

CHAPTER-5A

BUSINESS PLAN

MESCOM is submitting the Business Plan for the period from FY 20 to FY 22 for kind consideration of the Hon'ble Commission.

I. OPERATIONAL STRUCTURE OF MESCOM:

The organization set-up is having 1 O&M Zone, 4 O&M Circles, 13 O&M Divisions, 60 O&M Sub Divisions and 234 O&M accounting / non-accounting sections.

II. EMPLOYEE STRENGTH OF MESCOM:

Cadres	Sanctioned Strength	Working Strength	Vacant	% Vacancy
Group-A	267	211	56	21%
Group-B	365	277	88	24%
Group-C	2731	1772	959	35%
Group-D	5762	3150	2612	45%
On Deputation	21	14	7	33%
Total	9146	5424	3722	41%

III. SALIENT FEATURES OF MESCOM:

Sl. No.	Particulars (As on 30-09-2018)		Statistics
1	Area	Sq. Km.	26222
2	Districts	No.s	4
3	Taluks	No.s	23
4	Population	Lakhs	61.55
5	KPTCL Sub-stations (66 kV & above)	No.s	86
9	MESCOM Sub-stations (33 kV)	No.s	39
10	Distribution Transformer Centers	No.s	71283
11	HT lines	Ckt. Km	37488
8	LT lines	Ckt. Km	81777
6	Net Fixed Assets (As on 31-03-2018)	Rs. in Cr.	1508.87
7	Consumers	Lakhs	23.19
12	Energy Sales in Fy-18	MU	4881.92
13	Rev. Dem.(including Tax & int.) in Fy-18	Rs. in Cr.	3498.51
14	Rev. Col. (including Tax & int.) in Fy-18	Rs. in Cr.	1197.30
15	Revenue Collection Efficiency in Fy-18	%	105.34%

IV. **MESCOM BUSINESS:**

MESCOM is procuring energy from different source i.e., Hydel, thermal, and Non-conventional sources through Long term Power purchase agreement, short term power purchase agreement and bidding process. Average approved power purchase cost for 2018-19 is Rs3.37 per unit (including KPTCL & PGCIL transmission charges).

Purchased energy is being transmitted through transmission lines of KPTCL transmission units. Approved transmission loss is 3.14% for FY-19. The approved transmission charges for FY19 payable to KPTCL is Rs.224.37 Cr. This will worked out to 42 paise per unit at MESCOM's interface point and 47 paise per unit at sales point.

MESCOM's network is being used to distribute energy to its consumer under high tension as well as low tension. Distribution loss in kind at HT level and LT level is about 4.32% and 6.58% respectively with reference to the total energy input at interface point. Thus Distribution Loss in cost per unit at consumer level constitutes about 43 paise per unit.

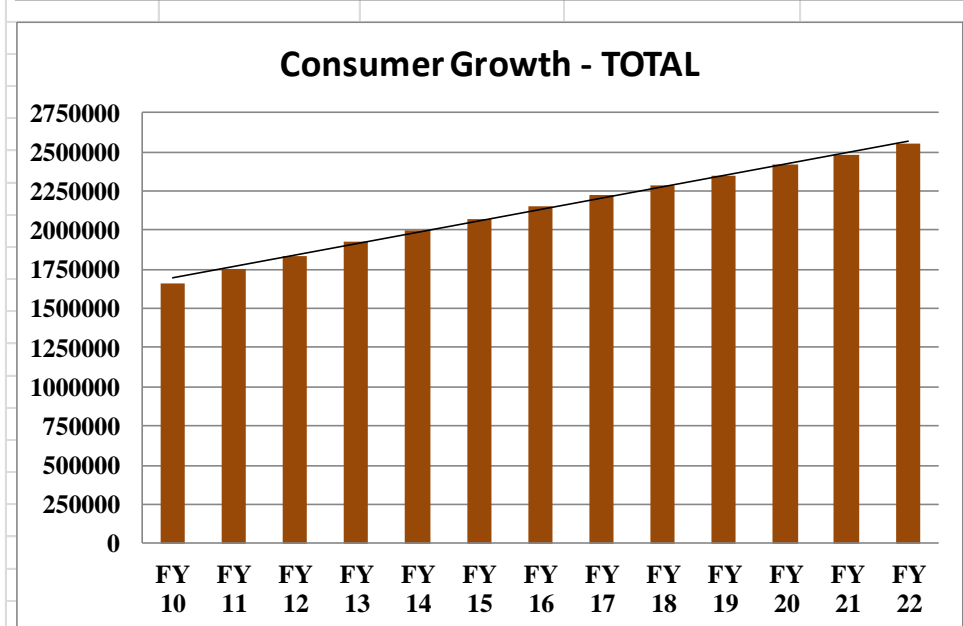
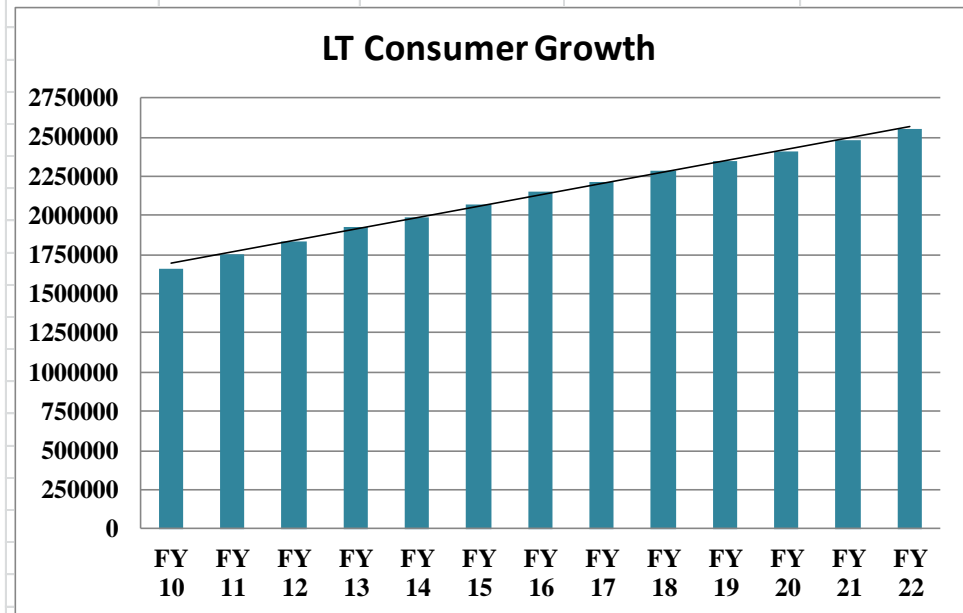
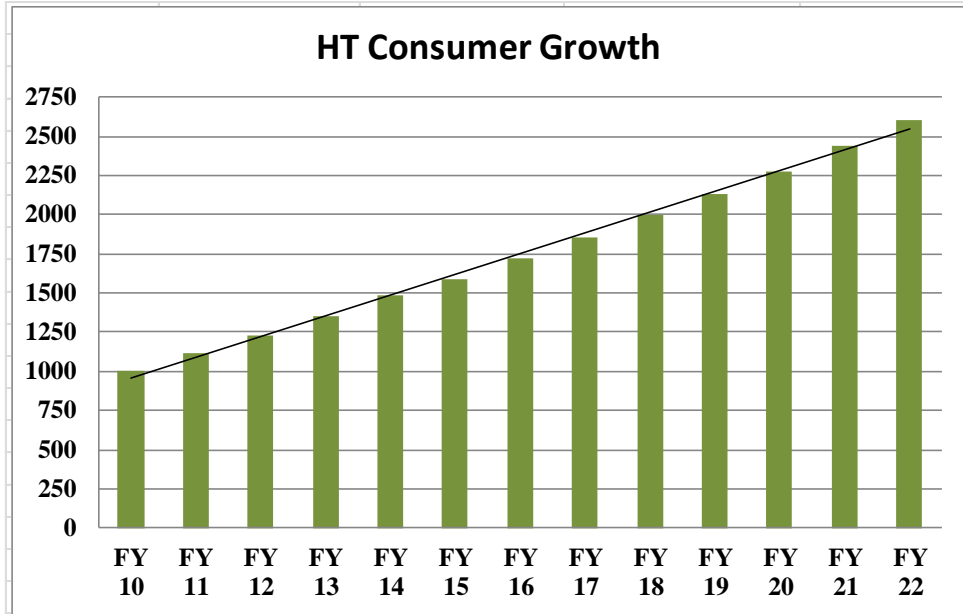
In all, at MESCOM's interface point cost per unit of energy purchased worked out to Rs.3.51 and at retail consumer level that will be Rs.3.94 per unit.

V. **MARKET PLAN:**

i. **Consumer Growth:**

The following table indicates the actual consumer growth from FY 10 to FY 18 and projected consumer growth from FY 19 to FY 22.

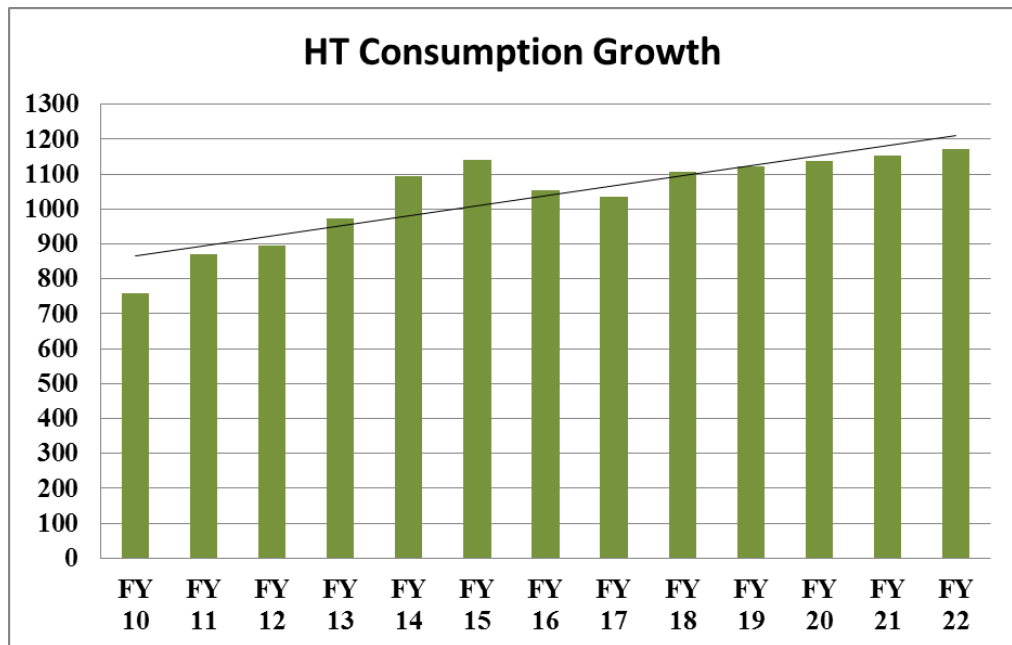
Year	HT Consumers	Year-on-year Growth (%)	LT Consumers	Year-on-year Growth (%)	Total Consumers	Year-on-year Growth (%)
FY 10	1008		1659444		1660452	
FY 11	1113	10.42%	1751022	5.52%	1752135	5.52%
FY 12	1225	10.06%	1835683	4.83%	1836908	4.84%
FY 13	1357	10.78%	1923960	4.81%	1925317	4.81%
FY 14	1490	9.80%	1993236	3.60%	1994726	3.61%
FY 15	1585	6.38%	2073040	4.00%	2074625	4.01%
FY 16	1720	8.52%	2150826	3.75%	2152546	3.76%
FY 17	1854	7.79%	2218186	3.13%	2220040	3.14%
FY 18	1994	7.55%	2281740	2.87%	2283734	2.87%
FY 19	2132	6.92%	2346229	2.83%	2348361	2.83%
FY 20	2280	6.94%	2412369	2.82%	2414649	2.82%
FY 21	2439	6.97%	2480225	2.81%	2482664	2.82%
FY 22	2609	6.97%	2549859	2.81%	2552468	2.81%

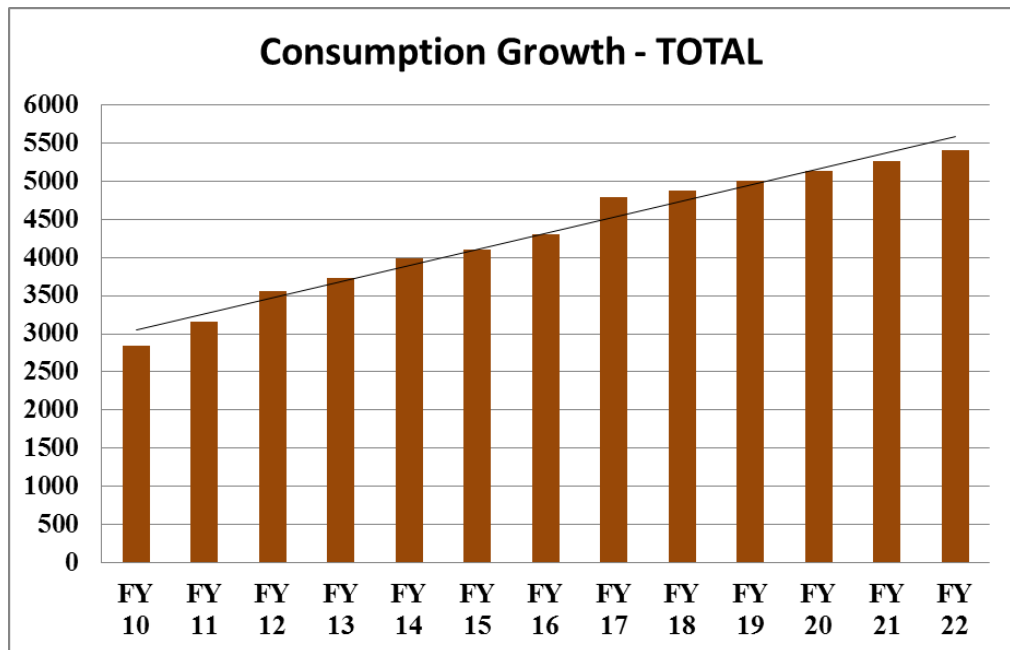
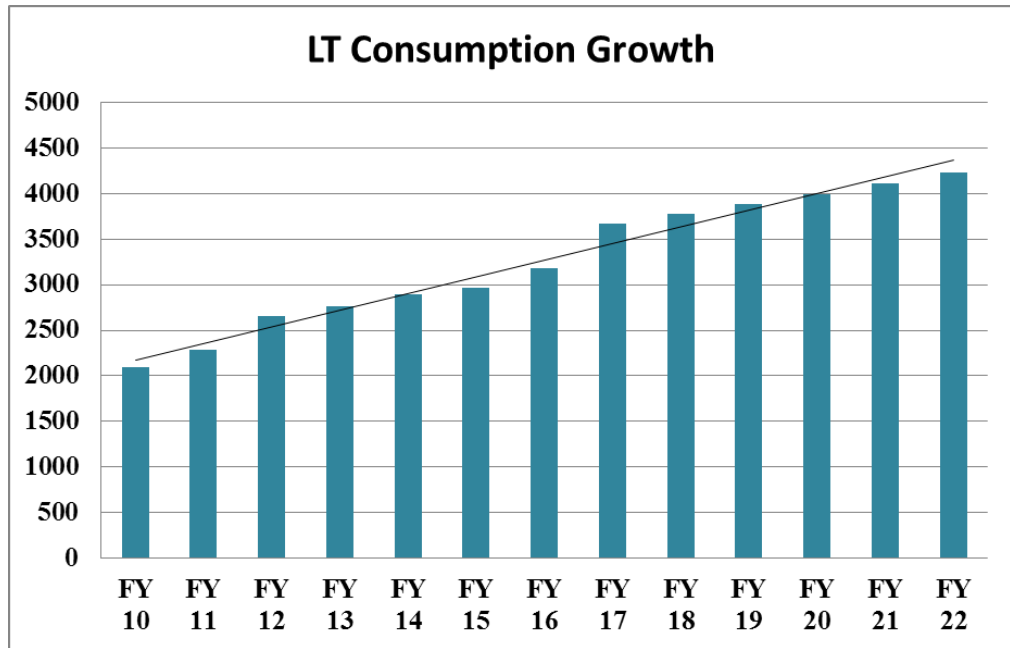


ii. Consumption Growth:

The following table indicates the actual consumption growth from FY 10 to FY 18 and projected consumer growth from FY 19 to FY 22.

Year	HT Consumption (MU)	Year-on-year Growth (%)	LT Consumption (MU)	Year-on-year Growth (%)	Total Consumption (MU)	Year-on-year Growth (%)
FY 10	757.62		2088.77		2846.39	
FY 11	870.39	14.88%	2287.62	9.52%	3158.01	10.95%
FY 12	895.53	2.89%	2661.65	16.35%	3557.18	12.64%
FY 13	971.93	8.53%	2761.23	3.74%	3733.16	4.95%
FY 14	1095.87	12.75%	2896.96	4.92%	3992.83	6.96%
FY 15	1142.18	4.23%	2961.09	2.21%	4103.27	2.77%
FY 16	1054.90	-7.64%	3185.64	7.58%	4309.17	5.02%
FY 17	1034.28	-1.95%	3673.04	15.30%	4794.42	11.26%
FY 18	1105.32	6.87%	3776.60	2.82%	4881.92	1.83%
FY 19	1121.34	1.45%	3885.05	2.87%	5006.39	2.55%
FY 20	1137.80	1.47%	3997.12	2.88%	5134.92	2.57%
FY 21	1154.74	1.49%	4112.99	2.90%	5267.73	2.59%
FY 22	1172.17	1.51%	4232.78	2.91%	5404.95	2.60%

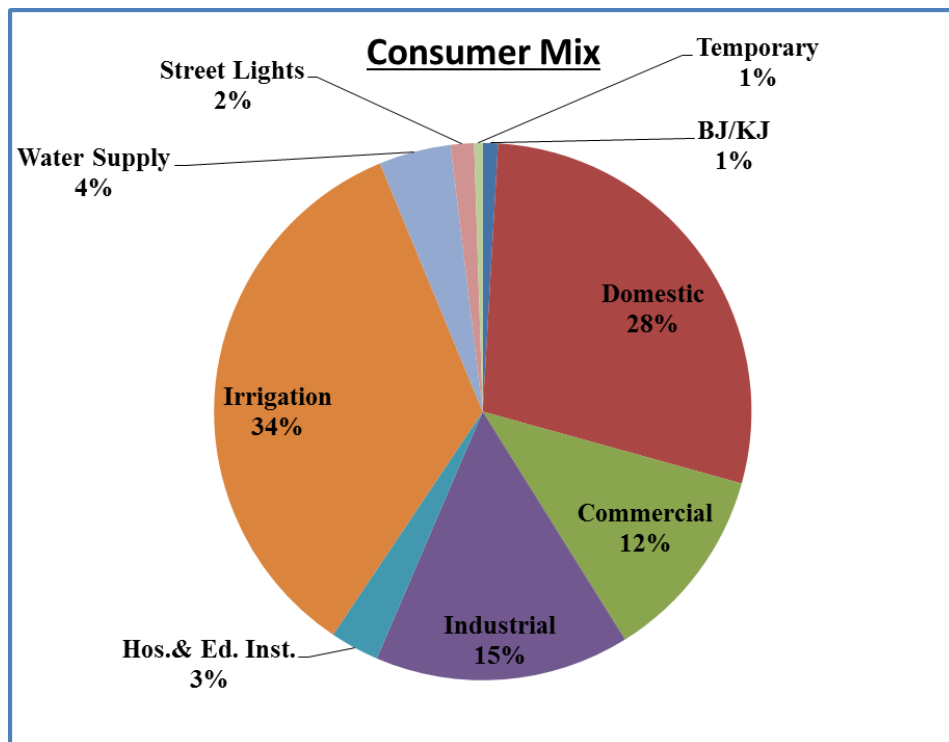




iii. Category wise sales projection:

In MESCOM, about 28% of energy sales go to Domestic consumption, 34% of energy goes to Irrigation pump sets and industrial consumption is only 15% and others constitutes about 23%. Hence, MESCOM has prepared load forecast for the period from FY-20 to FY-24 by using the mixed CAGR method. By using the mixed CAGR method energy sales for the control period from FY-20 to FY-22 are projected as under.

Category	FY 17	FY 18	FY 19
BJ/KJ	46.81	46.81	46.81
Domestic	1458.28	1511.30	1566.27
Commercial	606.26	633.34	661.75
Industrial	787.53	795.05	802.67
Hospitals& Education Institutions	151.48	151.83	152.20
Irrigation	1763.25	1798.90	1835.29
Water Supply	222.60	229.53	236.66
Street Lights	72.34	74.60	76.93
Temporary	26.37	26.37	26.37
Total Sales	5134.92	5267.73	5404.95



iv. **Power Purchase Plan:**

MESCOM has to arrange for the power requirement of its distribution area. In the above paras, energy requirement and demand have been worked out with certain assumptions. PCKL has furnished the source of available energy and cost which has been considered by MESCOM (Format D-1) in the present filing for the MYT period.

v. **Transmission Charges:**

The transmission charges in respect of Central Generating Stations are included in the computation of power purchase cost for the respective years. The transmission system in Karnataka operates as one composite network for the purpose of sharing of charges. The Annual Revenue Requirement of various transmission licensees are pooled together and shared by distribution

licensees in their proportion of allocation of installed capacity to the ESCOMs.

KPTCL is also filing its proposal before Hon'ble Commission for transmission charges for the control period from FY-20 to FY-22.

For the period from FY-20 to FY-22, KPTCL has intimated their proposed transmission charges which have been considered to arrive at the ARR of MESCOM. The transmission charges factored in the present filing is as below;

(KPTCL Transmission Charges: Rs. in Crores)

Year	Amount
FY 20 (Projection)	224.37
FY 21 (Projection)	247.99
FY 22 (Projection)	259.80

vi. **CAPEX PLAN:**

MESCOM has proposed the CAPEX for the period from FY-20 to FY-22 as indicated in the below table;

Rs. In Cr.

Sl. No.	Particulars	2017-18		2018-19	2019-20	2020-21	2021-22
		Board Approved	Expenditure Booked				
1	E&I Works (Addl. Transformers, Link-Lines, HT/LT Re-conductoring, HVDS)	101.00	88.78	100.00	100.00	250.00	250.00
2	DTC metering,	50.88	52.60	30.00	52.69	2.70	2.70
3	Replacement of MNR/DC & Electromagnetic meters by Static meters and providing SMC meter protection box wherever required.	3.67	1.51	5.00	5.00	20.00	20.00
4	Replacement of faulty Distribution Transformers	45.31	34.61	30.00	5.00	5.00	5.00
5	Service Connection including promoter vanished layout Works	45.23	29.56	45.00	50.00	55.00	60.00
	Sub-Total	246.09	207.06	210.00	212.69	332.70	337.70
6	Rural Electrification (General)						
a	Electrification of Hamlets	2.00	0.61	2.00	2.00	2.00	2.00
b	Energisation of IP sets Including Ganga Kalyana	71.16	33.04	45.00	45.00	55.00	65.00
c	Electrification of BPL House Holds	0.25	0.10	0.25	0.25	0.25	0.25
	Sub- Total	73.41	33.75	47.25	47.25	57.25	67.25
7	Tribal Sub-Plan						
a	Electrification of Tribal Colonies	1.50	1.78	1.50	1.50	1.50	1.50
b	Energisation of IP sets	1.15	0.58	0.75	0.80	0.85	0.90
c	Electrification of BPL House Holds	0.05	0.01	0.05	0.05	0.05	0.05
	Sub- Total	2.70	2.37	2.30	2.35	2.40	2.45
8	Special Component Plan						
a	Electrification of S.C Colonies	1.00	0.32	1.00	1.00	1.00	1.00
b	Energisation of IP sets	2.53	1.18	1.00	1.05	1.10	1.15
c	Electrification of BPL House Holds	0.10	0.01	0.10	0.10	0.10	0.10
	Sub- Total	3.63	1.51	2.10	2.15	2.20	2.25

Sl. No.	Particulars	Rs. In Cr.				
		2017-18	2018-19	2019-20	2020-21	2021-22
		Board Approved	Expenditure Booked			
9	Tools & Plants & Computers	13.76	13.46	11.50	6.00	6.50
10	Civil Engineering Works	21.54	21.86	60.00	60.00	60.00
11	33 KV Station and Line Works	22.62	22.74	82.00	100.00	100.00
12	Solar Roof top on Company Buildings	7.85	0.68			
13	Software Acquired /Purchased for internal use - GPS Survey, Validation, Updation & Enumeration of IP Sets etc.	3.84		4.00	4.00	4.00
	TOTAL (Sl.No. 1 to 13)	395.44	303.43	421.94	564.55	580.15
14	Schemes Under Progress					
a	Deen Dayal Upadyaya Grama Jyoti Yojana (DDUGJY)	59.90	6.08	290.00	50.00	
b	IPDS: System Improvement & Strengthening works in towns	34.17	9.71	121.50	15.00	0.50
c	IPDS: Gas Insulated Stations			75.00	75.00	30.00
d	IPDS: Phase-II IT	3.72		6.00		
e	IPDS: RT-DAS			5.00	5.50	
f	Providing Infrastructure to regularized UIP	147.21	132.30	82.00	9.50	75.00
g	Improvement works for Model Electricity Village	50.00		25.00	25.00	5.20
h	Improvement works for Model Sub Divisions			50.00	58.00	5.00
i	Saubhagya			15.00	7.00	
	Sub Total	295.00	148.09	669.50	245.00	115.70
	Grand Total	690.44	451.52	1091.44	809.55	695.85

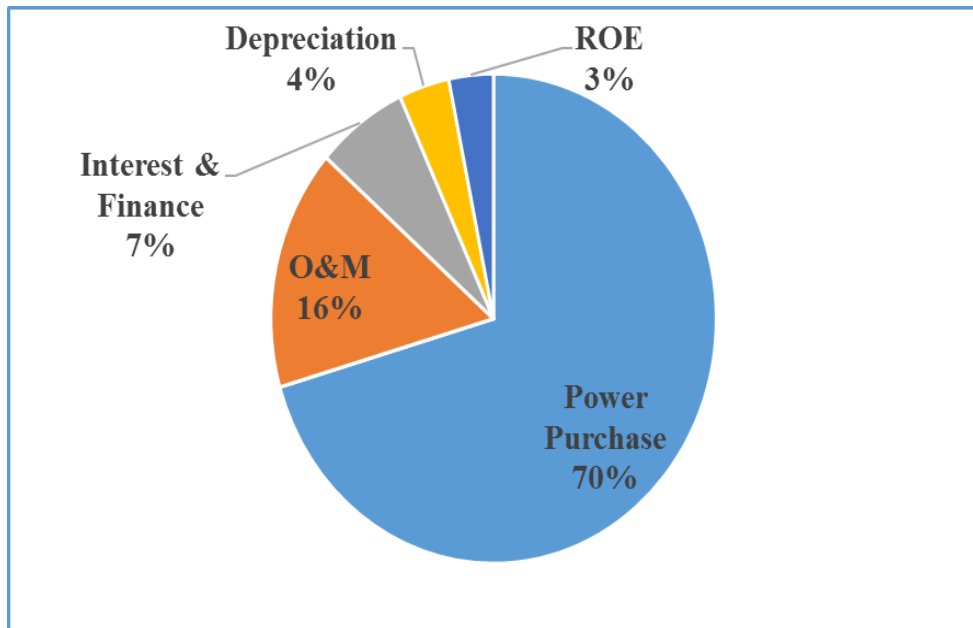
vii. ANNUAL REVENUE REQUIREMENT:

MESCOMs Annual Revenue Requirement has been detailed in the Chapter-6.

The extract of ARR for the MYT period is indicated in the below table.

Year	ARR (Rs. In Cr.)
FY 18 (Actusls)	3884.85
FY 19 (Proj.)	3389.40
FY 20 (Proj.)	4153.51
FY 21 (Proj.)	3753.02
FY 22 (Proj.)	3973.74

The profile of major components of the ARR is as below.



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