

MESCOM

Preliminary Observations on the Applications filed by the MESCOM for approval of APR for FY20 and ARR & Retail Supply Tariff for FY22 under MYT Framework

1. Observations on Sales:

A. Sales- Other than IP sets:

1. Annual Performance Review for FY20:

- a. The Commission, in its Tariff Order 2019 dated 30.05.2019, had approved total sales to various consumer categories at 5050.52 MU, as against the MESCOM's proposal of 5095.32 MU, excluding the sales of 51.13 MU to MSEZ. The Actual sales of MESCOM, as per the current APR filing [D-2 FORMAT], is 5190.28 MU indicating an increase in sales to an extent of 139.96 MU, as compared with the approved sales. There is increase in sales of 90.69 MU in LT-categories and 49.07 MU in HT-categories.
- b. The category-wise sales approved by Commission and the actuals for FY 20 are indicated in the table below:

Category Col-1	Approved** Energy in MU Col-2	Actuals** Energy in MU Col-3	Energy In MU
			Difference (MU) Col-4= Col 3 - Col 2
LT-2a*	1449.29	1482.36	33.07
LT-2b	15.18	14.86	-0.32
LT-3	390.69	393.82	3.13
LT-4b	0.93	0.88	-0.05
LT-4c	8.81	8.08	-0.73
LT-5	141.13	136.88	-4.25
LT-6	126.06	131.97	5.91
LT-6	72.34	66.47	-5.87
LT-7	20.41	20.01	-0.40
HT-1	99.38	95.71	-3.67
HT-2a	606.33	635.20	28.87
HT-2b	207.21	205.72	-1.49
HT-2c	138.74	139.87	1.13

HT-3a & b	43.10	69.68	26.58
HT-4	21.59	21.80	0.21
HT-5	5.96	3.40	-2.56
Sub total	3347.15	3426.71	79.56
BJ/KJ	34.21	34.65	0.44
IP	1669.16	1728.92	59.76
Sub total	1703.37	1763.57	60.20
Grand total**	5050.52	5190.28	139.76

**Including BJ/KJ installations consuming more than 40 units/month*

***Excludes sale to SEZ.*

From the above table it is noted that the major categories contributing to the increase in sales with respect to the estimate are LT-2a, LT-4a, HT-2a & HT-3 categories. The IP set consumption is discussed separately, in the subsequent paragraphs.

MESCOM shall analyze the reasons for the increase in sales to the above categories with a view to promote and increase the energy sales.

- c. MESCOM in its D-2 Format of the filing, has not indicated any wheeled energy for FY20 as per the actuals. **MESCOM shall furnish the same for the purpose of computation of distribution network losses.**

2. **Category wise sales FY22:**

a. **Data inconsistency**

1. At page 47 & 48, category-wise actual sales for some of the categories indicated for FY19 is not the same as approved by the Commission, as per the Tariff Order 2020 dated 04.11.2020. The figures shall be reconciled with that of Tariff Order,2020. Similarly, the actuals for FY19 in D-2 Format shall be reconciled with data as approved in the Tariff Order, 2020.
2. For FY20, The LT –Total at Page- 47 is 4016.18 MU, whereas as per D-2 Format, it is indicated as 4016.16 MU. Similarly, the grand total at page- 48 is 5247.18 MU, whereas as per D-2 Format, it is indicated as 5247.16 MU. The data shall be reconciled.

3. The sales approved by Commission for FY20 as per Tariff Order 2019 is 5101.65 MU, whereas the same is indicated as 5105.08 MU at page-117. Similarly, for FY22, it is 5436.41MU, whereas the same is indicated as 5439.83 MU at page 118. This shall be reconciled as sales to KPCL is already included in LT-2a sales.
4. The category-wise revised sales indicated at page -117, for FY-21 does not tally with that of figures indicated in D-2 Format. This shall be reconciled.

b. Sales Forecast for FY22

MESCOM in its filing has stated that the Commission in its Tariff Order,2019 has approved the number of installations and energy sales for the Control Period FY20 to FY22. However, considering the actuals of FY20, MESCOM has revised the estimates for FY21 and FY22.

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

For all categories except BJ/KJ, LT-4a, LT-7 and HT-5, generally MESCOM has considered the CAGR for the period FY15 to FY20 and for the period FY17 to FY20. MESCOM has also compared the previous year growth rates. Wherever, the growth is negative or inconsistent, MESCOM has suitably modified the estimates. Further, while estimating energy sales for FY21, keeping in view the prevailing Covid-19 situation, MESCOM has suitably reduced the sales to various categories.

Commission's observations on sales forecast for FY22 are as follows:

- i. LT (1) – BJ/KJ category: MESCOM has not considered any additions to the number of installations and has retained the FY20 data for both FY21 & FY22. **In FY20, the no. of installations had reduced by 6919 numbers in comparison to FY19 and upto September 2020, there is a further reduction by 1644 numbers. Hence, MESCOM may consider revising the number of installations and sales for this**

category, besides analyzing the reasons for the reduction in number.

- ii. In case of LT 6(b) category, though it is stated that the 3-year CAGR, which is negative has been adopted for estimating energy sales, MESCOM has retained the same sales for FY21 & FY22 at 66.47 MU, despite increase in number of installations. Reasons for the same shall be furnished.
- iii. In case of LT-7, since the CAGR for both no. of installations as well as energy sales is positive, MESCOM could have adopted lower of the CAGRs, instead of considering zero growth rate. MESCOM may consider revising the estimates for this category.
- iv. HT-2c category:
The Commission notes that, even though there is a positive growth rate in the number of installations, the energy sales are retained at FY20 level, stating that the energy sales have a negative growth. **MESCOM shall analyze the reasons for such decrease in sales in spite of growth in the number of installations.**
- v. HT-3 category: In spite of positive growth both in the number of installations and energy sales, the estimate for FY21 & FY22 is retained at FY20 level. MESCOM may revise the estimates by considering lower of the CAGRs.
- vi. At Page-110 para 5.1.18 reference is made to HT-2c instead of HT-4. Similarly, at Page-112 para 5.1.19 reference is made to LT-7 instead of HT-5. This may be corrected.
- vii. Further, it is observed that though MESCOM has stated that it has adopted 3-year CAGR, which is positive, the number of installations in respect of HT-4 category for FY21 has been retained at 63 being the actuals, as on September' 20. MESCOM may consider revising the same.

viii. The table indicating the growth rates for the number of installations is furnished below:

Category	Percentage Growth Rates			
	2014-15 to 2019-20 CAGR	2016-17 to 2019-20 CAGR	FY20 growth over FY19	Growth rate proposed by MESCOM for FY22
LT-2a	3.18%	3.11%	2.91%	3.12%
LT-2b	2.83%	2.31%	2.16%	2.31%
LT-3	3.87%	3.70%	3.77%	3.69%
LT-5	4.53%	3.92%	3.65%	3.93%
LT-6 WS	5.61%	5.37%	3.99%	5.37%
LT-6 SL	8.86%	7.83%	14.09%	7.83%
HT-1	9.86%	8.37%	7.69%	8.26%
HT-2 (a)	7.55%	6.65%	6.73%	6.70%
HT-2 (b)	7.92%	8.13%	7.35%	7.32%
HT-2 (c)	5.95%	4.70%	3.77%	0.00%
HT-3	6.58%	8.27%	17.86%	0.00%
HT-4	6.40%	4.89%	9.09%	4.76%

The growth rate considered for HT-1, HT-2b, HT-2c, HT-3 & HT-4 is lower, as compared to the CAGR. MESCOM may consider revising the same.

ix. The table indicating the growth rates for the energy sales is furnished below:

Category	Percentage Growth Rates			
	2014-15 to 2019-20 CAGR	2016-17 to 2019-20 CAGR	FY20 growth over FY19	Growth rate proposed by MESCOM for FY22
LT-2a	4.19%	4.26%	7.54%	4.26%
LT-2b	5.28%	2.45%	9.10%	101.03%
LT-3	5.27%	4.78%	6.35%	36.17%
LT-5	0.81%	0.02%	2.20%	24.16%
LT-6 WS	4.16%	3.07%	7.28%	3.07%
LT-6 SL	2.69%	-1.42%	-4.80%	0.00%
HT-1	2.81%	3.46%	-2.15%	3.46%
HT-2 (a)	-2.22%	5.03%	1.67%	47.35%

HT-2 (b)	5.98%	3.40%	2.64%	86.62%
HT-2(c)	-0.94%	-3.33%	-3.26%	88.68%
HT-3	24.58%	63.20%	69.13%	0.00%
HT-4	8.64%	5.02%	6.76%	5.03%

The growth rate considered for LT-2b, LT-3, LT-5, HT-2a, HT-2b and HT-2c is higher, considering the CAGR. MESCOM may examine revising the same.

B. Sales to IP sets:

1. Sales for FY20:

a. The Commission, while approving the APR for FY19 as per the tariff order, 2020, had approved the total sales to IP sets at 1,477.50 MU with a specific consumption of 4,674 units per IP set per annum for FY19, by disallowing 153.40 MU against the claims submitted by MESCOM. MESCOM, in its current filing has indicated the sales to IP sets as 1,728.92 MU for FY20 with a specific consumption of 5,156 units per IP set per annum. The Commission notes that there is an increase in the specific consumption by 482 (5156-4674) units per IP set per annum for FY20 as compared to the approved sales for FY19. The reasons for this increase in the specific consumption for FY20 needs to be explained.

b. The details of sales to IP sets for FY20 as approved by the Commission, in its tariff order 2019 and the actual sales, as furnished by MESCOM in its Tariff Filing for FY20, are as follows;

Particulars	As approved by the Commission in TO 2019	As submitted by MESCOM in the Tariff Filing 2020
Number of installations	3,35,901	3,44,482
Mid-year number of installations	3,28,439	3,35,334
Specific consumption in units / installation / annum	5,082.10	5,156
Sales in MU	1,669.16	1,728.92

- c. MESCOM has to furnish the reasons for, increase in specific consumption by 73.90 units / installation / annum and the increase in sales by 59.76 MU as compared to the approved figures.
- d. MESCOM has not furnished the details of GPS survey of IP sets and the number of IP sets reconciled with the figures as per DCB statement, as directed by the Commission, in all the previous Tariff Orders and directions issued during the course of Advisory Committee meetings.
- e. As per DCB Statement, the number of live installations as on 31.03.2020 is 3,44,482. Whereas, as per MESCOM's letter dated 12.10.2020, the number of authorized live installations, as per GPS survey, is only 2,50,858. MESCOM has furnished the same numbers as on 31.03.2019, as well. MESCOM has to furnish the reasons for not completing the GPS survey and on the variation in number of figures, giving clarity on the data.
- f. MESCOM has to furnish the reasons for the difference in number of consumers in the data as per GPS survey and the IP set assessment data, the action taken to reconcile the details of number of consumers with DCB figures and the action taken to regularize the unauthorized IP installations.
- g. As per the actual IP sets consumption data for FY20, the average consumption per IP set per month works out to 429.66 (5156 / 12). From the data of calculation of sales to IP sets furnished, it is observed that, every month, in more than 10% of the DTCs, the average consumption per IP per month is more than 2500 units.
- h. In the previous year tariff filing MESCOM has furnished the total number of pilot DTCs in its area are 904. Whereas, the number of pilot DTCs considered in the months of April to July 2019 are 798 to 898. MESCOM shall furnish the reasons for decrease in number of pilot DTCs being considered for calculation of sales to IP sets.
- i. The Commission had directed MESCOM to segregate the agricultural feeders and assess the sales to IP set installations based on the energy meter readings provided to such agricultural feeders. MESCOM is yet

to furnish the status of bifurcation of agricultural feeders in its area and the action plan for completing the work.

- j. MESCOM has to furnish the Division-wise number of hours of supply provided to IP sets as against the Government of Karnataka Orders for FY20 and up to September 2020.

Based on the above observations, MESCOM shall submit the assessed consumption for IP sets for FY20, duly furnishing clarity on the data.

2. Projected sales to IP Sets for the FY22:

- i. Details of the number of consumers as per actuals added to the system during the period April 2020 to September 2020 is not considered for projection of IP sales for FY22. Instead, MESCOM has considered the number of IP installations added to the system during FY20 directly and has projected the number of installations for rest of period of FY21 and for FY22.
- ii. The reasons for difference in number of installations approved by the Commission for FY22, in Tariff Order 2019 and the projections considered in Tariff Filing by MESCOM is not substantiated with proper reasons.
- iii. **The MESCOM, in its tariff application for FY21 has considered total IP consumption as 894.25 MU for the period April to September 2020 without furnishing the month-wise break-up, as per the prescribed formats, in support of its claim. If the data for the said period is not submitted, the Commission will not accept the assessment of consumption for FY21 as is submitted by MESCOM.**
- iv. MESCOM while making projections for FY22, has considered the specific consumption arrived on the data of actual sales submitted, instead of considering the Commission approved sales. MESCOM has to resubmit the sales projection based on the specific consumption arrived on the basis of Commission approved sales and on the basis of the observations made above.
- v. As per the letter dated 02.09.2020 addressed to the Commission by the Managing Director MESCOM, the time line to complete the GPS

survey of IP sets is 30.09.2020. MESCOM has not furnished, further compliance on the same.

C. Validation of Sales:

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

i. No. of Installations:

Category	2018-19 Actuals		2019-20 Actuals		2020-21	
	As on 30 th Nov 2018	As on 31 st March 2019	As on 30 th Nov 2019	As on 31 st March 2020	As on 30 th Nov 2020	As on 31 st March 2021 (Estimate)
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)& (b)						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP)						
BJ/KJ<=40units/month						
BJ/kJ > 40 units/month.						
IP sets-LT-4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

i. Energy Sales:

Category	2018-19 Actuals		2019-20 Actuals		2020-21	
	1st April 2018 to 30th Nov 2018 (cumulative)	1st Dec 2018 to 31st March 2019 (cumulative)	1st April 2019 to 30th Nov 2019 (cumulative)	1st Dec 2019 to 31st March 2020 (cumulative)	1st April 2020 to 30th Nov 2020 (cumulative actuals)	1st Dec 2020 to 31st March 2021 (cumulative Estimate)
LT-2a						
LT-2b						
LT-3						
LT-4 (b)						
LT-4 (c)						
LT-5						
LT-6						

	2018-19 Actuals		2019-20 Actuals		2020-21	
LT-6						
LT-7						
HT-1						
HT-2 (a)						
HT-2 (b)						
HT2C						
HT-3(a)& (b)						
HT-4						
HT-5						
Sub Total (Other than BJ/KJ and IP sets)						
BJ/KJ<=40uni ts/month						
BJ/kJ > 40 units/month.						
IP sets LT 4a						
Sub Total (BJ/KJ and IP)						
Grand Total						

2. MESCOM Capex:

A. APR FY20:

- i. MESCOM, as per APR filing has incurred capex of Rs.501.61 Crores as against approved Rs.818.58 Crores for FY20. MESCOM shall submit the comparison of capital expenditure incurred with reference to the amounts spent on different items of capex approved by the Commission for FY20, in the format approved by the Commission in the Tariff order 2019.
- ii. break up details for actual capex incurred during FY20 may be furnished as per the **Format-4** herein annexed.
- iii. MESCOM shall furnish the work-wise details covered under E&I works for having incurred the actual Capex of Rs.89.05 Crores for FY20.
- iv. MESCOM shall furnish the division-wise details of no. of Pump sets energized under Ganga Kalyana Schemes and SCP/TSP schemes, amount spent, amount of capital grants received from the Government of Karnataka and the balance amount to be received from the Government of Karnataka and the action taken thereon.

- v. MESCOM shall furnish the sources of funding for each of the category of works during FY20.
- vi. MESCOM shall furnish the capacity-wise details of replacement of failed transformers with new transformers and its cost against Capex incurred for Rs.4.78 Crores for FY20.
- vii. Model sub division works for FY20: MESCOM shall furnish the list and number of works sanctioned, Completed, balance number of works to be taken up, details of source of funding for capex incurred for Rs.31.56 Crores under Model sub division works for FY20 and up to November 2020. **MESCOM shall also furnish the details of cost benefit analysis/ evaluation of the benefits of the completed works as compared to the envisaged benefits with reference to the DPRs/ Estimates.**
- viii. MESCOM shall furnish the target date of completion of the projects sanctioned, total number of BPL beneficiaries serviced under DDUGVY and IPDS Schemes, amount spent, amount of capital grants received from the Government of India, additional grants of 15% from GOI on achievement of prescribed milestones set by GOI from the date of inception of the project till date and the balance amount to be received from the Government of India and the action taken thereon with documentary evidence.
- ix. MESCOM, in its filing has indicated Rs.52.11 Crores as the actual capital expenditure incurred for providing infrastructure to UNIP connections for FY20. MESCOM shall furnish the actual number of UNIP connections existing as on 01.04.2019, works completed and closing balance of UNIP installations to be provided with infrastructure during FY20 and up to November 2020. MESCOM shall also furnish source of funding in execution of these works in FY20 to FY22.
- x. MESCOM shall submit the compliance and the details sought in the Tariff Order 2020 both the physical progress as well as the financial progress, in **respect of all the schemes taken up by MESCOM in the format annexed at Annexure-1, 2 ,3 annexed hereunder.**

B. MESCOM Capex proposal for FY22:

As per the ARR filing, for FY22 MESCOM has considered to retain the Capex amount of Rs.521.89 Crores as approved by the Commission for FY22. MESCOM shall furnish the details of the proposed works under different categories and sources of funding for the approved Capex of FY22.

Annexure-1: physical and financial progress, in respect of the schemes taken up by MESCOM for FY 20

Sl. No.	Name of the Scheme	Total No. of works	Total Cost of Scheme (Rs in Crores)	Funding mechanism for the scheme	Objectives of the Scheme	Scheduled date for completion of the scheme	No. of works completed till FY20*	Objectives achieved with figures	Total expenditure till FY20*	Balance no. of works to be completed**	Expected expenditure for completion of balance works**	Expected date of completion of balance works	Cost to Benefit Ratio
1	DDUGJY												
2	IPDS												
3	Model Sub Division												
4	Model Village												
5	Soubhagya												
6	Any other schemes												

***Annexure-2: Year-wise break up of no. of works completed and corresponding expenditure incurred from the first year of inception of the scheme to till FY20**

Sl. No.	Name of the Scheme	1 st year (ex: ..)		2 nd year (FY...)		
		No. of works completed	Expenditure incurred (Rs in Cr)	No. of works completed	Expenditure incurred (Rs in Cr)	No. of works completed	Expenditure incurred (Rs in Cr)
1	DDUGJY						
2	IPDS						
3	Model Sub Division						
4	Model Village						
5	Soubhagya						
6	Any other schemes						

****Annexure-3: Year wise break up of no. of balance works that will complete and corresponding expenditure for completion of balance works of the scheme from FY21 onwards**

Sl. No.	Name of the Scheme	FY21		FY22		FY...			Total no. of balance works to be completed	Total of the expected expenditure (Rs in Cr)
		Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)	Balance no. of works to be completed	Expenditure (Rs in Cr)		
1	DDUGJY										
2	IPDS										
3	Model Sub Division										
4	Model Village										
5	Soubhagya										
6	Any other schemes										

Annexure-4: Break up of actual capital expenditure.

Sl. No.	Heads of works	Provisional expenditure utilized in Crs submitted as per tariff filing 2020	Total Number of works	Expenditure pertains to spill over works in Rs. Crores	Number of Spill over works	Expenditure pertains to Fresh/New works in Rs. Crores	Number of Fresh/New works
1	E&I Works (Addl. Transformers, Link-Lines, HT/LT Reconductoring)	89.05		64.57		24.48	
2	DTC Metering	2.85		2.85		-	
3	Replacement of MNR / DC & Electromagnetic meters by Static meters and providing SMC meter protection box wherever required.	2.07		0.38		1.69	
4	Replacement of faulty DTCs	4.78		1.27		3.51	
5	Service Connections	23.3		8.57		14.73	
6	<u>Rural Electrification (General)</u>						
a.	Electrification of Hamlets	0.01		0.01		-	
b.	Energization of IP sets (including Ganga Kalyana)	44.73		21.51		23.22	
c.	Kufir Jyothi	0.01		0.01		-	
7	<u>Tribal Sub Plan</u>						
a.	Electrification of Tribal Colonies	0.18		0.04		0.14	

b.	Energization of IP Sets	0.43		0.12		0.31	
8	<u>Special Component Plan</u>						
a.	Electrification of S.C. Colonies	1.72		1.1		0.62	
b.	Energization of IP sets	1.42		0.44		0.98	
9	Tools & Plants and Computers	4.44		-		4.44	
10	Civil Engineering Works	35.54		30.82		4.72	
11	33 kV Sub stations & Line works	12.91		12.54		0.37	
a.	DDUGJY	137.46		84.1		53.36	
b.	IPDS	46.01		21.51		24.5	
c.	Providing infrastructure to regularized UIPs.	52.11		51.95		0.16	
13	Solar Rooftop on MESCOM / Govt. Buildings	4.08		2.91		1.17	
14	Improvement works Model Sub Divisions	31.56		-		31.56	
15	SAUBHAGYA	6.95		-		6.95	
	GRAND TOTAL:	501.61		304.7		196.91	

3. RPO Compliance:

MESCOM at page-71 has submitted the RPO compliance for FY20, as per data furnished by SLDC. **It is noted that the target percentage for solar is indicated as 7.50%, whereas as per the Regulations it is 7.25%. This shall be rectified.**

It is submitted that the power purchase quantum excluding hydro is indicated as 4212.63 [6154.66MU -1789.73 MU of KPCL hydro -14.47 MU of other hydro -137.83 MU OF energy balancing].

It is observed that Shimsha power station having capacity of 17.20 MW is treated as Mini-Hydel source. Therefore, the actual KPCL hydro net of Shimsha will be 1782.30MU [1789.73-7.43]. Hence, the power purchase quantum net of total hydro works out to 4219.06, which shall be considered for working out RPO compliance.

As per D-1 format, the RE purchased is as follows:

Generation	MU
Shimsha Mini-Hydel	7.43
Mini-Hydel	336.49
Wind	268.32
Co-Generation Medium Term	134.75
Total- Non-solar	746.99

Similarly, as per D-1 Format, the solar energy purchased is as follows:

Generation	MU
NTPC bundled-Pavagada	101.73
NTPC-VVNL bundled	8.81
PPA	614.03
Total-solar	724.57

Accordingly, MESCOM shall furnish the revised RPO compliance data for FY20 in the following format indicating each source separately [banked energy shall also be indicated separately]:

a. Non-solar RPO:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Non-solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL		
3	Non-solar Short-Term purchase from RE sources, excluding sec-11 purchase		
4	Non-solar Short-Term purchase from RE sources under sec-11		
5	Non-solar RE purchased at APPC		
6	Non-solar RE pertaining to green energy sold to consumers under green tariff		
7	Non-solar RE purchased from other ESCOMs		
8	Non-solar RE sold to other ESCOMs		
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff		
10	Total Non-Solar RE Energy Purchased [No 2+ No.3+No.4+No.5 +No.7+No.9]		
11	Non-Solar RE accounted for the purpose of RPO [No.10- No.5-No.6-No.8]		
12	Non-solar RPO complied in % [No11/No1]*100		

i. Solar RPO:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy		
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL		
3	Solar energy purchased under Short-Term, excluding sec-11 purchase		
4	Solar Short-Term purchase from RE under sec-11		
5	Solar energy purchased under APPC		
6	Solar energy pertaining to green energy sold to consumers under green tariff		
7	Solar energy purchased from other ESCOMs		
8	Solar energy sold to other ESCOMs		
9	Solar energy purchased from NTPC (or others) as bundled power		
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff		
11	Total Solar Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9+No.10]		
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]		
13	Solar RPO complied in % [No.12/No.1]*100		

MESCOM shall furnish the estimates for complying with solar and non-solar RPO for FY21, including any cost implication for purchasing RECs, if any.

4. Wheeling Charges for FY22:

MESCOM has proposed wheeling charges of 45 paise/unit and 106 paise/unit for HT network and LT network, respectively. Further it is stated that proposed technical losses of 3.78% at HT level and 6.31% at LT level are applicable.

MESCOM, while submitting the details of wheeling transactions by RE sources, has stated that the same is increasing year on year. It is also submitted that transmission and distribution maintenance is also increasing and that the increased wheeling & banking arrangements are impacting the tariff charges of LT categories considerably. Hence it has requested the Commission to levy all charges as applicable to other OA/wheeling transactions.

Regarding banking the MESCOM has concurred with the decision of the Commission in the order dated 09.01.2018 reducing the banking facility to six

months and that energy banked during peak ToD hours only can be drawn during peak hours and not otherwise.

MESCOM has not furnished any analysis to substantiate that banking arrangements are impacting the tariff charges of LT categories considerably.

MESCOM is therefore, directed to make necessary analysis to substantiate that the banking arrangements are impacting the tariff of LT consumers considerably.

5. Power Purchases:

i. APR for FY 20

- a. MESCOM, in D1- Format, has indicated the actual per unit cost of Rs.9.86 for the BTPS unit-1 Generating station which is on the very higher side when compared with the approved per unit cost for FY20. In this regard, MESCOM shall submit the reason for the same and also with month-wise computation sheet for FY20.
- b. MESCOM shall indicate the actual energy sold to IEX in the D-1 Format and also furnish the month-wise details of the energy traded.
- c. The Commission, in its Tariff Order dated 30th May, 2019 has directed MESCOM as under:

“The Commission notes an abnormal contribution from the State towards payment of PGCIL transmission charges. Due to this there is a substantial financial impact, resulting in an increase in the retail supply tariff to the end consumers. The Commission, therefore, directs ESCOMs/PCKL to take appropriate action immediately, to resolve the issues with the appropriate authorities regarding the PGCIL transmission tariff. Henceforth, ESCOMs/PCKL shall constitute a dedicated team, which studies the pros and cons of any methodologies/amendments proposed to PGCIL's Transmission tariff or in any such other relevant matters, and shall effectively communicate the same to the concerned authorities, at the draft stage itself. The Commission will not allow such tariff in future, if it considers that the ESCOMs/PCKL have not taken effective and prompt steps to ensure that the PGCIL's transmission tariff is fair and equitable to the State in order to safeguard the interest of State consumers”

MESCOM shall furnish the latest status on the issue and the action taken in the matter.

- d. The Source-wise consolidated energy reconciliation statement with SLDC, in respect of energy drawn for FY20 shall be furnished.
- e. MESCOM shall furnish the plant-wise details of total energy utilized and unutilized in the following format, considering the merit order dispatch. Any deviation from merit order scheduling should be explained fully.

Plant wise details of energy utilized/ un-utilized considering the merit order dispatch

SL. N O.	Plant name and capacity (in MW)	Capacity Charges (Rs/Unit)	Variable Charges (Rs/Unit)	Total Per Unit Cost (Rs/Unit)	Total Energy Available (in MU)	Total energy utilized				Total Energy unutilized	
						Energy sold to consumers (in MU)	Energy sold through power exchanges and tender (in MU)	Energy utilized under UI mechanism (in MU)	Total energy utilized (in MU)	Energy unutilized due to backing down and reserve shutdown (in MU)	Capacity Charges paid for the unutilized energy (Rs in Crores)
1	2	3	4	5	6	7	8	9	10=7+8+9	11=6-10	12

ii. Power Purchase for FY22(ARR):

- a. MESCOM, in its filing has proposed its requirement of power for 6499.74 MU at a cost of Rs. 3513.24 Crores, which works out to Rs.5.41 per unit for the FY22. The Commission, under MYT Tariff Order 2019, had approved the energy requirement for MESCOM 6282.196 MU at a cost of Rs.2890.46 Crores, with per unit cost is Rs.4.60 for FY 22. MESCOM shall furnish the basis for projecting the source-wise energy for FY22 with the explanation the reasons for considering high cost energy for projections, without considering the Commission's approved projections.

- b. MESCOM, in its filing, has indicated the energy balancing figure of 682.63MU with a cost of Rs.346.60 Crores for FY22. The basis for projecting the energy balancing and the cost thereon may be furnished.
- c. MESCOM, has not submitted D1- Format with the actual source-wise energy for the FY21. Hence, MESCOM shall furnish the details in D-1 Format by taking the actuals upto November, 2020 and the projections for the remaining period of FY21, along with the actual cost upto November and projections for the remaining period of FY21.
- d. The basis and the computation sheet for reckoning the fixed cost and variable charges in respect of each of the generating stations, in respect of all the generating stations, except RE sources, shall be furnished for FY22.
- e. MESCOM shall furnish the basis and the document in support for the considering of the fixed cost and the variable cost in respect of BTPS unit-3, YTPS units.
- f. MESCOM shall furnish source-wise capacity and quantum of energy to be procured from RE projects, for which it has executed the PPAs.
- g. MESCOM shall furnish the methodology for forecasting the RE energy from different sources for FY22.
- h. MSEZ, in its filing has considered the energy requirement from MESCOM as 40.61MU and the energy purchase through short term by open access as 17.40MU with total energy requirement at IF point as 58.01MU for FY22. Whereas MESCOM in its filing of ARR for FY22 has considered the energy sold to MSEZ at IF points at 60.36 MU. MESCOM shall explain the reason for considering the higher quantum of power requirement of MSEZ for FY22.

6. MESCOM Distribution Losses:

a. Distribution Loss for FY 20

- 1. MESCOM, in its application for APR for FY20 has indicated distribution loss of 10.07% as against the Commission's approved distribution loss of 11%. MESCOM shall furnish the actual distribution loss upto November 2020.

2. MESCOM shall confirm whether actual the distribution loss of 10.07% for FY20 includes the Open Access and Wheeled Energy for FY20. MESCOM shall also submit the total quantum of Open Access and wheeled energy allowed/handled in MESCOM distribution network, for FY20.
3. MESCOM, in its filing, has indicated a transmission loss of 5.193% (page No:119) as against 3.162% claimed by KPTCL in its filing for FY20. MESCOM shall explain the reason for the substantial variance in the transmission losses adopted by MESCOM as compared with the declared transmission loss by KPTCL.

b. Distribution Loss for FY22:

1. MESCOM, in its ARR filing has proposed the revised distribution losses of 10.17 % for FY21 and 10.15% for FY22 as against the actual distribution loss of 10.07% for FY20. It is observed that, while proposing the capital expenditure investment plan for the FY21 and FY22 respectively, MESCOM has allocated major investments for the purpose of reconductoring of HT and LT lines, new lines for evacuation of power and other improvement works. Considering, the quantum of investments of Rs.607.16 Crores and Rs.521.89 Crores proposed for FY21 and FY22 respectively, the losses projected for FY 21 and FY22 is not commensurate with the proposed investments. The proposed revised distribution loss for FY21 and FY22 when compared to the actual distribution loss for FY20 are not acceptable. Hence, MESCOM shall reassess the distribution losses for FY21 and FY22, taking into account the proposed capital plan for FY 20 and FY22.
2. Further, while projecting the capital expenditure, MESCOM should identify high loss making feeders, subdivisions, divisions and circles to prioritize capital investments to specifically reduce losses and improve reliability of distribution system. But no such details are indicated in the filing. MESCOM should note that, the optimal distribution system loss should be less than 10% even to maintain the voltage regulations within the permissible limits of 9% for 11kV system and 6% for LT distribution

system. MESCOM should plan towards bringing down the distribution system losses below 10% and shall submit necessary plan/details in this regard.

7. Observations on Other Items of ARR:

A. APR for FY20:

1. MESCOM, in its tariff application has indicated the number of employees working strength as 5397 as against the sanctioned strength of 9274 employees for FY 20. It is observed from Format-D6 that, as against 8633 number of sanctioned post of all other staff, below the officer's grade, 4898 employees are working. MESCOM shall furnish the cadre-wise details of employees covered under all 'other staff' and explain how it is managing with the existing staff. MESCOM shall also furnish the number of persons working on outsourced/on-contract basis and remuneration incurred thereon during FY20 and up to October 2020.
2. MESCOM, in its filing as per D-1 Format has claimed the actual amount of Rs.220.01 Crores as PGCIL charges as against Rs.143.68 Crores approved by the Commission for FY 20. MESCOM shall furnish month-wise computation details for having paid the charges to PGCIL for FY20 and up to 30th November,2020.
3. MESCOM in its filing under Format D-7 has claimed an amount of Rs.84.79 Crores towards 'Other Professional charges' for FY20. MESCOM shall submit the details for having incurred the expenditure under this head of account of FY20 besides furnishing the reasons for claiming higher amount of Rs.89.69 Crores for FY22.
4. MESCOM, in its filing, has claimed an amount of Rs.20.82 Crores and Rs.15.04 Crores towards conveyance and 'Vehicle Hire Charges' for FY20 and FY22 respectively. The Commission, in its Tariff Order has directed MESCOM to control the expenses under A&G head of account. In spite of the said direction, the expenditure under this head of account is increasing year on

year. MESCOM shall explain the reason for incurring higher expenses under this head of account, besides furnishing the details about the expenditure incurred on behalf of regular employee's and service station maintenance along with number of vehicle hired.

5. MESCOM, in its filing has claimed an amount of Rs.125.30 Crores towards uncontrollable additional employees cost (Terminal Benefits) for FY20 and Rs.124.53 Crores for FY22. MESCOM shall furnish the detailed computation sheet for having incurred / proposed expenditure under this head of account along with the Actuarial Valuation Report for FY20 and FY22.
6. MESCOM, in its filing of ARR for FY22, under Format - D9 has indicated Rs.300 Crores as new long term borrowings for FY22. MESCOM shall furnish the loan-wise capital loan details for FY22 in the format enclosed **(Annexure-5)**.
7. MESCOM, in its ARR filing for FY22 under Format - D9 has proposed an amount of Rs.762.17 Crores as new working capital loan borrowings for FY22 which is on the higher side. MESCOM shall explain the reason for borrowings such a huge amount of short term loan/OD even with the more than 90% revenue collection. MESCOM shall also submit loan-wise details of short term/overdraft drawn during FY22 in the format enclosed. **(Annexure – 6)**
8. MESCOM, in filing of APR for FY20, has claimed the actual O&M expenses of Rs.684.26 Crores. MESCOM has not computed the O&M expenses as per the MYT Regulations/norms. MESCOM shall submit the computation of O&M expenses as per MYT norms and compare them with the actual expenditure and submit the reasons for variations, if any.

B. ARR for FY 22

1. MESCOM in its filing of ARR for FY22, under Format - D9 has indicated Rs.300 Crores as new long term borrowings for FY22. MESCOM shall furnish the loan-wise capital loan details for FY22 in the format enclosed (Annexure-5).

2. ESCOM in its APR filing for FY22 under Format - D9 has proposed an amount of Rs.762.17 Crores as new working capital loan borrowings for FY22 which is on the higher side. MESCOM shall explain the reason for borrowings such a huge amount of short term loan/OD even with the more than 90% revenue collection. MESCOM shall also submit loan-wise details of short term/overdraft drawn during FY22 in the format enclosed.

(Annexure – 6)

3. MESCOM shall submit the details about the measures taken / action plan to reduce the interest burden on Capital loans / working capital loans and late payment surcharge to the power generators as per the guidelines issued by the Govt. of India to reduce the financial burden of the transmission and distribution Companies suffering due to slowdown of economic activities on account of COVID-19.
4. MESCOM in its ARR filing under page130, has claimed the Bank rate of 6.50% for the payment of interest on consumer security Deposits for FY 22. MESCOM shall submit the basis with necessary documents in support of claiming the Bank Rate of 6.50% in contravention to the provisions of KERC Regulation on payment of interest on consumer's security deposit. MESCOM is required to reassess the interest amount as per the provisions of prevailing Regulations for FY22.
5. MESCOM shall submit the actual details of slab-wise of number of consumers, sectioned load and sales for FY 20 under LT-2 (a) domestic category as made out in the following Table:

Slab	No. of Consumers	Sanctioned load in Kw	Sales in MU	Demand in Rs. Crores
0-50				
50-40				
101-150				
150-200				
Above 200				

6. MESCOM under format A-2 (Balance sheet), Rs.616.31 Crores and has indicated Rs.755.76 Crores has been indicated as opening and closing balance of receivable from consumers for sales of power, as against the actual revenue demand of Rs.3756.41 Crores for FY 20. 100% recovery of

the bill amount is the key factor in running the Company financially viable. This will also a key factor in arriving the lower percentage of AT & C losses of the Company besides reducing the interest burden on the power purchase and bank loans. MESCOM shall explain the basis for projecting the higher amount of closing balance of receivables for FY21 and FY22. MESCOM shall also furnish the reasons for the accumulation of revenue receivables from the consumers during FY20 and efforts made and the action plan drawn for the recovery of arrears.

8. MESCOM shall submit the following category / sub-category-wise details under LT and HT in respect of Poultry Farms, Cold Storage Plants and Ice Manufacturing Plants based on the actual as on 31.03.2020 and as on 30.11.2020.

Category of consumers	No. of consumers	Sanctioned load in Kw/HP	Sales in MU

9. MESCOM in its filing of ARR for FY 22 has projected Rs. 46.76 Crores as "Other Income" as against the actual other income of Rs.75.84 Crores and Rs.72.71 Crores earned during FY19 and FY20 respectively. MESCOM shall furnish the reasons for under estimation and reassess the amount under other income for FY22.
10. MESCOM in filing of APR for FY20 and ARR for FY22 has indicated the actual closing balance of work in progress of Rs.378.22 Crores for FY20 and Rs.559.06 Crores for FY22. Considering the actual Capex of FY20 and the proposed Capex for FY21 and FY22, the closing balance of work-in-progress in each year is on the higher side. MESCOM has to take necessary action to complete the capex works on time so that the desired benefit of the works should reach the ultimate consumers. MESCOM shall furnish the reasons for the accumulation of balances under this head of account and the action plan drawn thereon.

11. BESCO, in its ARR filing under 'New Proposals for FY22', has proposed the new scheme to HT consumers with the aim to bring back the consumers who have opted for open access/wheeling/ captive power and also to sell the surplus power in the state at the reduced rate of energy charges. MESCOM shall submit its views on a similar proposal of BESCO.
12. MESCOM is also required to submit its views on the continuation of present Special incentives schemes approved by the Commission for FY22.
13. MESCOM, in its filing has claimed Rs.1111.99 Crores towards true up result of previous years from financial year 2007-08 to 2016.2017 (page- 63 of Chapter 4 of the filing). The Commission in its earlier Tariff Orders including the Tariff Order 2020 issued on 04.11.2020 has made it clear that once the truing up is completed with reference to audited accounts, the question of again truing up of ARRs of earlier years will not arise. This has been, time and again, reiterated by the Hon'ble Appellate Tribunal for Electricity (ATE) in a number of Appeals. However, the Commission notes that MESCOM is raising the same issue again and again and including arbitrary claims of the past years as deficit in the tariff filing. The Commission had issued specific directions not to include such claims in the ARR which are not supported by any Regulation. **The relevant extract of the Commission's Order dated 04.11.2020, is reproduced below:**

“ Para 4.3.2- Carry forward deficit of previous years during APR for FY19:

“XXXXXXXXXXXXXXXXX

As per the decisions of the Hon'ble ATE, it is a settled law that, True up of ARR once done cannot be re-opened at subsequent points of time. The Commission, therefore, once again rejects the arbitrary claim of MESCOM to carry forward the previous year's gap of Rs.1111.98 Crores for FY19. If MESCOM had incurred loss to this extent, it would have been reflected in the audited accounts. But, as per the audited accounts, there is always a surplus and MESCOM has been showing profit year on year. Hence, the so called revenue gap of previous years is fictitious and has no basis for being included in the revised ARR of FY19. MESCOM is therefore, directed to desist from making such arbitrary and fictitious claims in future, failing which the Commission would be constrained to initiate necessary action to impose penalty on the concerned under

Section 142 of the Electricity Act, for making fictitious claims in violation of the MYT Regulations and also for violation of Commission's directives".

The Commission notes that despite specific directions as above, MESCOM has again included the fictitious claim of Rs.1198.98 Crores in the APR for FY20. The Commission considers this as repeated defiance of Commission's directions and hereby decides to initiate necessary action against the Managing Director under section 142 of the Electricity Act, 2003 and impose suitable penalty to be recovered from the concerned official/ officers of MESCOM. However, MESCOM is given one more final opportunity to explain as to why action under Section 142 of the EA, 2003 should not be initiated as suggested above. In case, MESCOM fails to submit satisfactory explanation, the Commission would proceed to take a suitable decision as may be deemed necessary. MESCOM has an option to withdraw this particular proposal.

14. MESCOM shall submit the Audited Accounts with note / explanation / Director Reports on audited accounts for FY20 and half year accounts for FY21.

(Annexure – 5)

Capital Loan Details for FY20 to FY22

(Amount in Rs. Crores)

Bank/Financial Institution name	Opening Balance as on 01.04.2019	New Loan amount Borrowed	Tenure amount	Rate of Interest	Repayment of Loan	Interest amount	Closing Balance as on 31.03.2020	Scheme/ Works/purpose of availing loans

(Annexure – 6)

Short Term/OD Details for FY20 to FY22

(Amount in

Bank/ Financial Institution Name	Opening Balance as on 01.04.2019	New Loan Borrowed	Tenure	Rate of Interest	Repayment of Loan	Interest amount	Closing Balance as on 31.03.2020

8. Preliminary observations on Directives of MESCOM:

Directive No	Directives Issued by the Commission	Observation made
1	Consumer interaction meeting at Subdivision level.	<p>MESCOM is not furnishing the details every quarter in the format prescribed by the Commission in previous Tariff Orders. MESCOM has to furnish the details of the CIM conducted in its jurisdiction in the format for FY21 till September 2020.</p> <p>In the details furnished, MESCOM has informed that the CIMs are not conducted in few Sub-divisions due to Code of conduct and Covid – 19 pandemic. The CIMs could have been conducted by adjusting the dates before or after the code of conduct. During FY20, the Covid – 19 issues started only after 24th March and the lockdown was lifted in the first week of May, 2020. Hence, MESCOM shall furnish suitable reasons for not conducting the CIMs.</p>
3	Directive on Energy Conservation	<p>The MESCOM has not submitted the compliance regularly on the above directive. It has not informed about the action taken for promoting energy conservation by the use of Energy Efficient appliances among the consumers and action taken while servicing the installations with EE appliances, especially street lights installation.</p> <p>The MESCOM shall submit the compliance as per the directions in the matter.</p>
4	Directive on implementation of Standards of Performance (SoP)	<p>The MESCOM was directed to display the SoP parameters in all its O&M Subdivisions and O&M Sections. Also directed the MESCOM to carry out effective supervision over the functioning of field offices particularly in rendering of services to the consumers, relating to restoration of supply of electricity and to submit the details of number of violations of SoP by officers, sub-division wise, month wise, amount of penalty levied on the officers and the amount paid to the consumers for any delay in service. MESCOM shall furnish the details on these issues.</p> <p>The Commission had also directed MESCOM to conduct awareness campaign at the Hobli levels for educating the public about the prevailing Standards of Performance prescribed by the Commission. MESCOMs shall have to conduct necessary orientation programme for all the field officers and the staff up to linemen to educate them on the SoP and the consequences of non - adherence to the SoP.</p> <p>Also, MESCOM is not submitting the compliance periodically. MESCOM has not reported anything on the conduct of awareness campaigns at the Hobli levels for educating consumers. MESCOM shall submit the compliance regularly.</p>
5	Directive on use of safety gear by linemen	<p>MESCOM is not submitting the quarterly compliance report to the Commission on the use of safety gear by linemen.</p> <p>The MESCOM has stated that it has provided safety gear to all Power men. MESCOM shall submit the details indicating the number of linemen, both regular and on contract, who are provided with complete set of safety gear and the definite timeline by which all the remaining linemen will be provided with the complete set of safety gear including the additional tools if any proposed to be given. Details of the action taken on erring staff also need to be furnished.</p>
6	Directive on providing Timer	MESCOM has not furnished in detail the statistics of the number

Directive No	Directives Issued by the Commission	Observation made
	Switches to Street lights by ESCOMs	<p>of Street Light installations existing as at the beginning of the year, serviced during the year, provided with timer switches etc.,</p> <p>MESCOM shall also furnish the details on the action taken / circulars issued towards servicing new street lights with timer switches.</p> <p>MESCOM has not submitted the compliance as to whether LED / energy efficient lamps are being used and timer switches are provided while servicing of new streetlight installations.</p> <p>MESCOM shall submit a comprehensive report on compliance of this directive.</p>
7	Directive on Load shedding	<p>The MESCOM is not submitting to the Commission, its projections of availability and demand for power and any unavoidable load shedding for every succeeding month in the last week of the preceding month regularly. The MESCOM shall submit compliance on the same.</p> <p>It is observed that MESCOM has not taken action to update the entire consumer data as to the applications used for public information system on power system interruption etc.,</p> <p>The MESCOM shall submit compliance in this regard.</p>
8	Directive on establishing a 24X7 fully equipped centralized consumer service centers	<p>MESCOM was directed to reduce the downtime to address the consumers' complaints. MESCOM is directed to report average time taken to attend to a complaint as at present and the efforts made to reduce the downtime, further in future.</p> <p>The MESCOM shall furnish compliance in this regard. Comparison of the downtime analysis for FY19 and FY20 shall be furnished. Consolidated month-wise statistics on the complaints handling for the FY20 shall also be furnished.</p>
9	Directives on Energy Audit	<p><u>Energy Audit of cities / towns</u></p> <p>MESCOM shall furnish the details up to September '20, about the measures initiated to reduce distribution loss levels, wherever the same are above 15%.</p> <p><u>DTCs Energy Audit:</u></p> <p>The MESCOM has furnished the details of energy audit conducted in respect of 14,400 DTCs only, out of 45,470 DTCs for which meters are said to have been fixed. MESCOM shall furnish details of remedial measures taken to reduce losses in high loss making DTCs and the timeline by which all the remaining DTCs will be metered, and audited.</p> <p>It has come to the notice of the Commission that, MESCOM has taken initiative and invested huge capital on remote reading of energy meters provided to various DTCs for achieving efficient energy auditing. MESCOM shall furnish the details on the number of meters provided to DTCs to have AMI in place by the earlier agencies, % of communication achieved, % age energy audit conducted with the AMI readings, amount of savings in meter reading costs etc.</p> <p>The MESCOM is directed to comply with the directives of the</p>

Directive No	Directives Issued by the Commission	Observation made
		<p>Commission issued in all the preceding Tariff Orders, in respect of energy audit of DTCs.</p> <p>MESCOM shall also indicate a definite timeline by which it will complete the consumer indexing for taking up energy auditing effectively.</p>
10	Implementation of NJY	<p>From the data furnished, the progress achieved in completion of the work in the past one year is very meagre.</p> <p>MESCOM shall submit the stringent action plan for completion of work at the earliest by furnishing the status as on November 2020 in order to assess the progress of work as per time line extension given by M/s REC to complete the work.</p>
13	Directive on Implementation of Financial Management Framework	<p>MESCOM has to submit the compliance in respect of implementation of Financial Management Framework, on quarterly basis regularly to the Commission.</p> <p>MESCOM shall furnish the action taken to collect huge arrears in respect of the O&M Divisions, where the ratio of Closing Balance is high, including the arrears from the Government installations.</p>
14	Prevention of Electrical Accidents	<p>MESCOM has to furnish the details of hazardous locations identified, no. of hazardous locations rectified in FY20- 21, the balance number of hazardous locations to be rectified for FY20 and till September 2020 along with an action plan for rectification of balance hazardous locations / installations identified in its distribution network.</p> <p>MESCOM has to furnish a summary of the analysis made on the accidents reports submitted by Electrical Inspectorate for FY20 and FY21 up to September 2020 and e action taken to prevent such accidents, in future.</p> <p>MESCOM shall furnish the compliance periodically as per the directives.</p>
