the inter-state projects.
- vi. In respect of Yelahanka Combined Cycle Power Plant (YCCPP) having a capacity of 350 MW, the availability as furnished by the KPCL, has not been considered, as the said generating station is yet to be synchronized with the grid and the CoD is yet to be declared.

Based on the above availability criteria, the energy allowed for the State to achieve the sales target of the respective years, is given in the following Table:

**TABLE - 5.9**

**Abstract of Power Purchase Approved for ESCOMs  
for the Control Period FY23 to FY25**

Sources	Financial Year FY 23			Financial Year FY 24			Financial Year FY 25		
	Energy in MU	Cost in Rs. Crores	Average cost Per Unit (Rs.)	Energy in MU	Cost in Rs. Crores	Average cost Per Unit (Rs.)	Energy in MU	Cost in Rs. Crores	Average cost Per Unit (Rs.)
KPCL Hydel Energy	11588.54	1310.26	1.13	11588.54	1336.46	1.15	11588.54	1363.19	1.18
KPCL Thermal Energy	17145.05	10263.35	5.983	18928.04	10971.03	5.80	19645.18	11302.29	5.75
CGS Energy	21187.50	9844.79	4.65	21187.50	10068.52	4.75	21187.43	10194.71	4.81
UPCL	1870.70	1892.14	10.11	2000.00	1965.48	9.83	3500.00	2651.57	7.58
Renewable Energy/Bundled Power	19626.62	8242.65	4.65	19808.91	8320.74	4.75	19812.704	8321.93	4.81
Other State Hydel	227.465	60.79	2.67	227.457	62.14	2.73	227.47	63.80	2.80
PGCIL & POSOCO Charges		2492.14			2554.33			2618.08	
KPTCL Transmission & SLDC		5126.755			5447.77			5838.41	
<b>TOTAL</b>	<b>71645.875</b>	<b>39232.87</b>	<b>5.48</b>	<b>73740.447</b>	<b>40726.47</b>	<b>5.52</b>	<b>75961.324</b>	<b>42353.98</b>	<b>5.58</b>

### 5.2.6 Power Purchase Cost & Transmission charges:

#### MESCOM's Submission:

MESCOM has submitted the Power Purchase requirement along with the cost including the transmission charges and SLDC charges, in the D-1 Format. The MESCOM has sought approval of the Commission for purchase of power as indicated below:

**TABLE - 5.10**

#### Power Purchase Quantum & Cost Proposed by MESCOM

FY23		FY24		FY25	
Quantum in MU	Cost in Rs. Crores	Quantum in MU	Cost in Rs. Crores	Quantum in MU	Cost in Rs. Crores
6197.93	2858.44	6421.66	2983.05	6648.40	3089.93

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

#### Commission's analysis and decisions

The Commission has arrived at the power purchase quantum and cost to be allowed in the ARR for the control period, after considering various aspects such as Sales, transmission and distribution losses, tariff rates claimed by the MESCOM etc.

The basis for computation of power purchase quantum for the control period FY23 to FY25 is indicated below:

1. Considering the approved sales and the allowable transmission and distribution losses, the requirement of Power for the MESCOM, for the control period FY23 to FY25, is worked out as under:

TABLE - 5.11

**Power Purchase Requirement approved for the  
MESCOM for the Control Period FY23 to FY25**

Particulars	FY23	FY24	FY25
Sales (MU)	5387.54	5594.91	5814.92
Approved Distribution losses (%)	9.10	8.85	8.60
Energy at IF point (MU)	5926.89	6138.13	6362.06
Transmission Losses (%)	2.864	2.764	2.664
<b>Energy Required to meet the sales of MESCOM (MU) including MSEZ</b>	6151.477	6360.517	6586.425

2. While approving the cost of power purchase, the Commission has arrived at the quantum of power from various sources in accordance with the principles of merit order schedule and dispatch, based on the ranking of all approved sources of supply according to the merit order of the variable cost.
3. The rates considered in respect of the KPCL stations are based on the Commission's Order dated 03.08.2009 approving the PPAs in respect of hydel stations except for Shivasamudram, Shimsha, Munirabad & MGHE.
4. The variable costs of State thermal stations and UPCL, have been considered based on the recent power purchase bills passed by the MESCOM duly considering the recent landed cost of fuel and other variable components.
5. The Tariff in respect of YTPS station Unit-1 & 2 the tariff has been considered as per the Commission's order dated 17.01.2022.
6. The fixed charges and the variable charges for the Central Generating Stations, UPCL Stations and the DVC Stations have been considered based on the Tariff determined by the CERC as per the CERC norms. However, the energy has been considered from these units by limiting the quantum of energy as per the requirement of ESCOMs, to meet the sales target on the basis of merit order dispatch. It is expected that any surplus energy available from tied up sources of energy would be traded by the ESCOMs through PCKL on commercial principles. Similarly, any requirement over and above the

quantum approved in this Tariff Order shall be procured from the tied up/ approved sources only.

7. The variations, if any, in the costs allowed, will be considered during the FAC determination exercise / Annual Performance Review of FY23.
8. The Commission has also allowed the KPTCL Transmission charges/PGCIL charges and SLDC charges to be paid by the ESCOMs for FY23-25, in the Power Purchase Cost.
9. Based on the approved requirement of energy and the power allocation given by the Government of Karnataka, the Power Purchase quantum and costs thereon are approved in the ARR of MESCOM for the control period FY23 to FY25, as shown in Annexure- 1 (i to iii) and 2 (i to iii).
10. The consolidated power purchase cost allowed by the Commission visa-vis the power purchase costs, as filed by the MESCOM for the control period FY23 to FY25 is shown in the following Table:

**TABLE - 5.12**  
**Transmission & SLDC Charges**

Name of ESCOMs	KPTCL Transmission charges in Rs. Crores			SLDC charges in Rs. Crores		
	FY23	FY24	FY25	FY23	FY24	FY25
<b>BESCOM</b>	2576.672	2774.577	3013.159	17.480	16.404	17.974
<b>MESCOM</b>	383.258	401.466	423.502	2.458	2.374	2.526
<b>CESC</b>	559.129	580.933	608.051	3.668	3.435	3.627
<b>HESCOM</b>	960.686	1011.446	1072.090	6.073	5.980	6.395
<b>GESCOM</b>	614.026	647.325	686.991	3.300	3.827	4.098
<b>Total</b>	5093.771	5415.747	5803.792	32.984	32.020	34.620

The CERC (Sharing of inter State Transmission charges and loss) Regulations, 2020 have come into force with effect from 01.11.2020 with change in the methodology of calculation. The PoC charges payable by ESCOMs has been computed by considering amounts claimed by PGCIL from the month of April 2021 onwards.

TABLE - 5.13

**Abstract of Power Purchase Approved for  
MESCOM for the Control Period FY23 to FY25**

Sources	Financial Year FY 23			Financial Year FY 24			Financial Year FY 25		
	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.	Energy in MU	Cost in Rs. Crores	Average cost Per Unit Cost in Rs.
KPCL Hydel Energy	2209.48	248.94	1.13	2317.71	267.29	1.15	2425.32	285.297	1.18
KPCL Thermal Energy	843.40	504.874	5.99	768.56	445.47	5.80	929.78	534.922	5.75
CGS Energy	1466.00	681.18	4.65	1461.90	694.71	4.75	1459.01	702.028	4.81
UPCL	92.02	93.08	10.12	251.22	246.88	9.83	241.02	182.59	7.58
Renewable Energy/Bundled Power	1497.54	606.12	4.04	1515.64	612.87	4.04	1515.65	612.84	4.04
Other State Hydel	43.03	11.50	2.67	45.49	12.43	2.73	15.66	4.39	2.80
PGCIL & POSOCO Charges		184.193			126.54			168.50	
KPTCL Transmission & SLDC		385.716			403.84			426.032	
<b>TOTAL</b>	<b>6151.477</b>	<b>2714.599</b>	<b>4.41</b>	<b>6360.517</b>	<b>2810.04</b>	<b>4.42</b>	<b>6586.425</b>	<b>2916.59</b>	<b>4.43</b>

The Commission directs MESCOM to regulate the quantum and cost of power as approved above by the Commission.

Since, as per the MYT Regulations the power purchase costs are uncontrollable, any excess quantum or cost will be tried up in Annual Performance Review of the respective years.

In the light of the above discussion, the Commission hereby approves power purchase quantum and costs as follows:

TABLE – 5.14

**Approved Power Purchase for FY23-25**

Year	Approved Quantum-MU	Approved Cost-Rs. Crores
FY23	6151.477	2714.599
FY24	6360.517	2810.042
FY25	6586.425	2916.591

### 5.2.7 O & M Expenses for FY23-25:

#### MESCOM's Proposal:

The MESCOM in its application has requested the Commission to consider the projected O&M expenses based on the employee cost, R&M Expenses and A&G Expenses made on the assumptions detailed below:

- Actual O&M expenses in the year FY21 as the base;
- Consumer growth index of 3.13% (3 years CAGR);
- Weighted average inflation index of 6.96%;
- Efficiency factor of 1%;

MESCOM has considered the WPI and CPI figures from 2009 to 2020 as per the CERC Notification in the ratio of 80:20 using the formula adopted by CERC. MESCOM has projected the O&M expenses by applying the normative growth rate of 9.09% by considering the inflation rate over FY21 for FY22 to FY25.

Based on the above assumptions, MESCOM has sought O&M expenses for FY23-25 as detailed below:

**TABLE - 5.15**  
**O&M Expenses for FY23-25-MESCOM's Proposal**  
Amount in Rs. Crores

Particulars	FY23	FY24	FY25
Employee Costs	556.48	607.06	662.24
R&M Expenses	77.35	84.38	92.06
A&G Expenses	134.91	147.16	160.52
<b>Total O&amp;M Expenses</b>	<b>768.74</b>	<b>838.60</b>	<b>914.82</b>

#### Commission's analysis & decision:

The Commission in its preliminary observation, had observed that MESCOM in its filing of ARR for FY23 to FY25, had projected Rs.139.14 Crores, Rs.155.79 Crores and Rs.165.59 Crores respectively towards Terminal Benefits for FY23 to FY25. Accordingly, 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.

MESCOM in its reply to the preliminary observation, has submitted that for FY23 to FY25 normative inflation rate applicable to O&M Expenses i.e., 9.09% have been applied in projecting the terminal benefits as indicated below:

	<b>Terminal Benefits in respect of Employees recruited prior to 31.03.2002 (Rs.in Crs.)</b>	<b>Terminal Benefits in respect of employees covered under NDCPS (Rs.in Crs.)</b>	<b>Total (Rs.in Cr)</b>	<b>Inflation Rate (%)</b>	<b>Projection (Rs.in Cr)</b>
FY21 (Actual)	91.77	25.15	116.92	-	-
FY22 (Projected)	-	-	-	9.09%	127.55
FY23 (Projected)	-	-	-	9.09%	139.14
(Projected)	-	-	-	9.09%	151.79
(Projected)	-	-	-	9.09%	165.59

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

The Commission notes that the actual O&M expenses of Rs.646.24 Crores for FY21 also includes the contribution towards P&G Trust along with the other employee cost, Repair & Maintenance expenses and A&G expenses. Hence, the Commission decides to consider the actual O&M expenses of Rs.646.24 Crores, as per the audited accounts (all inclusive) for FY21 as the base data (being the latest data available as per the audited accounts) to arrive at the O&M expenses for the base year in FY22.

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

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, in line with the methodology followed by the Commission, in its earlier Tariff Orders, the allowable annual escalation rate for FY23 is computed as follows:

**TABLE - 5.16**  
**Computation of Inflation Index for FY23**

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	79.3	1.32	0.28	3	0.84
2013	111.1	80.6	86.7	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	94.7	1.58	0.46	6	2.74
2016	110.3	95.3	98.3	1.64	0.49	7	3.46
2017	114.1	97.6	100.9	1.68	0.52	8	4.16
2018	118.9	102.4	105.7	1.76	0.57	9	5.10
2019	121.2	110.2	112.4	1.87	0.63	10	6.28
2020	121.8	116.3	117.4	1.96	0.67	11	7.39
<b>A= Sum of the product column</b>							34.05
<b>B= 6 Times of A</b>							204.28
<b>C= (n-1)*n*(2n-1) where n= No of years of data=12</b>							3036.00
<b>D=B/C</b>							0.07
<b>g(Exponential factor)= Exponential (D)-1</b>							0.0696
<b>e=Annual Escalation Rate (%)=g*100</b>							<b>6.9602</b>
<b>As per CERC Notification No.Eco T I / 2021-CERC dated 23.04.2021 with weightage of 80% on CPI and 20% on WPI</b>							

For the purpose of determining the normative O&M expenses for FY23-25, the Commission has considered the following:

- The actual O & M expenses incurred as per the audited accounts for FY21 inclusive of contribution to the Pension and Gratuity Trust and pay revision arrears to determine the O & M expenses for the base year.
- The three year Compounded Annual Growth Rate (CAGR) of the number of installations considering the actual number of installations as per the audited accounts upto FY21 and as projected by the Commission for FY22-FY25.
- The weighted inflation index (WII) at 6.9602% as computed above.
- Efficiency factor at 1% as considered in the earlier two control periods.

Accordingly, the normative O & M expenses for FY23-25 are as follows:

**TABLE - 5.17**  
**Approved O & M expenses for FY23-25**

Particulars	FY22	FY23	FY24	FY25
No. of Installations	2564568	2645032	2727598	2812344
CGI based on 3 year CAGR in %	2.68%	2.69%	2.88%	3.12%
Inflation index in %	6.9602%	6.9602%	6.9602%	6.9602%
Base year O&M expenses (Projected as per actuals of Rs. 646.24 Crores for FY21) Rs. Crores	646.24			
O&M Index= O&M (t-1) *(1+WII+CGI-X) in (Rs. Crores)	702.05	762.76	830.19	905.59
<b>Allowable Total O&amp;M cost in Rs. Crores</b>	<b>702.05</b>	<b>762.76</b>	<b>830.19</b>	<b>905.59</b>

Since, the base year data of O & M expense for FY21 also includes the contribution to the P & G Trust, the Commission has not considered allowing the above items separately for the control period for FY23-25. As the O&M expenses are controllable expenses as per the provisions of MYT Regulations, the Commission directs the MESCOM to exercise due diligence and limit the expenses within the approved level during FY23 to FY25.

**Thus, the Commission decides to approve O&M expenses of Rs.762.76 Crores for FY23, Rs.830.19 Crores for FY24 and Rs.905.59 Crores for FY25.**

### 5.2.8 Depreciation:

#### MESCOM's Proposal:

The MESCOM, in its filing has claimed amount of Rs.247.95 Crores, Rs.274.67 Crores and Rs.299.03 Crores respectively towards depreciation for the control period for FY23-25, as per the norms specified under the MYT Regulations based on the following assumptions:

The MESCOM, in its application has submitted that, it has considered a CAPEX of Rs.661.92 Crores, Rs.506.42 Crores and Rs.509.69 Crores for the years FY23, FY24 & FY25 respectively and has factored the depreciation on the asset likely to be added during FY23 to FY25 also. MESCOM has informed that it has categorized assets amounting to Rs.402.83 Crores during FY21. MESCOM has submitted that the net weighted average rate of depreciation in the year FY21 is 5.186% on the

average of the opening & closing balances of assets, which has been considered to project the depreciation for the years FY22 to FY25.

Accordingly, MESCOM has claimed the depreciation for FY23-25 as detailed below:

#### **Depreciation-FY23-25- MESCOM's Submission**

Amount in Rs. Crores			
Particulars	FY23	FY24	FY25
Depreciation	247.95	274.67	299.03

#### **Commission's analysis and decision:**

The Commission, in its preliminary observations had directed MESCOM 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.

MESCOM, in its reply to the preliminary observation, has submitted that till FY16 Company was following Accounting Standard-12 issued by the Institute of Chartered Accountants of India for recognizing the Grants and Contributions received towards Capital expenditure wherein the value of grants and consumer contributions utilized towards the capital expenditure has been reduced from carrying amount of the fixed assets. With implementation of Indian Accounting Standards from FY17, the grants received from Government or other authorities towards capital expenditure as well as consumers' contributions to 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, with respect to charging of depreciation on assets created out of grants / contributions up to FY16, old method is being continued. Accordingly, the depreciation charged by the accounting units during the year FY21 for the assets created upto FY16 amounting to Rs.25.38 Crores has been withdrawn at

Corporate Office as the assets were reduced to the extent of grants/ contributions received and accordingly the depreciation was not charged in the books for the assets created upto FY16 out of Grants and Contributions.

Further, the depreciation charged by the accounting units during the year FY21 for the assets created from FY17 amounting to Rs.36.15 Crores has been 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 in income schedule.

MESCOM has submitted the details of total gross fixed assets created and the assets created out of 'Consumers' Contributions and Grants' and related depreciation in the replies to the preliminary observations, which is indicated below;

Amount in Rs. Crores

Year	Opening Balance Of GFA	Additions	Retirement / Deductions	Net Additions	Closing Balance of GFA	Value of assets created out of 'Consumers' Contributions and Grants' included
*FY21	3379.31	586.08	21.35	564.73	3944.04	740.11
**FY22	3944.04	521.89	24.82	497.07	4441.11	875.95
**FY23	4441.11	661.90	27.87	634.03	5075.14	1003.24
**FY24	5075.14	506.42	31.77	474.65	5549.79	1122.52
**FY25	5549.79	509.69	34.68	475.01	6024.80	1234.31

The Assets created out of 'Consumers' Contributions and Grants' before FY17 has been not included in the Gross Assets and the depreciation of Rs.25.38 Crores charged on such assets in accounting units is withdrawn in Corporate Office for FY21. Assets created out of 'Consumers' Contributions and Grants' from FY17 to FY21 included in the gross assets is Rs.740.11 Crores and the depreciation of Rs.36.15 Crores charged on such assets is also included in expenses in the P&L account but considered as reduction out of 'Deferred Income' and included under 'Other Income'.

The Commission has noted the replies furnished by MESCOM. In accordance with the provisions of the MYT Regulations and amendments issued thereon, the Commission has determined the depreciation for FY23-25 considering the following:

- a) The actual rate of depreciation of category-wise assets is determined considering the depreciation and gross block of opening and closing balances of fixed assets as per the audited accounts for FY21.
- b) The actual rate of depreciation, so arrived at, is considered to allow the depreciation on gross block of average of opening and closing balance of fixed assets projections, made on the approved capex and categorization of asset thereon approved by the Commission for FY21 to FY25.
- c) The depreciation on account of assets created out of consumers contribution and grants are considered based on the average balance of fixed assets and the depreciation amount as considered by MESCOM for Rs.48.73 Crores, Rs.55.12 Crores and Rs.61.11 Crores has been considered and deducted to arrive at the net depreciation for FY23 to FY25.

Accordingly, the depreciation for FY23-25 are as follows:

**TABLE - 5.18**  
**Approved Net Depreciation for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Buildings	6.64	7.37	8.01
Civil	0.22	0.25	0.27
Other Civil	0.07	0.07	0.08
Plant & M/c	236.63	262.97	285.61
Line, Cable Network	0.00	0.00	0.00
Vehicles	1.35	1.50	1.62
Furniture	0.60	0.67	0.73
Office Equipment	1.17	1.30	1.42
Lease hold assets	0.00	0.00	0.00
Released assets reused	0.00	0.00	0.00
Intangible Assets	4.00	4.44	4.83
<b>Gross Fixed Assets</b>	<b>250.67</b>	<b>278.58</b>	<b>302.56</b>
Less: Depreciation on GFA created out of Consumers contributions / grants	-48.73	-55.12	-61.11
<b>Depreciation</b>	<b>201.94</b>	<b>223.46</b>	<b>241.45</b>

Thus, the Commission decides to approve an amount of Rs.201.94 Crores, Rs.223.46 Crores and Rs.241.45 Crores towards net depreciation for FY23, FY24 and FY25 respectively.

### 5.2.9 Interest on Capital Loans:

#### MESCOM's proposal:

MESCOM in its application, has projected an Interest on Capital Loans of Rs.155.20 Crores, Rs.165.78 Crores and Rs.163.13 Crores for FY23, FY24 and FY25, respectively. MESCOM has submitted that they have planned a CAPEX program of Rs.661.92 Crores, Rs.506.42 Crores and Rs.509.69 Crores for FY23, FY24 & FY25, respectively. MESCOM has informed that during FY21, it has categorized assets amounting to Rs.402.83 Crores and as such expected to incur the CAPEX as proposed for the years FY23 to FY25. Accordingly, MESCOM has considered the amount equal to the proposed CAPEX and new capital loan of Rs.430 Crores, Rs.250 Crores and Rs.250 Crores for projection of Interest on Capital loan for the years FY23 to FY25.

Based on the above assumptions, MESCOM has requested the Commission to approve interest on loans for FY23 to FY25 as follows:

**TABLE – 5.19**  
**Interest on Capital Loans– MESCOM's Proposal**

Amount in Rs. Crores

Particulars	FY23	FY24	FY25
Opening Balance of loans	1310.54	1511.54	1502.54
Add: New Loans	430.00	250.00	250.00
Less: Repayments	229.00	259.00	289.00
Closing Balance of loans	1511.54	1502.54	1463.54
Average Loan	<b>1411.04</b>	<b>1507.04</b>	<b>1483.04</b>
Rate of Interest	11.00%	11.00%	11.00%
<b>Interest on Capital Loan</b>	<b>155.20</b>	<b>165.78</b>	<b>163.13</b>

#### Commission's analysis and decision:

The Commission has taken note of the capex requirement and the capital loan proposals of the MESCOM for FY23-25. As discussed earlier, considering the approved capex, and the availability of capital grant, internal resources and

works to be carried out under DCW / self-execution, the Commission has considered an addition of loan of Rs.400 Crores, Rs.250 Crores and Rs.250 Crores and repayment of loan at Rs.214.00 Crores, Rs.239.00 Crores and Rs.264.00 Crores respectively for FY23, FY24 and FY25.

As per the audited accounts and as per the APR of FY21, the MESCOM had incurred interest on capital loan at a weighted average rate of interest of 9.07% per annum. This weighted average rate of interest is considered for the existing loan balances for which interest has to be factored during FY22. For the years FY23 to FY25, the weighted average rate of interest of the preceding year has been considered on the existing loan balances. Further, the Commission has considered the new capital loan duly factoring the availability of capital grants from GOI / GoK works to be carried out under self-execution / DCW and the internal resources on the proposed works as made out by MESCOM for FY23-25. As discussed in pre para, the Commission to meet the approved capex has considered the new loans of Rs.400.00 Crores, Rs.250.00 Crores and Rs.250.00 Crores for FY23, FY24 and FY25 respectively to factor the interest on new borrowings.

The Commission notes that, MESCOM in its filing has proposed an interest rate of 11% per annum on the average loans considering both the existing and the new loan. The Commission notes that, the interest rates of 11% as proposed by MESCOM on the existing loans amount is comparatively on a higher side, when the actual weighted average rate of 9.04% for FY20 and 9.07% for FY21. As such, MESCOM is once again directed to take up financial prudence measures, so as to avail loans at comparatively lower interest rates and thereby reduce the interest burden on the consumers. The Commission further notes that, the present interest rate being charged by the commercial banks and financial institutions is on the basis marginal cost of fund based Lending Rates (MCLR) and there is a downward trend in the MCLR rates. As such, these rates are comparatively lower than the rates considered by the MESCOM. Hence, the Commission is of the view that, MESCOM should avail capital loan at a competitive interest rates which would be lesser than the interest rate proposed by it.

The Commission notes that, as per the provisions of MYT Regulations has considered the present SBI MCLR rate for capital loan for more than 3 years as on 15.01.2022 is 7.30%. Considering 200 basis point over the MCLR rate of 7.30%, the Commission decides to allow an interest rate of 9.30% for the control period FY23-25 for new capital loan borrowings. It shall be noted that, the rate of interest now considered by the Commission, on the new capital loans for the control period, is subject to review during APR and revision of ARR of the relevant years of the control period.

Accordingly, the approved interest on capital loan for FY23-25 are as follows:

**TABLE – 5.20**  
**Approved Interest on capital loan for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Opening Balances of Capital Loans	1320.54	1506.54	1517.54
Add: New Loans borrowed	400.00	250.00	250.00
Less: Repayments of loan	214.00	239.00	264.00
Total loan at the end of the year	1506.54	1517.54	1503.54
Average Loan	<b>1413.54</b>	<b>1512.04</b>	<b>1510.54</b>
Interest paid on long term loans	129.04	138.24	138.30
Weighted average rate of interest allowed on existing loans	9.13%	9.14%	9.16%
Interest Rate allowed on new loans in %	9.30%	9.30%	9.30%
<b>Allowable Interest on Capital Loan</b>	<b>129.04</b>	<b>138.24</b>	<b>138.30</b>

Thus, the Commission decides to approve interest on capital loans of Rs.129.04 Crores, Rs.138.24 Crores and Rs.138.30 Crores for FY23, FY24 and FY25 respectively.

#### 5.2.10 Interest on Working Capital Loan:

##### MESCOM's proposal:

MESCOM in its application has claimed the interest on working capital based on the norms specified in the MYT Regulations as follows:

TABLE – 5.21

**Interest on Working Capital Loan for FY23-25  
MESCOM's Submission**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
1/12th of O&M Expenses	64.06	69.88	76.24
Opening GFA	4,441.11	5,075.14	5,549.79
1% on opening GFA	44.41	50.75	55.50
1/6th of Revenue	681.46	704.95	728.67
<b>Total Working Capital</b>	<b>789.93</b>	<b>825.58</b>	<b>860.41</b>
Rate of Interest (%) [*]	11.00%	11.00%	11.00%
<b>Interest on Working Capital</b>	<b>86.89</b>	<b>90.81</b>	<b>94.65</b>

**Commission's analysis and decision:**

The Commission in its preliminary observations had observed that MESCOM while projecting the interest on working capital, has considered interest at 11.00% for FY22 to FY25. MESCOM was directed to consider reduction in the interest rates while projecting the interest on working capital and to submit the revised estimated interest on working capital for FY21 to FY25.

MESCOM in its reply to the Commission's observation, has submitted that considering the risk involved in borrowing working capital, the financial institutions charge varied interest rates. Hence, in accordance with the interest rate of 11% as considered by the Commission in its earlier Tariff Orders, MESCOM has maintained the same working capital interest rates for FY23 to FY25.

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

The Commission notes that MESCOM has claimed the working capital interest at 11% per annum. The commercial banks and financial institutions are charging the interest rates mainly on the basis of MCLR declared from time to time. Hence, the Commission would consider MCLR, depending upon the tenure of the loan.

The Commission directs MESCOM to take financial prudence measures while availing short term loans, working capital loans so that the interest burden on its end consumers is reduced. As per the audited accounts for FY21, MESCOM has

availed the working capital loan at an interest rate of 7.20% to 7.80% from Commercial banks.

As discussed earlier, the MCLR for loan with a tenure of one year is 7%. Therefore, the Commission, considering the downward trend in the interest rates, and also considering the present MCLR with an appropriate spread of basis points and as per the provisions of the MYT Regulations, decides to consider interest on working capital at 9.50% per annum for FY23-25.

Accordingly, the approved interest on working capital for FY23-25 are as follows:

**TABLE – 5.22**  
**Approved Interest on Working Capital Loan for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
One-twelfth of the amount of O&M Exp.	63.56	69.18	75.47
Opening GFA	4462.58	5059.28	5522.72
Stores, materials and supplies- 1% of Opening balance of GFA	44.63	50.59	55.23
One-sixth of the Revenue	698.25	725.12	753.64
Total Working Capital	806.44	844.90	884.33
Rate of Interest (% p.a.)	9.50%	9.50%	9.50%
Interest on Working Capital	76.61	80.27	84.01

Thus, the Commission decides to approve interest on working capital loan of **Rs.76.61 Crores, Rs.80.27 Crores and Rs.84.01 Crores for FY23, FY24 and FY25 respectively.**

#### 5.2.11 Interest on Consumer Security Deposit:

##### MESCOM's proposal:

MESCOM, in its Petition, has projected Rs.50.08 Crores, Rs.52.58 Crores and Rs.55.08 Crores for FY23 to FY25. MESCOM has considered bank rate of 6.50% per annum for estimating interest on consumer deposits for FY23-25.

MESCOM has claimed interest on consumer security deposit as follows:

**TABLE – 5.23**  
**Interest on Consumer Security Deposits for FY23-FY25**  
**-MESCOM's Proposal**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Opening balance of Consumer Security Deposit	751.13	789.65	828.17
Proposed addition during the year	38.52	38.52	38.52
Closing Balance of the Consumer security deposits	789.65	828.17	866.69
<b>Average of deposit</b>	<b>770.39</b>	<b>808.91</b>	<b>847.43</b>
Rate of Interest per annum.	6.50%	6.50%	6.50%
<b>Interest on Consumer Security Deposit</b>	<b>50.08</b>	<b>52.58</b>	<b>55.08</b>

**Commission's analysis and decision:**

The Commission, in its preliminary observations, had observed that MESCOM while claiming the interest on consumer security deposit had considered the interest rates of 6.50% for FY22 to FY25 which is contrary to the Regulations issued by the Commission. MESCOM was directed to re-compute and submit the revised amount of interest on consumer security deposit, duly considering the applicable Bank Rate as per the provisions of the Regulations, for FY23 to FY25. MESCOM has not replied to this observation raised by the Commission.

In accordance with the KERC (Interest on Security Deposit) Regulations 2005, the interest rate to be allowed is the Bank Rate prevailing on the 1<sup>st</sup> of April of the financial year for which interest is due. As per Reserve Bank of India Notification dated 04.10.2021, the bank rate is 4.25%. This being the latest available bank rate, the Commission has considered the same, for computation of interest on consumer deposits for FY23-25.

The Commission has noted the consumer security deposits as per the audited accounts of FY21 and half yearly accounts of FY22 and noted the additional amount of deposit collected from the consumers during the previous years. Based on the additional security deposits collected during previous years, the Commission has decided to factor Rs.50 Crores, Rs.60 Crores and Rs.70 Crores as the additional security deposit likely to be collected for the projection of the

security deposit for the Control period FY23-25. Thus the allowable interest on consumer deposits for FY23-25 is computed in the following Table:

**TABLE – 5.24**  
**Approved Interest on Consumer Security Deposits for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Opening balance of consumer deposits	762.61	822.61	892.61
Closing balance of consumer deposits	822.61	892.61	962.61
Average consumer deposits	792.61	857.61	927.61
Rate of Interest allowed	4.25%	4.25%	4.25%
<b>Allowable Interest on Consumer Security Deposit</b>	<b>33.69</b>	<b>36.45</b>	<b>39.42</b>

**Thus, the Commission decides to approve interest on consumer security deposits at Rs.33.69 Crores, Rs.36.45 Crores and Rs.39.42 Crores for FY23, FY24 and FY25, respectively.**

#### 5.2.12 Other Interest and Finance Charges:

MESCOM in its filing has submitted that it has incurred an expense of Rs.1.58 Crores towards cost of raising finance for capital loans during FY21. As such, MESCOM has claimed the same amount towards 'other interest and finance charges' for FY23 to FY25:

#### Cost of raising finance- MESCOM submission

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
<b>Cost of raising finance</b>	1.58	1.58	1.58

#### Commission's analysis and decision:

The Commission as per the audited accounts notes the actual other interest and finance charges incurred by MESCOM during the previous years in raising the loans. Considering this, the Commission decides to allow an amount of Rs.1.58 Crores as proposed by MESCOM towards interest and finance charges for each of the years, during the control period FY23-25.

**5.2.13 Interest and other expenses capitalised:**

MESCOM has not claimed any amount towards capitalization of interest and other expenses for the sixth control period.

Considering, the capital expenditure incurred and capitalized during the previous years, the Commission decides to allow capitalization of interest and other expenses of Rs.2.10 Crores for each of the year for FY23, FY24 and FY25.

**5.2.14 Interest and finance charges:**

The abstract of approved interest and finance charges for FY23-25 are as follows:

**TABLE – 5.25**  
**Approved Interest and finance charges for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Interest on Capital Loan	129.04	138.24	138.30
Interest on Working Capital Loan	76.61	80.27	84.01
Interest on Consumers Security Deposit	33.69	36.45	39.42
Other Interest & Finance Charges	1.58	1.58	1.58
Less: Interest & other expenses capitalized	-2.10	-2.10	-2.10
<b>Total Interest &amp; Finance Charges</b>	<b>238.82</b>	<b>254.44</b>	<b>261.22</b>

**5.2.15 Return on Equity:****MESCOM's proposal:**

MESCOM, in its application, has claimed the RoE at 15.50% based on the opening balances of share capital, share deposit, reserves and surplus, and recapitalized security deposit grossed up with MAT of 17.472% which works out to 18.7815% for the control period FY23-25, as indicated in the following Table:

**TABLE – 5.26**  
**Return on Equity – MESCOM's Proposal**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Opening balance of Paid up Share capital	619.44	619.44	619.44
Share deposit	34.96	34.96	34.96
Reserves and surplus	362.04	494.60	648.12
Less: Recapitalized Security Deposit	-26.00	-26.00	-26.00
<b>Total</b>	<b>990.44</b>	<b>1123.00</b>	<b>1276.52</b>
RoE grossed up with MAT	18.7815%	18.7815%	18.7815%
<b>Return on Equity</b>	<b>186.02</b>	<b>210.92</b>	<b>239.75</b>

**Commission's analysis and decision:**

The Commission in its preliminary observations, had noted that MESCOM has projected the opening and closing balance of GFA for FY21 to FY25 and was directed to submit the bifurcated figures of GFA created out of consumer's contribution & grants and from internal resources & borrowings included in the projected closing balances of GFA for FY23 to FY25 to verify the compliance of the directive in terms of Hon'ble ATE Order in OP 46/2014. The Commission notes the reply furnished by MESCOM.

The Commission also notes that, status of debt equity ratio with reference to this projected gross fixed assets for each year of the control period FY23-25. The Commission has considered the actual amount of share capital, share deposits and the accumulated surplus / deficit under reserves & surplus as per the audited accounts for FY21 and the additional equity report received from the Gok during FY22 for arriving at the allowable equity base for the control period FY23-25.

The Commission, in accordance with the provisions of the MYT Regulations, has considered RoE Grossed up with MAT at 17.472% from FY23 to FY25 which works out to be 18.7815% on Equity allowed. Further, as per the decision of the Commission in the Review Petition No.6/2013 and Review Petition 5/2014, and the amended provisions of the MYT Regulations, the Return on Equity is to be computed based on the opening balances of share capital, share deposits and the accumulated balances of surplus / deficit under reserves and surplus account. Further an amount of Rs.26.00 Crores of recapitalized consumer deposit as net worth is also considered as per the Orders of the Hon'ble ATE in Appeal No.46/2014. The Commission by considering the actual profit/loss earned by MESCOM during the previous years as per the audited account, in order to avoid front-loading of the allowable RoE in the retail supply tariff, has not carried forward the allowable RoE of each year from FY22 to FY25 as the additional equity infused during the year for computation of RoE for the subsequent year.

Further, in compliance with the Orders of the Hon'ble ATE in Appeal No.46/2014, wherein it is directed to indicate the opening and closing balances of gross fixed

assets along with break-up of equity and loan component in the Tariff Order henceforth, the details of GFA, debt and equity (net worth) for FY23-25 are as follows:

**TABLE – 5.27**  
**Status of Debt Equity Ratio for FY23-25**

Amount in Rs. Crores								
Year	Particulars	GFA (excluding GFA out of CC/Grant)	Debt	Equity (Net worth)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
FY23	Opening Balance	3586.63	1320.54	806.03	2510.64	1075.99	36.82	22.47
	Closing Balance	4056.04	1506.54	806.03	2839.23	1216.81	37.14	19.87
FY24	Opening Balance	4056.04	1506.54	806.03	2839.23	1216.81	34.49	19.87
	Closing Balance	4400.20	1517.54	806.03	3080.14	1320.06	34.49	18.32
FY25	Opening Balance	4400.20	1517.54	806.03	3080.14	1320.06	34.49	18.32
	Closing Balance	4735.94	1503.54	806.03	3315.16	1420.78	31.75	17.02

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

Accordingly, the allowable Return on Equity for FY23-25 as follows:

**TABLE – 5.28**  
**Approved Return on Equity for FY23-25**

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
OB: Paid Up Share Capital	619.44	619.44	619.44
OB: Share Deposit	34.96	34.96	34.96
OB; Reserves & Surplus	178.43	178.43	178.43
Less: Recapitalized Security Deposit	-26.00	-26.00	-26.00
Opening Balance of Equity for the year	<b>806.83</b>	<b>806.83</b>	<b>806.83</b>
<b>RoE Grossed up with MAT @ 18.7815 (MAT 17.472%)</b>	<b>151.53</b>	<b>151.53</b>	<b>151.53</b>

Thus, the Commission decides to approve Return on Equity grossed up with MAT (17.472%) at 18.7815% at Rs.151.53 for each year of the control period for FY23-25. The RoE and the MAT now allowed is subject to truing up as per the actual equity and tax paid by the MESCOM for the relevant year, as per the audited accounts for FY23-25.

#### 5.2.16 Other Income:

##### MESCOM's proposal:

MESCOM in its filing as per the D-4 Format has claimed other income for the control period as detailed below:

**TABLE – 5.29**

#### Other Income - MESCOM's Proposal

Particulars	Amount in Rs. Crores		
	FY23	FY24	FY25
Interest on Staff Loan and advances	0.02	0.02	0.02
Interest on Bank Deposits	0.09	0.09	0.09
Income on Other Investments	1.40	1.40	1.40
Interest from banks	19.89	19.89	19.89
Profit from sale of fixed assets	1.26	1.26	1.26
Profit from sale of Stores	0.03	0.03	0.03
Sale of Scrap	2.94	2.94	2.94
Rental from Staff quarters	2.01	2.01	2.01
Rental from Others	0.47	0.47	0.47
Value of materials found excess during physical verification	0.08	0.08	0.08
Rebate for collection of Electricity duty	2.01	2.01	2.01
Incentives received	39.91	39.91	39.91
Miscellaneous recoveries	26.62	26.62	26.62
<b>Total</b>	<b>96.73</b>	<b>96.73</b>	<b>96.73</b>

##### Commission's analysis and decision:

The Commission notes that the other income received by the MESCOM mainly includes income from miscellaneous recoveries, interest on bank deposits, rent from staff quarters and sale of scrap, profit on sale of stores, rebate on collection of electricity duty besides incentives for timely payment of power purchase bills etc.

Based on the actual 'other income' earned by the MESCOM in the previous year, with the reasonable income for each year along with the amount of revenue earned on sale of energy to MSEZ, during FY23 to FY25, the Commission decides to consider Rs.95.53 Crores, Rs.105.08 Crores and Rs.115.59 Crores respectively as the other income for the FY23, FY24 and FY25.

**Thus, the Commission decides to approve 'other income' of Rs.95.53 Crores, Rs.105.08 Crores and Rs.115.59 Crores for the FY23, FY24 and FY25, respectively.**

#### **5.2.17 Regulatory Assets:**

MESCOM in its filing has submitted that the Commission in its Tariff Order 2020, dated 04.11.2020 had carried the unrecovered portion of the revenue gap of seven months amounting to Rs.122.93 Crores of FY21 as Regulatory Asset to be recovered in the tariff over the next two years i.e. FY22 and FY23. Further, the Commission has also allowed carrying cost at 10% per annum on the amount of Regulatory Asset. MESCOM has already considered Rs.61.46 Crores as Regulatory Asset for FY22 without 10% carrying cost. Similarly, MESCOM is considering the unrecovered regulatory asset without carrying cost of Rs.61.46 Crores for FY23.

The Commission notes that, out of the Regulatory Asset of Rs.122.93 Crores created as per Tariff Order dated 04.11.2020, Rs.61.47 Crores has been included in the ARR of FY22 for being recovered in the retail supply tariff of FY22. The remaining Regulatory Asset of Rs.61.47 Crores recoverable in the ARR/Retail supply tariff for FY23 is now considered in the ARR of FY23. As regards to carrying cost FY22 and FY23 on the Regulatory Asset, the Commission will consider the same during the APR of FY22 and FY23 based on the actual revenue gap as per audited accounts for these years.

#### **5.2.18 Fund towards Consumer Relations / Consumer Education:**

MESCOM in its filing, has submitted that the Commission has been allowing an amount of Rs.50 lakhs towards Consumer Education / Relations activities over

the years. As such, the same amount has been projected for the years FY23 to FY25

### Commission's analysis and decision:

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. This amount is earmarked to conduct consumer awareness and grievance redressal meetings periodically and institutionalize a mechanism for addressing common problems of the consumers. The Commission has already issued guidelines for consumer education and grievance redressal activities. **Accordingly, the Commission decides to continue providing an amount of Rs.0.50 Crore for each year of the control period FY23-25 towards meeting the expenditure on consumer relations / consumer education.**

### 5.2.19 Other Debits:

MESCOM has claimed Rs.6.55 Crores as other debits for the entire control period. The Commission has not considered the same, as 'other debits' cannot be estimated before hand.

### 5.3 Abstract of ARR for FY23-25:

In the light of the above analysis and decisions of the Commission, the following is the approved ARR for the control period FY23-25:

**TABLE – 5.30**  
**Approved ARR for FY23-25**

Sl. No	Particulars	Amount in Rs. Crores					
		FY23		FY24		FY25	
		As Filed	As Approved	As Filed	As Approved	As Filed	As Approved
1	Energy at Gen Bus (With MSEZ) in MU	6197.93	6151.48	6421.66	6360.52	6648.40	6586.43
2	Transmission Losses in %	2.978%	2.864%	2.978%	2.764%	2.978%	2.664%
3	Energy at Interface in MU	6013.36	5926.89	6230.42	6138.13	6450.41	6362.06
4	Distribution Losses in %	9.82%	9.10%	9.80%	8.85%	9.78%	8.60%
	<b>Sales in MU</b>						

Sl. No	Particulars	FY23		FY24		FY25	
		As Filed	As Approved	As Filed	As Approved	As Filed	As Approved
5	Sales to other than IP & BJ/KJ	3529.54	3642.18	3639.22	3772.35	3753.34	3915.15
6	Sales to BJ/KJ	35.54	32.97	35.81	32.97	36.08	32.97
7	Sales to IP	1857.77	1712.39	1944.81	1789.59	2030.14	1866.80
	<b>Total Sales</b>	<b>5422.85</b>	<b>5387.54</b>	<b>5619.84</b>	<b>5594.91</b>	<b>5819.56</b>	<b>5814.92</b>
	<b>Revenue at existing tariff in Rs. Crores.</b>						
8	Revenue from tariff and Misc. Charges	2955.56	3151.29	3044.88		3136.52	
9	Tariff Subsidy to BJ/KJ	28.22	26.18	28.43		28.65	
10	Tariff Subsidy to IP	1097.94	1012.02	1149.38		1199.81	
	<b>Total Existing Revenue</b>	<b>4081.72</b>	<b>4189.49</b>	<b>4222.69</b>	<b>4350.75</b>	<b>4364.98</b>	<b>4521.83</b>
	<b>Expenditure in Rs. Crores.</b>						
11	Power Purchase Cost	2505.48	2328.88	2595.22	2406.20	2663.02	2490.56
12	Transmission charges of KPTCL	350.06	383.26	384.58	401.47	423.27	423.50
13	SLDC Charges	2.90	2.46	3.25	2.37	3.64	2.530
	<b>Power Purchase Cost including cost of transmission</b>	<b>2858.44</b>	<b>2714.60</b>	<b>2983.05</b>	<b>2810.04</b>	<b>3089.93</b>	<b>2916.59</b>
14	Employee Cost	556.48		607.06		662.24	
15	Repairs & Maintenance	77.35		84.38		92.06	
16	Admin & General Expenses	134.91		147.16		160.52	
	<b>Total O&amp;M Expenses</b>	<b>768.74</b>	<b>762.76</b>	<b>838.60</b>	<b>830.19</b>	<b>914.82</b>	<b>905.59</b>
17	Depreciation	247.95	201.94	274.67	223.46	299.03	241.45
	<b>Interest &amp; Finance charges</b>						
18	Interest on Capital Loans	155.20	129.04	165.78	138.24	163.13	138.30
19	Interest on Working capital loans	86.89	76.61	90.81	80.27	94.65	84.01
20	Interest on belated payment on PP Cost	0.00	0.00	0.00	0.00	0.00	0.00
14	Interest on consumer security deposits	50.08	33.69	52.58	36.45	55.08	39.42

Sl. No	Particulars	FY23		FY24		FY25	
		As Filed	As Approved	As Filed	As Approved	As Filed	As Approved
15	Other Interest & Finance charges	1.58	1.58	1.58	1.58	1.58	1.58
16	Less: interest & other expenses capitalised	0.00	-2.10	0.00	-2.10	0.00	-2.10
	<b>Total Interest &amp; Finance charges</b>	<b>293.75</b>	<b>238.82</b>	<b>310.75</b>	<b>254.44</b>	<b>314.44</b>	<b>261.22</b>
17	Other Debits	6.55	0.00	6.55	0.00	6.55	0.00
18	Net Prior Period Debit/Credit	0.00	0.00	0.00	0.00	0.00	0.00
19	Return on Equity	186.02	151.53	210.92	151.53	239.75	151.53
20	Funds towards Consumer Relations/Consumer Education	0.50	0.50	0.50	0.50	0.50	0.50
	Regulatory Assets as per T.O dated 04.11.2020	61.46	61.47	0.00	0.00	0.00	0.00
21	Less: Other Income (Including income from MSEZ)	-96.73	-95.53	-96.73	-105.08	-96.73	-115.59
	<b>ARR</b>	<b>4326.68</b>	<b>4036.09</b>	<b>4528.31</b>	<b>4165.08</b>	<b>4768.29</b>	<b>4361.30</b>
	<b>Surplus/Deficit (-) for FY22</b>	<b>-244.96</b>	<b>153.40</b>	<b>-305.62</b>	<b>185.67</b>	<b>-403.31</b>	<b>160.53</b>
22	Add :Deficit for FY21 carried forward (As per APR)	(-)473.25	(-)341.96	0.00	0.00	0.00	0.00
23	<b>Net ARR</b>	<b>4799.93</b>	<b>4378.05</b>	<b>4528.31</b>	<b>4165.08</b>	<b>4768.29</b>	<b>4361.30</b>
24	<b>Net surplus/deficit (-)</b>	<b>-718.21</b>	<b>-188.56</b>	<b>-305.62</b>	<b>185.67</b>	<b>-403.31</b>	<b>160.53</b>

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

MESCOM in its application has not proposed any new ratio for segregation of consolidated ARR into ARR for Distribution Business and ARR for Retail Supply Business.

#### Commission's Analysis and Decisions:

Since no new proposal has been furnished by MESCOM, the Commission decides to continue with the existing ratio of segregation of ARR as detailed below:

**TABLE – 5.31**  
**Approved Segregation of ARR – FY23**

Particulars	Distribution Business	Retail Supply Business
O&M	39%	61%
Depreciation	84%	16%
Interest on Loans	100%	0%
Interest on Consumer Deposits	0%	100%
RoE	78%	22%
GFA	84%	16%
Non-Tariff Income	7%	93%

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

**TABLE – 5.32**  
**APPROVED REVISED ARR FOR DISTRIBUTION BUSINESS – FY23**

Amount in Rs. Crores		
Sl. No	Particulars	FY23
1	R&M Expenses	297.48
2	Employee Expenses	
3	A&G Expenses	
4	Depreciation	169.63
	<b>Interest &amp; Finance Charges</b>	
5	Interest on Capital Loans	129.04
6	Interest on Working capital loans	11.46
7	Interest on consumer security deposits	0.00
8	Other Interest & Finance charges	1.58
9	<b>Less: interest &amp; other expenses capitalised</b>	-2.10
	<b>Total</b>	<b>607.08</b>
10	RoE	118.20
11	<b>Less: Other Income</b>	-6.69
12	Provision for taxes	0.00
	Regulatory assets	51.6306
	<b>NET ARR</b>	<b>770.22</b>

**TABLE – 5.33**  
**APPROVED ARR FOR RETAIL SUPPLY BUSINESS – FY23**

Amount in Rs. Crores		
Sl. No	Particulars	FY23
1	Power Purchase	2331.34
2	Transmission Charges & SLDC Charges	383.26
3	O&M Expenses	465.28
4	Depreciation	32.31
	<b>Interest &amp; Finance Charges</b>	
5	Interest on Working capital loans	65.15
6	Interest on consumer security deposits	33.69
7	Other Interest & Finance charges	0.00
8	<b>Less interest &amp; other expenses capitalised</b>	0.00
	<b>Total</b>	<b>3311.03</b>

9	ROE	33.34
10	Less: Other Income	-88.84
11	Provision for taxes	0.00
12	Fund towards Consumer Relations / Consumer Education	0.50
	Regulatory assets	9.83
	<b>NET ARR</b>	<b>3265.86</b>

### 5.5 Gap in Revenue for FY23:

As discussed above, the Commission decides to approve the Annual Revenue Requirement (ARR) of Rs.4378.05 Crores as against MESCOM's proposal for approving ARR of Rs.4799.93 Crores for FY23. The approved ARR includes an amount of Rs.341.96 Crores, which is approved as the revenue deficit as per APR for FY21, as discussed in Chapter-4 of this Order. The revenue gap for FY23 is as indicated below:

**TABLE – 5.34**  
**Revenue gap for FY23**

Particulars	FY23
Net ARR including carry forward gap of FY21 (in Rs. Crores)	4378.05
Approved sales (in MU)	5387.54
Average cost of supply for FY23 (in Rs./unit)	8.126
Revenue at existing tariff (in Rs. Crores)	4189.49
<b>Deficit in revenue for FY23 (in Rs. Crores)</b>	<b>188.56</b>

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

### Annual Revenue Requirement for FY24 and FY25

As discussed above, the Commission also decides to approve the Annual Revenue Requirement (ARR) of Rs.4165.08 Crores and Rs.4361.30 Crores as against MESCOM's proposal for approving ARR of Rs.4528.31 Crores and Rs.4768.29 Crores for FY24 and FY25 respectively.