

Mangalore Electricity Supply Company Limited

REPLIES TO PRELIMINARY OBSERVATIONS

(KERC Letter No.B/05/19/1112/Dt.12-12-2019)

1. MESCOM Capex:

a) Capex for FY-19:

- The physical progress of capital works for FY-18 and FY-19 is enclosed in **Annexure-P-1.**
- Directions have been issued to the field officers to follow the Capital expenditure guidelines issued by KERC vide letter No: SEE(Tech)/EE(Tech)/M1-1085A/2019-20/7731-55 dated: 23.12.2019. Enclosed as **Annexure-P-2.**
- The comments on the imprudent works and compliance to the observations and recommendations made in the final report on Prudence check FY17 and FY18 prepared by M/s RSA has been submitted to KERC vide letter No: SEE(Tech)/EE(Tech)/M1-1085A/2019-20/7577 dated: 16.12.2019. Enclosed as **Annexure-P-3.**

b) Capex for FY-21:

- The Capital Investment Programme of MESCOM for the fiscal year 2019-20, 2020-21 and 2021-22 is prepared for a total amount of Rs. 818.58 Crores, Rs.607.16 Crores and Rs.521.89 Crores respectively. Since some of the scheme works were not taken up on time the Budget allocated for these works during previous years has been carry forwarded to next years. Hence the CAPEX for FY-20 and FY-21 works out for Rs. 1091.44 Crores and Rs. 914.75 Crores respectively.
- For System improvement works Budget provision of Rs.100.00 Crores was being made for carrying out works like Providing additional transformers, Link-Lines, Re-conductoring of HT/LT/33kV lines etc.

Further, it is proposed to replace 25 year old conductor of around 15,000 of DTCs for which additional budget requirement of Rs.150.00 Crores is made for FY 21 and 22.

The physical and financial progress in respect of E&I works, DTC metering and 33kV station and line works and corresponding reduction in distribution loss and DTC audit details are enclosed in **Annexure-P-4**.

- As desired by the Hon'ble Commission progress physical and financial progress in respect of various scheme works are given in the **Annexure-P-16 (a,b,c,d,e,f,g,h)**.

2. Observations on Sales:

A. Sales – Other than IP sets:

I. Data inconsistency:

- Hon'ble Commission has stated that at page 21 & 22 of the filing, the category wise actual sales for some of the categories indicated for FY-18 is not tallying with that of the actuals sales approved for FY-18 in the Tariff Order 2019.

In this regard, it is to be submitted that there is no data inconsistency in the data furnished in the present filing. The following comparison will indicate the position;

Category	FY-18 MU (sales data)		Remarks
	As per Tariff Order 2019	As per present filing	
1. LT-1: =< 40 Units	34.21	34.21	-
2. LT-1: > 40 Units		12.60	
3. LT-2a	1351.30	1335.27	(*1)
4. LT-2b	13.79	13.77	(*2)
5. LT-3	362.66	362.66	
6. LT-4a	1517.47	1661.64	(*3)
7. LT-4b&c	8.84	8.84	
8. LT-5	136.90	136.90	
9. LT-6(W/s)	118.83	118.84	(*2)
10. LT-6(St. Lt.)	68.04	68.03	(*2)
11. LT-7	20.41	20.41	
LT-Total		3773.17	
12. HT-1	90.54	90.54	
13. HT-2a	596.27	596.27	
14. HT-2b	193.17	193.17	
15. HT-2c	137.07	137.07	
16. HT-3a&b	23.60	23.61	(*2)
17. HT-4	19.09	19.10	(*2)
18. HT-5	5.96	5.96	
HT-Total		1065.72	
19. MSEZ Supply		39.60	
20. KPCL Consumption		3.43	
Grand Total		4881.92	

(*1) In the tariff order Hon'ble Commission has approved energy sales of 1351.30 MU for LT-2a category, which includes LT-1 sales of the installations consuming above 40 units per month and KPCL consumption. In the present filing MESCOM has given the breakup for these categories. By adding the energy sales of the categories of Sl. No. 2, 3 & 20 (in the above table), it will match the approved sales in the Tariff Order 2019 ($12.60 + 1335.27 + 3.43 = 1351.30$).

(*2) The present filing data are exactly tallying with the data furnished to the Hon'ble Commission for FY-18 APR filing dated 30-11-2018. MESCOM is unable to track for the observed decimal differences.

(*3) Hon'ble Commission has disallowed 144.17 MU of LT-4a consumption. But the consumption for LT-4a, as per DCB, was 1661.64 MU only.

2. Hon'ble Commission has observed that in D-2 format for FY-19, the number of HT-2a installations as approved should be 905 and not 904.

In this regard, it is to be submitted that MESCOM is considering MSEZ installation as one of the industrial installations for identification. Hence, numbers indicated against HT-2a tariff is 904 and 1 number is indicated against MSEZ category. Thus it matches with the approved figures for FY-19.

3. Hon'ble Commission has observed that the actual number of HT-2a installations indicated in D-2 format is 890 but the numbers indicated in page No.66 in the table is 891.

In this regard, it is to be submitted that MESCOM is considering MSEZ installation as one of the industrial installations for identification. Hence, numbers indicated in D-2 format against HT-2a tariff is 890 and 1 number is indicated against MSEZ category. Whereas, in the table given in page No.66, MSEZ is not shown separately, but included in category HT-2a.

4. Hon'ble Commission has stated that at page 66, the total number of HT installations should be 2276 and not 2275.

In this regard, it is to be submitted that the total number of HT installations indicated at page No.66 as 2275 is an inadvertent error. It should be 2277. On comparing with the data indicated in D-2 format, it is observed that total HT-2a installations to be indicated at page No.66 should be 951 (including MSEZ) and the total should be 2277. Hon'ble Commission is requested to consider the total HT-2a installations as 951 and total HT installations as 2277.

5. Hon'ble Commission has observed that in D-2 format for FY-21, the number of HT-2a installations are indicated as 1012 but it is indicated as 1013 at page No.67.

As already stated above, MESCOM is considering MSEZ installations as one of the industrial installation for identification. Hence, numbers indicated in D-2 format against HT-2a tariff is 1012 and 1 number is indicated against MSEZ category. But at page No.67 one MSEZ installation is included in HT-2a category.

6. Hon'ble Commission has observed that the data relating to number of installations and energy sales in respect of BJ/KJ sales are interchanged between "*less than 40 units and more than 40 units*" classification at page No.66 to 69.

In this regard, it is to be submitted that the Hon'ble Commission has rightly observed the error which has crept in inadvertently. Hence, the tables given at page no.66 to 69 is corrected appropriately (with all the observations & narrations given in Sl.No.2 to Sl.No.5 above) and submitted as below, which may be kindly considered.

Revised table for page No.66 of the filing:

Tariff Category	FY-19		FY-20	
	Apprd. in T.O. 2018	Actuals	Apprd. in T.O. 2019	Revised Proj.
1	2	3	4	5
LT-1:≤40 Units	177457	175524	179636	175524
LT-1:>40	15915	12480	11526	12480
LT-1 Sub Total:	193372	188004	191162	188004
LT-2a(i) Urban	1544434	611398	1576951	631023
LT-2a(ii) Rural		935899		965942
LT-2a Sub Total:		1547297		1596965
LT-2b(i) Urban	3540	1681	3715	1709
LT-2b(ii) Rural		1833		1871
LT-2b Sub Total:		3514		3580
LT-3(i) Urban	213525	124208	220378	128754
LT-3(ii) Rural		88191		91336
LT-3 Sub Total:		212399		220090
LT-4a	317045	326187	335901	345269
LT-4b	367	162	180	165
LT-4c(i)	4416	3450	4600	3642
LT-4c(ii)		861		925
LT-4c Sub Total:		4311		4567
LT-5a Urban	31403	5400	32594	5619
LT-5b Rural		25774		26818
LT-5 Sub Total:		31174		32437
LT-6a	15512	15391	16732	16325
LT-6b	22808	21621	23433	22665
LT-7	14153	17096	16430	17096
TOTAL- LT	2360575	2367156	2422076	2447163
HT-1	111	104	118	113
HT-2a	904	890	942	950
HT-2b	698	735	799	799
HT-2c	358	292	307	307
HT-3a & b	32	28	29	30
HT-4	62	55	61	60
HT-5	16	17	14	17
MSEZ	1	1	1	1
TOTAL- HT	2182	2122	2271	2277
TOTAL- LT + HT	2362757	2369278	2424347	2449440

Revised table for page No.67 of the filing:

Tariff Category	FY-21	
	Apprd. in T.O. 2019	Revised Proj.
1	4	5
LT-1:≤40 Units	179636	175524
LT-1:>40	11526	12480
LT-1 Sub Total:	191162	188004
LT-2a(i) Urban	1625051	651279
LT-2a(ii) Rural		996949
LT-2a Sub Total:		1648228
LT-2b(i) Urban	3845	1709
LT-2b(ii) Rural		1871
LT-2b Sub Total:		3580
LT-3(i) Urban	229478	133466
LT-3(ii) Rural		94679
LT-3 Sub Total:		228145
LT-4a	350825	457874
LT-4b	180	165
LT-4c(i)	4986	3642
LT-4c(ii)		925
LT-4c Sub Total:		4567
LT-5a Urban	34222	5846
LT-5b Rural		27904
LT-5 Sub Total:		33750
LT-6a	17894	17316
LT-6b	25381	23760
LT-7	16431	17096
TOTAL- LT	2499455	2622485
HT-1	133	123
HT-2a	1006	1012
HT-2b	858	866
HT-2c	323	323
HT-3a & b	31	30
HT-4	64	60
HT-5	14	17
MSEZ	1	1
TOTAL- HT	2430	2432
TOTAL- LT + HT	2501885	2624917

Revised table for page No.68 of the filing:

Tariff Category	FY-19		FY-20	
	Apprd. In T.O. 2018	Actuals	Apprd. In T.O. 2019	Revised Proj.
1	2	3	4	5
LT-1:=40 Units	33.23	37.29	34.21	37.29
LT-1:>40 units	14.08	12.08	12.60	12.08
LT-1 Sub Total:	47.31	49.37	46.81	49.37
LT-2a(i) Urban	1406.98	721.91	1436.69	741.11
LT-2a(ii) Rural		640.07		657.10
LT-2a Sub Total:		1361.98		1398.21
LT-2b(i) Urban	14.80	7.94	15.18	8.52
LT-2b(ii) Rural		5.68		5.72
LT-2b Sub Total:		13.62		14.24
LT-3(i) Urban	375.73	240.67	390.69	250.30
LT-3(ii) Rural		129.63		134.81
LT-3 Sub Total:		370.30		385.11
LT-4a	1381.08	1630.90	1669.16	1732.02
LT-4b	1.81	0.85	0.93	0.85
LT-4c(i)	9.69	3.50	8.81	3.50
LT-4c(ii)		3.41		3.41
LT-4c Sub Total:		6.91		6.91
LT-5a Urban	143.13	45.87	141.13	45.87
LT-5b Rural		88.08		88.08
LT-5 Sub Total:		133.95		133.95
LT-6a	131.39	123.02	126.06	124.29
LT-6b	73.72	69.82	72.34	70.04
LT-7	19.40	20.41	20.41	20.41
TOTAL- LT	3605.04	3781.13	3928.21	3935.40
HT-1	90.54	97.81	99.38	104.06
HT-2a	616.10	624.76	606.33	654.62
HT-2b	198.66	200.43	207.21	208.03
HT-2c	172.35	144.58	138.74	144.58
HT-3a & b	19.93	41.20	43.10	41.20
HT-4	21.11	20.42	21.59	21.27
HT-5	5.50	1.73	5.96	1.73
TOTAL- HT	1124.19	1130.93	1122.31	1175.49
MSEZ Supply	45.32	41.94	51.13	41.94
KPCL Consumption	5.89	2.88	-	2.88
TOTAL- LT + HT	4780.44	4956.88	5101.65	5155.71

Revised table for page No.69 of the filing:

Tariff Category	FY-21	
	Apprd. In T.O. 2019	Revised Proj.
1	4	5
LT-1:=40 Units	34.21	37.29
LT-1:>40 units	12.60	12.08
LT-1 Sub Total:	46.81	49.37
LT-2a(i) Urban	1502.36	760.83
LT-2a(ii) Rural		674.57
LT-2a Sub Total:		1435.40
LT-2b(i) Urban	16.13	8.52
LT-2b(ii) Rural		5.72
LT-2b Sub Total:		14.24
LT-3(i) Urban	414.05	260.31
LT-3(ii) Rural		140.21
LT-3 Sub Total:		400.52
LT-4a	1745.01	2071.70
LT-4b	0.93	0.85
LT-4c(i)	9.17	3.50
LT-4c(ii)		3.41
LT-4c Sub Total:		6.91
LT-5a Urban	143.06	45.87
LT-5b Rural		88.08
LT-5 Sub Total:		133.95
LT-6a	131.15	125.57
LT-6b	75.18	70.26
LT-7	20.41	20.41
TOTAL- LT	4104.26	4329.18
HT-1	102.16	110.71
HT-2a	590.51	685.91
HT-2b	214.49	215.91
HT-2c	135.65	144.58
HT-3a & b	43.33	41.20
HT-4	23.07	22.15
HT-5	5.96	1.73
TOTAL- HT	1115.17	1222.19
MSEZ Supply	56.86	41.94
KPCL Consumption	-	2.88
TOTAL- LT + HT	5276.29	5596.19

7. Hon'ble Commission has observed that in D-2 format total sales indicated is 5596.19 MU whereas in D-21 format the total sales indicated is 5593.31 MU.

In this regard, it is to be submitted that the above observed error is inadvertent one. Hon'ble Commission may kindly considered the energy sales of LT-2a(ii) category in D-21 format as 677.45 MU and the total sales as 5596.19 MU.

II. Annual Performance Review for FY-19:

Hon'ble Commission has directed to explain the reasons for reduction in sales under categories LT-2a and HT-2c.

In this regard, the following are submitted:

- LT-2a category has recorded 1361.98 MU of energy sales in FY-19 which is 2% higher compared to actuals of FY-18. However, comparing to approved sales, there is reduction in consumption by about 3.20%.

Since FY-15 the growth rate is declining. The following CAGRs indicate the growth trend.

4 year CAGR	: 3.92%
3 year CAGR	: 2.66%

Considering this aspect, for FY-19, MESCOM had projected the energy sales for the category at 1386.83 MU against which Hon'ble Commission, in the Tariff Order 2018, had approved the energy sales of 1406.98 MU. Hence, the observed variations comparing actuals v/s approved for FY-19.

- HT-2c category has recorded 144.58 MU of energy sales in FY-19 which is 5.48% higher compared to actuals of FY-18. However, comparing to approved sales, there is reduction in consumption by about 16.11%.

Since FY-17 the growth rate is declining. The following CAGRs indicate the growth trend.

4 year CAGR	: (-) 2.23%
3 year CAGR	: (-) 3.37%

Considering this aspect, for FY-19, MESCOM had projected the energy sales for the category at 137.07 MU against which Hon'ble Commission, in the Tariff Order 2018, had approved the energy sales of 172.35 MU. Hence, the observed variations comparing actuals v/s approved for FY-19.

- Hon'ble Commission has directed to furnish the wheeled energy for FY-19 for the purpose of computation of distribution network losses.

In FY-19, the total quantum of energy handled in respect of open access and wheeling transactions are 110.45 MU and 217.05 MU, respectively. In case this quantum is considered then the distribution loss of MESCOM would stand at 9.93%.

III. Category-wise sales FY-21:

- (i) Hon'ble Commission has stated that compared to the number of LT-1 installations existing as at the end of March-2019 with the number of LT-1 installations as at the end of Sep-2019 there is reduction of 835 installations and hence, MESCOM may have consider the revising the installations and energy sales for FY-21.

In this regard, it is to be submitted that MESCOM has retained the number of installations and energy sales of FY-19 for FY-21 also which may kindly be considered.

- (ii) Hon'ble Commission has noted that there is positive growth rate, in respect of LT-2b & LT-4c categories, in the number of installations and hence, MESCOM should have considered the same for estimating the number of installations. Further, sales could be projected based on the specific consumption of FY-19.

In this regard, it is to be submitted that MESCOM has adopted a conservative method / growth rate for estimating number of installations and energy sales. Hence, Hon'ble Commission may kindly consider the number of installations and energy sales as projected by MESCOM in the filing.

- (iii) Hon'ble Commission has observed that in respect of LT-5 category, though there is increase in number of installations, growth rate of energy sales is reducing and directed to analyze the reasons for the same.

In this regard, it is to be submitted that MESCOM will analyze the reasons in detail.

- (iv) Hon'ble Commission has observed that in respect of HT-2c category, though there is increase in number of installations, growth rate of energy sales is reducing and directed to analyze the reasons for the same.

In this regard, it is to be submitted that MESCOM will analyze the reasons in detail.

- (v) Hon'ble Commission has stated that the growth rate considered for LT-2b, LT-3, LT-6SL, HT-1, HT-2a and HT-4 is lower compared to CAGR.

In this regard, it is to be submitted that in the filing MESCOM has in detail elaborated the methodology adopted for projecting the number of installations for each of the above categories. Hence, it is requested kindly to consider the same.

- (vi) Hon'ble Commission has stated that the growth rate considered for LT-6WS, LT-6SL & HT-4 appears to be lower and in respect of HT-1 and HT-2a it appears to be higher considering the CAGR.

In this regard, it is to be submitted that in the filing MESCOM has in detail elaborated the methodology adopted for projecting the number of installations for each of the above categories. Hence, it is requested kindly to consider the same.

IV. Validation of Sales:

(a) As desired by the Hon'ble Commission, the category wise number of installations are given below;

Category	2017-18 Actuals		2018-19 Actuals		2019-20 Actuals	
	As on 30 th Nov-17	As on 31 st Mar-18	As on 30 th Nov-18	As on 31 st Mar-19	As on 30 th Nov-19	As on 31 st Mar-20 (estimate)
LT-2a	1463220	1490181	1521026	1547297	1561792	1596965
LT-2b	3411	3464	3480	3514	3575	3580
LT-3	202292	204617	209298	212399	217553	220090
LT-4b	340	180	168	162	164	165
LT-4c	3821	3963	4165	4311	4618	4567
LT-5	29475	29973	30686	31174	31929	32437
LT-6 WS	14423	14860	15205	15391	15807	16325
LT-6 SL	20389	20856	21375	21621	24126	22665
LT-7	13655	16431	14960	17096	16944	17096
HT-1	100	100	103	104	109	113
HT-2a(*)	826	827	871	891	933	951
HT-2b	668	693	722	735	768	799
HT-2c	276	277	288	292	301	307
HT-3a&b	27	28	28	28	31	30
HT-4	53	55	56	55	59	60
HT-5	16	14	17	17	19	17
Sub-total	1752992	1786519	1822448	1855087	1878728	1916167
BJ/KJ<= 40 units / month	176782	179636	172227	175524	166883	175524
BJ/KJ> 40 units / month	15854	11526	15973	12480	20155	12480
IP sets LT-4a	300303	306053	316465	326187	338712	345269
Sub-total	492939	497215	504665	514191	525750	533273
Grand Total	2245931	2283734	2327113	2369278	2404478	2449440

(*) including MSEZ

(b) As desired by the Hon'ble Commission, the category wise number of installations are given below;

Category	2017-18 Actuals		2018-19 Actuals		2019-20 Actuals	
	Apr-17 to Nov-17 (cumulative)	Dec-17 to Mar-18 (cumulative)	Apr-18 to Nov-18 (cumulative)	Dec-18 to Mar-19 (cumulative)	Apr-19 to Nov-19 (cumulative)	Dec-19 to Mar-20 (cumulative)
LT-2a(*)	901.54	437.16	915.93	448.93	989.22	411.87
LT-2b	9.02	4.75	8.91	4.71	9.44	4.80
LT-3	243.83	118.83	243.53	126.77	262.05	123.06
LT-4b	0.40	0.53	0.47	0.38	0.47	0.38
LT-4c	3.25	4.66	3.00	3.91	4.23	2.68
LT-5	89.44	47.46	86.08	47.87	88.56	45.39
LT-6 WS	77.47	41.37	80.77	42.25	84.69	39.60
LT-6 SL	43.24	24.79	44.54	25.28	43.46	26.58
LT-7	13.06	7.35	13.66	6.75	13.26	7.15
HT-1	59.08	31.46	64.45	33.36	61.88	42.18
HT-2a(**)	421.69	214.18	437.93	228.77	439.18	257.38
HT-2b	130.29	62.88	134.89	65.54	138.17	69.86
HT-2c	93.21	43.86	99.10	45.48	95.40	49.18
HT-3a&b	12.05	11.56	28.55	12.65	30.25	10.95
HT-4	12.78	6.32	13.47	6.95	14.77	6.50
HT-5	4.83	1.13	1.03	0.70	1.92	0.00
Sub-total	2115.18	1058.29	2176.31	1100.30	2276.95	1097.56
BJ/KJ<= 40 units / month	22.07	12.14	25.02	12.27	23.20	14.09
BJ/KJ> 40 units / month	9.35	3.25	8.31	3.77	10.48	1.60
IP sets LT-4a	917.63	744.01	852.27	778.63	1078.89	653.13
Sub-total	949.05	759.40	885.60	794.67	1112.57	668.82
Grand Total	3064.23	1817.69	3061.91	1894.97	3389.52	1766.38

(*) including KPCL (**) including MSEZ

(c) Sales to MSEZ:

Hon'ble Commission has stated that MSEZ has estimated energy sales for FY-20 and FY-21 as 53.44 MU and 57.89 MU, respectively. But MESCOM has considered the sales of FY-19 for both the years of FY-20 and FY-21. As such, it has been directed to MESCOM to reconcile the above data.

In this regard, it is to be submitted that in the Tariff Order 2018, Hon'ble Commission has approved 45.32 MU of sales in respect of MSEZ installations for FY-19 against which the actual consumption is 41.94 MU. In FY-18 also the consumption was only 39.60 MU. Hence, MESCOM has considered the energy sales of FY-19 to both the years of FY-20 and FY-21. Hon'ble Commission is requested to consider the same.

B. Sales to IP sets:

1. Sales for FY-19:

- a. Hon'ble Commission has observed that in APR for FY-18 the approved sales for LT-4a category are 1517.47 MU @ specific consumption of 5082.10 units / IP per year. Whereas for FY-19, MESCOM has reported the total consumption for the category at 1630.90 MU which is @ specific consumption of 5159 units / IP per year. As such, it has been directed to explain the reasons for increase in specific consumption by 76.90 units in FY-19 compared to FY-18.

In this regard, it is to be submitted that energy sales of 1517.47 MU for FY-18 approved by the Hon'ble Commission is after disallowing 144.17 MU. Even considering the approved specific consumption of 5082.10 units of FY-18, the increase in specific consumption in FY-19 is only about 1.51%. As can be noticed in the table given at page No.49 of the filing, the specific consumption in FY-17 was 5720 units / IP per year. This has reduced to 5159 units in FY-19. Further, it is to submit that marginal variation in specific consumption might have due to weather effects which are not symmetrical to the expected seasonal effects.

- b. Hon'ble Commission has compared the actual energy sales of LT-4a category for FY-19 with the approved energy sales in the Tariff Order 2018.

In this regard, it is to be submitted that while approving the sales for FY-19 in Tariff Order-2018, Hon'ble Commission has considered the specific consumption of FY-16 i.e., 4447 units / IP set, whereas the specific consumption per IP in FY-17 was 5720 units.

- c. Hon'ble Commission has compared the actual specific consumption for FY-19 with the approved specific consumption and directed to explain the reasons for increase in specific consumption by 712.

In this regard, apart from the reasons explained above for Sl.No.(b), it is to submit the following for the kind consideration of the Hon'ble Commission.

- Average load per IP in MESCOM is about 4 HP.
- If 7 hours of supply for 270 days in a year is considered then the consumption per IP per year would be around 5640 units.

As such, specific consumption of FY-19 i.e. 5159 units / IP appears to be generally acceptable.

- d. Hon'ble Commission has observed that as per the month wise data energy sales in respect of LT-4a category is 1631.16 MU whereas in the accounts & filing it is 1630.90 MU indicating difference of 0.26 MU.

In this regard, it is to be submitted that in urban areas of Mangaluru Division the actual metered IP sales are being considered and not the assessed consumption. Hence the observed difference of 0.26 MU.

- e. Hon'ble Commission has observed that for assessment of IP sets uniform distribution loss of 7% is being considered for all agricultural load feeding DTCs instead of considering the different loss levels to different DTCs with reference to feeders from where that DTCs are emanated.

In this regard, it is to be submitted that up to FY-19 MESCOM had applied distribution loss of 7% for the consumption recorded in the predominantly IP feeding DTCs for assessment of IP consumption, which had been benchmarked by the Hon'ble Commission in the Tariff Order dated 22-01-2008 on the recommendation of TERI.

However, with effect from FY-20 MESCOM has proceeded to apply LT line losses as approved by the Hon'ble Commission for the respective years in the respective tariff orders, for instance LT line loss of 6.67% is considered for FY-20. Further, given the practical conditions such as switching over of power supply from one feeder to another for the technical reasons it may be imperative to apply company level distribution loss percentage instead of applying different loss percentages.

f. **GPS Survey Data:**

Hon'ble Commission has observed that as at the end of Mar-19, the number of IP sets installations, as per DCB, are 3,26,187 whereas as per GPS survey report the number of authorized IP sets surveyed are 2,69,349.

In this regard, it is to be submitted that the GPS survey contract was given on 19-01-2017 with the list of 2,81,646 IP installations for carrying out the survey. As per the terms of the contract, the work of surveying was to be completed within 6 months from the date of work award. However, the contractor could not complete the work within the prescribed period of six months and hence, the contract was periodically extended upto 31-03-2019 and the MESCOM Board has also approved the same.

As such, the survey work has been carried out with reference to the list of IP sets given to the contractor at the time of work award which is 2,81,646 nos. Hence, it may not be appropriate to compare the number of IP sets as on 31-03-2019 to the surveyed list. Such being the case, the difference between the number of authorized IP sets as per the survey report and as per the list given to the contractor at the time of work award is only 12,297 nos. Since the contract was closed on 31-03-2019, the contractor could not have gone into the survey of the difference numbers i.e., 12,297 nos. In order to complete the survey of these remaining installations and also the installations serviced till 31-03-2019, i.e. 56,838 nos., the jurisdictional O&M Executive Engineers have been directed to complete the survey through their sub divisional level officers.

- g. Hon'ble Commission has observed that as per 31-03-2019 DCB, the number of IP installations are 3,26,187 and as per GPS survey the authorized live installation are only 2,50,858.

In this regard, it is to be submitted that the authorized number of installations as per the GPS survey report is 2,69,349 and not 2,50,858. Hon'ble Commission has deducted the installations classified as '*Not in use / dried up IP sets*' and '*Disconnected IP sets*', which are in fact authorized installations and have found to be in that state at the time of survey. These installations will once again become active whenever the availability of water becomes

available and hence, these installations have also to be considered on par with live installations.

Reasons for difference in number of installations, as observed by the Hon'ble Commission, have sufficiently elaborated in the paragraph (f) above, which may kindly be considered.

- h. Hon'ble Commission has sought to clearly indicate whether 39,572 nos. of IP installations which are classified as '*Not in use / dried up IP sets*' are functional or not.

In this regard, it is to be submitted that these installations were found in the state of '*Not in use / dried up*', at the time of survey. These installations will once again become active whenever the availability of water becomes available and hence, these installations have also to be considered on par with live installations.

- i. Hon'ble Commission has sought to confirm whether 3767 IP sets which are classified as 'Disconnected' is considered for estimating the IP set consumption.

In this regard, it is to be submitted that out of 3767 nos., 2599 nos. are relating to un-authorized installations and 1168 nos. are relating to authorized IP sets. Thus, MESCOM has considered only 1168 nos. for assessment of IP consumption, which has been reported as 'Disconnected' in the GPS survey report.

- j. Hon'ble Commission has sought to explain 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 consumer with DCB figures and the action taken to regularize the unauthorized IP installations.

In this regard, it is to be submitted that the reasons for difference in number of installations, as observed by the Hon'ble Commission, have sufficiently elaborated in the above paragraphs, which may kindly be considered.

Regarding regularization of unauthorized IP sets, it is to be submitted that MESCOM has addressed a letter to the energy department (letter No.5876-87 / Dt.24-10-2019) requesting approval to assign RR No.s to the un-authorized connections duly collecting Rs.50/- registration charges. Further, MESCOM will provide required infrastructure to the un-authorized connections after collecting Rs.10,000/- from each of the registered applicant as per GO Circular dated 14-07-2014. Once the approval is received from GOK, appropriate action will be taken by MESCOM.

- k. Hon'ble Commission has summarized the observations of the data on assessment of IP consumption submitted by MESCOM and directed to explain the reasons for the same.

In this regard, it is to submit as below;

- MESCOM has humbly taken note of all the observations of the Hon'ble Commission. MESCOM will investigate in detail all the anomalies observed by the Commission in due course.
- Further, in the Tariff Order 2019, which is issued on 30th May 2019, Hon'ble Commission has directed MESCOM to increase the sampling meters and also to rectify the defective meters on priority. In this regard, MESCOM's technical team has visited all the circles where all the divisional officers were present and interacted with the concerned field officers. They have been instructed to rectify all the technical aspects such as CT/PT functioning, appropriate multiplying constant, evaluation of abnormal / subnormal consumption recorded in the DTCs, increasing sampling meters, etc. This initiative of MESCOM will be reflected in FY-20.
- In MESCOM there are no separate IP feeders existing. Hence, details of division wise hours of 3 phase power supply catered during FY-19 & FY-20 (upto Sep) are enclosed as **Annexure-P-5(a) & 5(b)**.

2. Projected Sales to IP Sets for FY-21:

- a. Hon'ble Commission has observed that for projection of number of LT-4a installations MESCOM has not considered the actual increase in the installations during the period Apr-19 to Sep-19. Instead, considered the CAGR based increase.

In this regard, it is to be submitted that as at the end of Sep-19 the total LT-4a installations (as per DCB) is 337140. Thus, addition of installations in the first half year of FY-20 is 10953. Increase in the number of installations during FY-19 is 20134. As such, the increase in number of installations considered for FY-20 & FY-21 i.e., 19082 & 20198, respectively, appears to be acceptable.

- b. Hon'ble Commission has observed that the revision in number of installations for FY-21 in respect of LT-4a category, compared to the approved numbers in the tariff order 2019, is not properly substantiated.

In this regard, the following are submitted;

- While projecting the number of installations for the category LT-4a, in the filing dated 30-11-2018, for the period FY-20 to FY-24, MESCOM has considered the increase in number of installation of 14924 which is the actual increase in FY-18. Thus, the number of installations was projected as 350825 for FY-21.
 - However, for the present filing the actuals of FY-19 is available and the additions in the numbers in FY-19 are 20134. As such, the increase in number of installations considered for FY-20 & FY-21 i.e., 19082 & 20198, respectively, appears to be acceptable.
- c. As desired by the Hon'ble Commission, the IP set consumption details in the prescribed formats are emailed on 26-12-2019.

3. MESCOM Power Purchase:

a) APR FY-19

1. Hon'ble Commission desired MESCOM to clarify as at whether share of power purchase for FY-19 is as per the Orders of the GoK vide No.EN 32 PSR 2018, Bangalore, dated 24-04-2018.

In this regard, it is to confirm that the details of source wise power furnished for FY-19 in D-1 format is as per the Orders of the GoK vide No.EN 32 PSR 2018, Bangalore, dated 24-04-2018.

2. As desired by the Hon'ble Commission a statement showing the variable cost in the ascending order for the energy scheduled from different sources of power is furnished in **Annexure-P-6**.

Further, it is to be submitted that the position of scheduled energy with reference to variable cost given in the statement indicates that the SLDC has followed merit order dispatch in scheduling power from various sources.

3. Hon'ble Commission desired MESCOM to furnish the source wise energy and cost variation statement as approved and as per actuals for FY-19.

In this regard **Annexure-P-7** is enclosed for kind needful of the Hon'ble Commission.

4. As desired by the Hon'ble Commission, computation of capacity charges and variable charges (ECR) in respect of BTPS-1, 2 & 3 and YTPS is enclosed as **Annexure P-8A, P-8B, P-8C and P-8D**, respectively.

5. Hon'ble Commission has directed to furnish the action taken on the directive regarding PGCIL charges.

In this regard, it is to be submitted that a committee was formed by GOK, Energy Department and PCKL / ESCOM, MOP and submitted a detailed report to CERC on 13.3.2019. Based on this report CERC had framed the draft CERC (sharing of interstate transmission charges & losses) Regulation and invited the comments of stakeholders vide notification

dated 31.10.2019. The last date for submitting comments / suggestion was 2.12.2019. CERC had extended the time till 31.12.2019 based on request of stakeholders.

6. Hon'ble Commission has desired to furnish the source wise consolidated statement for the energy for FY-19.

In this regard, it is to be submitted that consolidated source wise power purchase statement for FY-19 is furnished in D-1 format of the filing.

7. Hon'ble Commission has observed that MESCOM has paid transmission charges of Rs.226.15 Cr for FY-19 to KPTCL as against the approved amount of Rs.224.37 Cr and directed to furnish the reasons for excess payment.

In this regard, it is to be submitted that in the KPTCL Tariff Order 2019, Hon'ble Commission has approved for KPTCL an incentive amount of Rs.21.68 Cr to be collected from ESCOMs. Accordingly, KPTCL has claimed an amount of Rs.1.78 from MESCOM which has been paid and accounted in the account head 'transmission charges payable to KPTCL'. Hence, the variation as observed by the Hon'ble Commission (Rs.224.37 Cr + Rs.1.78 Cr = 226.15 Cr).

8. As desired by the Hon'ble Commission month wise details of energy traded in FY-19 is furnished below;

Month	Karnataka Share		MESCOM share			Avg. Cost
	Energy (MU)	Amount (Cr)	in %	Energy (MU)	Amount (Cr)	
Apr-18	-	-	-	-	-	
May-18	0.90	0.75	8.1054	0.07	0.06	
Jun-18	27.47	9.75	8.1054	2.23	0.79	
Jul-18	85.58	31.77	8.1054	6.94	2.62	
Aug-18	222.93	67.37	8.1054	18.07	5.46	
Sep-18	116.10	53.83	8.1054	9.41	4.36	
Oct-18	216.72	128.20	8.1054	17.57	10.39	
Nov-18	55.88	20.23	8.1054	4.53	1.64	
Dec-18	52.63	18.37	8.1054	4.27	1.49	
Jan-19	24.40	9.03	8.1054	1.98	0.73	
Feb-19	0.93	0.29	8.1054	0.08	0.02	
Mar-20	0.00	0.00	8.1054	0.00	0.00	
Total				65.13	27.56	4.23

9. Hon'ble Commission has observed that in respect of certain hydro and thermal stations, indicated in D-1 format, is showing the per unit cost higher / lower side compared to BESCOM and directed to furnish the reasons for the same.

In this regard, the following are submitted;

- In respect of '*Priyadarshini Jurala*', cost as per BESCOM is Rs.7.15 / unit and cost as per MESCOM is Rs.14.45 / unit. On a review, it is noticed that MESCOM has accounted the short supply penalty separately amount of Rs.5.84 Cr as income, without adjusting the same in the power purchase cost. If the same is excluded then the cost per unit will be on par with BESCOM.
- In respect of TBHE, provisionally an amount of Rs.0.52 Cr was considered for FY-19 since the actual bill was not received. In case, the actual bill received in Nov-19 is considered then the cost per unit works out to Rs.1.12 / unit.

Provisional amount considered in FY-19 : Rs.0.52 Cr.

Amount as per actual bill received in Nov-19: Rs.0.61 Cr.

- In respect of UPCL, MESCOM has again verified the ECR calculations for FY-19 and it is ascertained that the ECR parameters prescribed in CERC tariff regulations and in the provisions of PPA were applied appropriately. Thus the variable charges arrived so far FY-19 is Rs.3.87 / unit.
- In respect of KPCL bills, the claims of KPCL were considered as per truing up bill received at MESCOM on 19-08-2019.

b) Power Purchase for FY-21 (ARR):

1. As desired by the Hon'ble Commission, write up for the energy considered for FY-21, as furnished by PCKL, is enclosed as **Annexure-P-9**.
2. As desired by the Hon'ble Commission, statement showing the variable cost in the ascending order from different sources of power for FY-21 is furnished in **Annexure-P-10**.

4. As desired by the Hon'ble Commission, the details of capacity and quantum of energy to be procured from RE sources in FY-21 is given below.

Sl. No.	RE Sources	Commissioned Capacity in MW	Likely to be Commissioned Capacity in MW	Forecasted Energy (MU)	Total Cost (Cr)
1	Wind	149.35	-	266.23	95.31
2	Hydro	218.18	-	379.18	135.12
3	Co-Gen	52.71	-	106.27	55.37
4	Biomass	-	-	-	-
5	Municipal Solid Waste	-	-	-	-
6	Solar MW Projects	381.00	-	640.33	284.87
7	Solar SRTPV	24.65	-	4.18	3.00

5. Hon'ble Commission has desired MESCO to explain the methodology of forecasting the RE energy for FY-21.

In this regard, the following are submitted;

- Mini Hydel: No addition of MW considered for FY-21. Energy equivalent to the actuals of FY-19 is considered for FY-21 i.e. 348.08 MU. Further, in the month of May-19 a 24 MW of mini hydel project has been commissioned. Hence, 31.10 MU of additional energy is considered for FY-21.
- Wind Projects: No addition of MW considered for FY-21. Energy equivalent to the actuals of FY-19 is considered for FY-21 i.e. 266.23 MU.
- Co-gen plants: PCKL has estimated that 1285.06 Mu of co-gen energy will be available for FY-21. Hence, MESCO has considered 8.2699% of 1285.06 MU i.e. 106.27 MU for FY-21.
- Solar: No addition of MW considered for FY-21. Energy equivalent to the actuals of FY-19 is considered for FY-21 i.e. 409.92 MU. Further, in the month of Aug-19 & Nov-19 a 110 MW of mini hydel project has been commissioned. Hence, 234.59 MU of additional energy is considered for FY-21.

4. Distribution Losses for FY-19:

- a) Hon'ble Commission has directed to confirm whether the distribution loss of 10.52% for FY-19 included Open Access & wheeling consumption.

In this regard, it is to be submitted that the distribution loss of 10.52% computed for FY-19 does not include the energy handled in respect of open access and wheeling transactions.

In FY-19, the total quantum of energy handed in respect of open access and wheeling transactions are 110.45 MU and 217.05 MU, respectively. In case this quantum is considered then the distribution loss of MESCOM would stand at 9.93%.

- b) Hon'ble Commission has observed that the trajectory of reduction in distribution losses proposed for FY-20 and FY-21 is not adequate compared to the proposed capex.

In this regard, it is to be submitted that out of the total capex proposed for FY-20 and FY-21, the budget earmarked for improvement works is only Rs.100 Cr and Rs.250 Cr, respectively. Other capex works proposed may not have any effect in reduction of technical losses. Hence, the trajectory of reduction in distribution losses proposed for FY-20 and FY-21 appears to be acceptable.

- c) Hon'ble Commission has observed that MESCOM has indicated a transmission loss of 7.39% as against 3.161% claimed by KPTCL for FY-19.

In this regard, it is to be submitted that 7.39% loss indicated as 'transmission loss' is not actually the transmission loss. It is the difference between the energy at interface point and quantum of energy for which payment has been made by MESCOM in FY-19. In fact, it is the scheduled energy for which MESCOM has released the payment.

5. RPO Compliance:

Hon'ble Commission has directed to furnish the power purchased from Shimsha and Shivanasamudram separately, which is given below;

Shivanasamudram	: 43.19 MU
Shimsha Power House	: 14.15 MU
Total;	: 57.34 MU

6. Wheeling Charges fro FY-21:

Hon'ble Commission has observed that MESCO has considered 100% PLF for both conventional and RE sources.

In this regard, it is to be submitted that the example of 1 MW generation for RE source is symbolically taken to justify the impact. As only 10 hours of generation per day is considered then the PLF will be worked out 42%.

7. Cross-Subsidy Surcharge (CSS):

Hon'ble Commission has directed to submit the CSS applicable to LT categories also.

In this regard, it is to be submitted that as per the prevailing open access regulations, open access has been extended upto 1 MW consumers only. However, as directed by the Hon'ble Commission, CSS for LT-2a, LT-2b, LT-3 and LT-5 categories have been computed and indicated below;

Tariff Category	Average Tariff	Cost of Supply for LT category	Rs./Unit
			CSS for LT category
LT-2a	7.29	7.70	-
LT-2b	9.65	7.70	1.93
LT-3	10.32	7.70	2.06
LT-5	9.94	7.70	1.99

8. Observations on Revenue Expenditure / Revenue:

a. Operation and Maintenance Expenses:

Hon'ble Commission has directed to furnish the actual amount towards payment of arrears to tis employees on account of pay revision for FY-18 during FY-19, additional P&G trust contribution and actual employee cost incurred rung FY-19 excluding the arrears of pay revision and P&G trust contribution.

As desired, the following are submitted for kind needful.

- Details of pay revision arrears relating to FY-18 but paid in FY-19.

Total provision created in FY-18 accounts : Rs.47.94 Cr.
 Actual payment made in FY-19 : Rs.48.08 Cr.
 Short provision included in FY-19 : Rs. 0.14 Cr.

- Details of P&G trust contribution relating to FY-18 but paid in FY-19

Sl. No.	Particulars	Provision made in FY-18 accounts	Actual payment during FY-19	Short Provision
	P&G Trust contribution w.e.f. 01-04-2017			
1	a) Employees appointed prior to 01-04-2006	11.42	11.54	0.12
	b) Employees appointed after 01-04-2006	1.88	1.90	0.02
2	P&G Trust contribution due to revision of rates for FY-18 (No provision is created in FY-18 accounts for the arrears of FY-17	8.48	8.61	0.13
	Total	21.78	22.05	0.27

- Details of actual employee cost incurred during FY-19 excluding the arrears of pay revision and P&G trust contribution.

Sl. No.	Particulars	Rs.in Cr
1.	Total Employee cost as per audited accounts	392.40
2.	Less: Short provided for pay revision arrears	0.14
3.	Less: Short provided for terminal benefits	0.27
	Net employee cost for FY-19	391.99

b. As desired, the following details relating to terminal benefits are furnished;

Sl. No.	Particulars	Rs.in Cr.	
		Employees recruited prior to 31-03-2006	Employees recruited after 31-03-2006
1.	Contribution to P&G Trust		
a.	Actual contribution for FY-19 (excluding pay arrears)	39.60	12.37
b.	Actual contribution for pay arrears	11.54	1.90
c.	Contribution at revised rates for FY-17 as reconciled with P&G Trust	8.86	-
d.	Contribution at revised rates for FY-18 as reconciled with P&G Trust	8.61	-
e.	Provision created for contribution payable on OSL as on 31-03-2019	0.33	-
f.	Total contribution payable during FY-19	68.94	14.27
g.	Already provided in FY-18 accounts	19.92	1.88
h.	Net expenditure booked in FY-19 accounts	49.02	12.39
2.	PF Contribution	0.26	-
3.	Company contribution to NDCPS w.e.f. 01-04-2006	12.39	-
4.	Company contribution to NDCPS – Deputed employees	0.02	-
	Pension & leave contribution of deputed employees	0.11	-
Total terminal benefits for FY-19		61.80	12.39
		74.19	

Further, for FY-20 and FY-21, inflation related growth rate of 10.57% is grossed up for projecting the expenses as below;

Rs. In Cr.	
a. Actual Terminal Benefits for FY-19	74.19
b. Add: P&G Trust contribution arrears for FY-19 due to revision of rates	16.07
c. Total liability for FY-19	90.26
d. Projected Terminal Benefits for FY-20 (with 10.57% growth)	99.80
e. Less: P&G Trust contribution arrears for FY-19 due to revision of rates	16.07
f. Net liability for FY-20	83.73
g. Projected Terminal Benefits for FY-21 (with 10.57% growth)	92.57

c. As desired, it is to be submitted that the process of recruitment of about 700 employees is nearing completion and it is expected that by March-2020 the new employees will join the Company.

Further, it is to be submitted that the rates of Pension & Gratuity contribution has been revised to 57.30% and 6.08% with effect from 01-04-2017. The increase in contribution is by 14.77%. This increased percentage has been applied to the basic pay, DP & DA pertaining to the employees recruited before 31-03-2006 and have arrived the difference of contribution amount.

Basic pay : Rs.72.36 Cr.
DP : Rs. 32.77 Cr.
DA : Rs. 3.68 Cr.
Total : Rs. 108.81 Cr.
14.77% of above is Rs.16.07 Cr.

d. Administrative & General Expenses:

Hon'ble Commission has directed to explain the reasons of huge expenses under the above head.

In this regard, it is to be submitted that number of installations has been increased by 85544 numbers when compared to previous years, once new zonal office at Shimoga started operation during FY-19 and two new sub divisions & 8 new section offices are formed during FY-19. These factors have contributed to higher A&G expenses.

e. Fuel cost adjustment charges:

As desired by the Hon'ble Commission the following details are furnished;

Qtr.	Sales (MU)	Approved FAC rate	FAC amount demanded
1 st	-	-	-
2 nd	-	-	-
3 rd	1185.99	4 paise / unit	Rs.4.77 Cr
4 th	-	-	-
Total	1185.99	-	Rs.4.77 Cr

g. Hon'ble Commission has directed to explain the rationale for proposing higher demand charges and reduction in energy charges in respect of HT industrial category.

In this regard, it is to be submitted that the rationale for the above is detailed in the Chapter-10 'New Proposals' in the filing.

h. Tariff Subsidy to IP set installations for FY-21:

As desired by the Hon'ble Commission, it is to be submitted that in the Tariff Order 2019 Commission Determined Tariff for LT-4a category is Rs.5.51 / unit against the average cost of supply of Rs.7.13/ unit. Thus, cross subsidization factor in the Commission Determined Tariff for the category is Rs.1.62 / unit. Further, as per MESCOM proposal for FY-21 the average cost of supply is Rs.7.60 / unit. MESCOM has considered a reduction of 10 paise in the cross subsidization factor with reference to FY-20 i.e, cross subsidization factor considered for FY-21 is Rs.1.52 / unit. Accordingly, tariff of Rs.6.08 / unit is proposed for LT-4a category.

i. Demand, Collection and Balance (DCB) for FY-19:

As desired by the Hon'ble Commission, DCB statement for FY-19 as in the format for FY-19 accounts is annexed as **Annexure-P-11(a) & 11(b)**.

Additional Proposal:

In the GOK order dated 16-11-2019, the royalty charges for all Hydro generating station of KPCL except ALmatti Dam Power House has been revised from the prevailing 4 paise / unit to 20 paise per unit w.e.f. from 01-04-2019.

In the PCKL letter No.PCKL/A12/119/2010-11/V-9/4898-907/Dt.18-12-2019 it has been informed that in the projection given for FY-21 the above stated revision of Royalty Charges has not been factored. As per PCKL computations liability for MESCOM would be Rs.23.39 Cr for FY-18 and FY-19.

Hon'ble Commission is humbly requested to consider the above additional liability while finalizing the MESCOM tariff proposal.

Copy of PCKL letter enclosed as **Annexure-P-12**.