CHAPTER - 4

ANNUAL PERFORMANCE REVIEW FOR FY19

4.0 MESCOM's Application for APR for FY19:

The MESCOM has filed its application on 28.11.2019 for Annual Performance Review (APR) of FY19 based on the Audited Accounts and for revision of the Annual Revenue Requirement (ARR) along with revision of retail supply tariff for FY21.

The Commission had communicated its preliminary observations on the application of the MESCOM on 12th December, 2019. The MESCOM has furnished its replies to the preliminary observations of the Commission, vide its response dated, 26th December, 2019.

The Commission, in its Tariff Order dated 14th May, 2018, had approved MESCOM's revised Annual Revenue Requirement (ARR) of Rs.3245.70 Crores along with the revision of retail supply tariff for FY19.

The revised Annual Revenue Requirement (ARR) of the MESCOM as per annual performance review for FY19, based on the Audited accounts, is discussed in this chapter.

4.1 MESCOM's Submission:

The MESCOM has submitted its proposals for revision of ARR under APR for FY19 as under:

TABLE – 4.1

APR for FY19 – MESCOM's Submission

Amount in Rs. Crores

SI. No	Particulars	As Filed
1	Energy at the Generation Bus – in MU	5,981.66
2	Transmission Losses - in %	7.39%
3	Energy at Interface - in MU	5539.73
4	Distribution Losses in %	10.52%
	Sales in MU:	
5	Sales to other than IP SETS & BJ/KJ including sales to MSEZ & KPCL	3288.69

SI. No	Particulars	As Filed
6	Sales to BJ/KJ(consuming<40 units/month.)	37.29
7	Sales to IP SETS	1630.90
	Total Sales (MU)	4956.88
	Revenue at existing tariff in Rs. Crores	
8	Revenue from tariff and Misc. Charges	2457.68
9	RE Subsidy to BJ/KJ	27.24
10	RE Subsidy to IP SETS	867.33
	Total Existing Revenue	3352.25
	Expenditure in Rs. Crores	
11	Power Purchase Cost	1994.99
12	Transmission charges of KPTCL	226.15
13	SLDC Charges	1.90
14	Total Power Purchase Cost	2223.04
15	Employee Cost	392.40
16	Repairs & Maintenance	59.14
17	Administration & General Expenses	106.84
18	Total O&M Expenses	558.38
19	Depreciation	125.69
20	Interest & Finance charges	
21	Interest on Loans	67.79
22	Interest on Working capital	49.99
23	Interest on belated payment on PP Cost	0.00
24	Interest on consumer deposits	34.15
25	Other Interest & Finance charges	1.84
26	Less: interest and other expenditure capitalized	-2.10
27	Total Interest & Finance charges	151.67
28	Other Debits/Extraordinary items	55.02
29	Net Prior Period Expenses/Income (Debit/Credit)	0.00
30	Return on Equity	92.55
31	Taxation/MAT Credit	0.16
32	Funds towards Consumer Relations/Consumer Education	0.39
33	Other Income	-75.84
34	Net ARR	3131.06
35	Revenue Surplus	221.19

Considering the revenue of Rs.3352.25 Crores against net ARR of Rs.3131.06 Crores, MESCOM has reported a revenue surplus of Rs.221.19 Crores for FY19.

4.2 MESCOM's Financial Performance as per the Audited Accounts for FY19:

Karnataka Electricity Regulatory Commission

An overview of the financial performance of MESCOM for FY19, as per its Audited Accounts is indicated in the following Table:

TABLE - 4.2 Financial Performance of MESCOM for FY19

Amount in Rs. Crores SI. No. **Particulars FY19 Receipts** Revenue from Tariff and misc. charges 3316.86 2 111.24 Other income Total Revenue 3428.10 **Expenditure** 3 Power Purchase Cost 1839.45 Transmission charges of KPTCL, PGCIL & TNEB 381.69 5 SLDC & DSM(UI) Charges 1.90 Power Purchase Cost including transmission 2223.04 charges Operating Expenses 59.14 6 Employee Cost & Benefit Expenses 7 392.40 8 Finance Cost 98.50 9 Depreciation 125.69 10 Other Expenses 159.80 11 Current Tax 12.09 12 MAT Credit Entitlement (-)11.9213 **Exceptional Items** 36.60 Net movement of Regulatory deferred 14 276.38 amount 3371.71 Net AR **Net Profit** 56.39

As per the Audited Accounts, MESCOM has indicated a net profit of Rs.56.39 Crores for FY19. The profit / loss reported by MESCOM in its audited accounts in the previous years are as follows:

TABLE - 4.3 MESCOM's Accumulated Profit / Loss

Particulars	Amount in Rs. Crores
Accumulated Profits upto FY15	85.57
Profits earned in FY16	11.11
Profits earned in FY17 (Adjusted)	3.33
Profits earned in FY18	31.42
Restated Balance at the end of FY18	251.64
Profit earned in FY19	56.39
Accumulated Balance of profit as at the	
end of FY19	308.03

As seen from the above table, the accumulated profit is Rs.308.03 Crores as at the end of FY19.

Commission's analysis and decision on APR for FY19:

As per the provisions of the MYT Regulations, the Commission has taken up the Annual Performance Review for FY19, duly considering the actual revenue and expenditure booked as per the Audited Accounts against the revenue and expenditure approved by the Commission in its Tariff Order dated 14th May, 2018. The item-wise review of expenditure and the revenue and the decisions of the Commission thereon are as discussed in the following paragraphs:

4.2.1 Sales for FY19:

A. Sales-Other than IP sets

The Commission's observations on sales for FY19 and MESCOM's Reply thereon are discussed below:

I. Data inconsistency

 At page 21 & 22 of the APR filing / Chapter – 4, the category-wise actual sales for some of the categories indicated for FY18 is not the same as approved by the Commission, in the Tariff Order 2019 dated 30.05.2019.
 The figures shall be reconciled with that of Tariff Order, 2019.

MESCOM replies:

- a. LT-2a: In the present filing MESCOM has furnished break up of Domestic Consumption, BJ/KJ consuming less than or equal to 40 units & KPCL separately, which sums up to 1351.30 MU as approved in Tariff Order 2019.
- b. LT-2b, LT-6 WS & St. Lt, HT-3 & HT-4.: There is only decimal difference, which is not traceable.
- c. LT-4a: The Commission had disallowed 144.17 MU of consumption in this category. But as per DCB it is 1661.64 MU only.

In view of the above, MESCOM has stated that there is no inconsistency in the above data.

2. In D-2 format for FY19, the number of HT 2(a) installations as approved should be 905 and not 904 as indicated.

MESCOM replies:

The HT-2a installations in the current filing includes MSEZ and therefore there is a difference of one installation.

3. The actual HT-2a number of installations in D2 format for FY19 is indicated as 890 numbers, whereas at page 66 in the Table, it is indicated as 891 numbers. The actual number of HT-2a installations for FY19 shall be reconciled.

MESCOM replies:

At page No. 66 the HT-2a installations includes MSEZ, whereas in D-2 format it is shown separately.

4. At page 66, the total number of HT-installations should be 2276 and not 2275. This shall be rectified.

MESCOM replies:

At page 66, the total should be 2277, including MSEZ and there is an inadvertent error.

5. The revised HT-2a number of installations in D2 format for FY21 is indicated as 1012 numbers, whereas at page 67 in the Table, it is indicated as 1013 numbers. MESCOM shall reconcile the figures.

MESCOM replies:

At page No. 67 the HT-2a installations includes MSEZ, whereas in D-2 format it is shown separately.

6. At Page 68, the actual BJ/KJ sales for FY19, approved & revised sales for 20, for less than 40 units and more than 40 units/month is interchanged.

Similar mistake is noticed for FY21 at page 69 and also in the number of installations indicated at page 66 & 68. This shall be rectified.

MESCOM replies:

There is an inadvertent error in the above tables and is corrected appropriately.

7. MESCOM, in D-2 format has considered total sales of 5596.19 MU, whereas in D-21 format the total sales are indicated as 5593.31 MU. The sales to KPCL of 2.88 MU, which was included in LT-2a category last year, is left out. MESCOM shall reconcile the same.

MESCOM replies:

There is an inadvertent error. The Commission may consider the energy sales of LT-2a (ii) in D-21 as 677.45 MU and total sales as 5596.19 MU.

The Commission has noted the above replies furnished by MESCOM and has retained the sales data as approved in its Tariff Order dated 14th May, 2018 for APR analysis.

II. Annual Performance Review of Sales for FY19:

a. The Commission in its Tariff Order 2018, dated 14.05.2018, had approved total sales to various consumer categories at 4729.22 MU, as against the MESCOM's proposal of 5022.23 MU, excluding the sales of 45.32 MU to MSEZ and 5.89 MU to KPCL. The actual sales of MESCOM, as per the current APR filing [D-2 FORMAT], is 4912.06 MU indicating an increase in sales to an extent of 182.84 MU, as compared with the approved sales. There is increase in sales of 176.09 MU in LT-categories and a marginal increase of 6.75 MU in HT-categories. It is noted that, as against approved sales [excluding KPCL sales and supply to SEZ] of 3314.91 MU to the categories other than the BJ/KJ and IP sets, the actual sales achieved by MESCOM is 3243.87 MU, resulting in the reduction of sales to these categories by 71.04 MU. Further, MESCOM has sold 1668.19 MU to BJ/KJ and IP set consumers as against approved sales of 1414.31 MU resulting in increased sales to these categories by 253.88 MU.

b. The category-wise sales approved by Commission and the actuals for FY19 are indicated in the table below:

TABLE - 4.4
Category-wise Sales Approved Vs Actuals for FY19

Energy In MU Actuals** Difference Tariff Approved** **Energy in** (MU) Category **Consumer Category Energy in MU** Col-5= Col MU Col-1 Col-3 Col-4 4 - Col 3 LT-2a* Domestic / AEH 1421.06 1374.06 -47.00 Pvt. Educational 14.80 -1.18 13.62 LT-2b Institutions 375.73 370.30 -5.43 Commercial LT-3 IP >10 HP LT-4b 1.81 0.85 -0.96 Pvt. Nurseries, Coffee & 9.69 6.91 -2.78 LT-4c Tea LT-5 LT Industries 143.13 133.95 -9.18 131.39 123.02 -8.37 LT-6 Water Supply 73.72 -3.90 LT-6 Public Lighting 69.82 LT-7 Temporary Supply 19.40 20.41 1.01 Water Supply & Sewerage 90.54 97.81 HT-1 7.27 HT-2a Industrial 616.09 624.76 8.67 HT-2b Commercial 198.66 200.43 1.77 Govt./Aided Hospital & 172.35 144.58 -27.77 HT-2c HT-3a Lift Irrigation & Agriculture 19.93 41.20 21.27 Residential Apartment, 21.11 20.42 -0.69 HT-4 Colonies HT-5 Temporary supply 5.50 1.73 -3.77 Sub total 3314.91 3243.87 -71.04 BJ/KJ L†1 33.23 37.29 4.06 IP Set 10 HP & below 1381.08 1630.90 249.82 LT4(a) Sub total 1414.31 1668.19 253.88 4729.22 **Grand Total** 4912.06 182.84

c. The Commission noted that the major categories contributing to the reduction in sales with respect to the estimate are LT-2a & HT-2c and increase in sales is in IP –set consumption and HT-3 category. The IP set consumption is discussed separately, in the subsequent paragraphs.

The MESCOM, has compared the sales of FY19 with respect to FY18 sales in most of the cases and has not compared with the sales estimates approved by the Commission. Further, for LT-2a, HT-1, HT-2a, HT2b and HT-2c, no analysis is furnished. **MESCOM shall provide**

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

^{**}Excludes sale to KPCL and SEZ.

analysis for the above categories explaining the reasons for variations, if any.

Regarding LT-2a and LT-2c, the MESCOM shall explain the reasons for reduction in sales.

MESCOM in its replies has submitted that reduction in sales to LT-2a category and HT-2c categories is due to declining growth rate since FY15 and FY17 respectively.

The Commission has taken note of the replies furnished by MESCOM.

d. The Commission, in its Tariff Order had considered wheeled energy at 81.21 MU for FY19. MESCOM in its D-2 Format of the filing, has not indicated any wheeled energy for FY19 as per the actuals. MESCOM shall furnish the same for the purpose of computation of distribution network losses.

MESCOM in its replies, has submitted that the energy handled for open access and wheeling is 110.45 MU and 217.05 MU respectively and considering the above quantum the distribution losses would be 9.93%.

B. Sales to IP sets - APR for FY19:

- i. In its Tariff Order dated 14th May, 2018, the Commission had approved a specific consumption of IP-sets as 4,447 units / installation / annum for FY19, whereas, as per the data of IP-set consumption submitted by the MESCOM, in its Tariff filing for APR of FY19, the specific consumption works out to 5,159 units / installation / annum, which indicates an increase in the specific consumption by 712 units / installation / annum, as compared with the approved figures. This actually corresponds to an increase by 16%.
- ii. The total IP-set consumption reported by the MESCOM for the FY19 in the prescribed formats of the Commission, for assessment of sales to IP sets, vide e-mail dated 20.11.2019 is 1631.16 MU, whereas the same is indicated as 1,630.90 MU in MESCOM's audited accounts and also in the tariff application filed before the Commission. The Commission had

approved 1,381.08 MU for FY19, in its Order dated 14th May, 2018. Thus, there is an increase of overall sales by 249.82 MU which corresponds to 18.09 per cent increase in percentage terms. The replies furnished by MESCOM on the observation of the Commission, in this regard, are vague and not clear.

iii. Further, the Commission had approved 3,17,045 as the number of IP-set installations for FY19; whereas the actual number of installations serviced as reported by the MESCOM in its Tariff filing is 3,26,187. This indicates an increase in number of installations by 9,142 and this corresponds to 2.88 per cent increase in the number of installations as compared to number of installations approved for the FY19.

The details of sales to IP sets for FY19, as approved by the Commission in its tariff order 2018 and as furnished by MESCOM, in its current Tariff Filing for FY21 are as indicated below (FY19 approved Vs Actuals);

Particulars	As approved by the Commission	Actuals as submitted by MESCOM
Number of installations	3,17,045	3,26,187
Mid-year number of installations	3,10,566	3,16,120
Specific consumption in units / installation / annum in units	4,447	5,159
Sales in MU	1,381.08	1,630.90

v. The Commission, in its preliminary observations had directed MESCOM to furnish the reasons for the difference in number of IP Set installations as per GPS survey and the IP set assessment data submitted, and also the action taken to reconcile the number of IP Sets installations with the DCB figures. In its reply, MESCOM has stated that, comparing the difference in number of IP Set installations as per GPS survey as on 31.03.2019 and the list of number of IP sets given to the agency for survey two years ago is not appropriate, since the contract was closed on 31.03.2019. Thus, the contractor could not have gone into the survey of the remaining IP sets. It is also submitted that directions have been issued to the jurisdictional Executive Engineers to complete the

- survey of the newly serviced IP installations through their Sub divisional level Officers.
- v. The GPS survey data furnished by MESCOM is ambiguous and not acceptable. The Commission notes with displeasure that, MESCOM has not taken any stringent action to complete the work and submit the reliable data. MESCOM, has failed to report the precise details of actual number of IP Sets installations existing in the field, working IP sets, permanently disconnected IP sets in respect of both the authorized and unauthorized categories, action taken to regularize the unauthorized IP sets etc., and the action taken to reconcile the data of the GPS survey with the DCB figures.
- vi. The Commission hereby finally directs MESCOM to complete the survey at the earliest and submit the details without any ambiguity in the data of total number of IP sets existing, defunct / dried up etc., within 3 months from the date of this Order. If the data is not received in time, the Commission would restrict the sales to IP sets for FY20, on the data of GPS survey received during the Tariff Filing for APR FY19 and revision of ARR of FY21 and would pass orders accordingly.
- vii. The summary of the data on assessment of consumption of IP sets, as per the submissions made by MESCOM is as follows;

TABLE - 4.5
Assessment of IP sets consumption by MESCOM

SI. No.	Month	No of Pilot DTCs	No of Meters working in Pilot DTCs	No. of IP sets in the Pilot DTCs	No of DTCs where consum -ption is >850 units per month	No of DTCs where consum ption is <250 units	Highest Consu mption Units / IP / Month	Lowest Consu mption Units / IP / Month
1	Apr-18	904	730	7835	199	220	8381	50
2	May-18	904	589	6125	175	156	5816	51
3	Jun-18	904	596	6172	56	266	7302	52
4	Jul-18	904	487	5108	14	352	7204	52
5	Aug-18	904	501	5198	35	330	3892	25
6	Sep-18	904	491	5039	48	285	3075	51
7	Oct-18	904	559	5929	94	270	8023	50
8	Nov-18	904	586	6067	80	308	5233	44
9	Dec-18	904	599	6269	136	232	12074	6
10	Jan-19	904	654	7109	203	166	10022	50
11	Feb-19	904	693	7463	273	173	11279	50
12	Mar-19	904	778	8588	296	191	6036	42

- viii. As per the actual IP sets consumption data submitted by MESCOM for FY19, the average consumption per IP set per month is 429.92 units (rounded off 430 units). The Commission notes that, the DTCs where the average consumption is more than 850 units per month per IP set and more than the approved values is varying from 14 number of DTCs in the month of July 2018 (monsoon) to 296 Nos of DTCs in the month of March 2019 (summer) and also has taken note of the DTCs where the subnormal consumption is recorded. Based on these observations, MESCOM was directed to submit the assessed consumption by IP sets for FY19, duly furnishing clarity on the data.
- ix. In its preliminary observations, the Commission had directed MESCOM to justify the IP-set consumption of 1631.16 MU (it is 1,630.90 MU as per DCB statement and accounts) for FY19 with necessary data to justify the same, including the month-wise sample meters' consumption of DTCs duly indicating the initial and final readings with multiplying constants of such sample meters.
- x. But the replies furnished by MESCOM in this regard are vague and unrealistic and instead of submitting the revised calculations, MESCOM has requested the Commission to consider the data submitted in respect of the sales to IP sets.
- xi. The average consumption per IP set per month as detailed in para (viii) works out to 430 units per IP set per month. It is the average of the entire year covering monsoon, winter and summer periods. On an average, if 2.5 times the consumption is expected during summer, the average consumption per IP set per month works to 1080 units.
- xii. The Commission, in its previous Tariff Orders, had directed MESCOM to submit the monthly IP-set consumption by considering the meter readings of individual IP-set installations which were said to be metered. MESCOM was also directed not to assess the IP-set consumption as per the meter readings of sample DTCs feeding predominantly IP-set loads. MESCOM has not completed the

bifurcation of agricultural feeders under NJY scheme or any other schemes. However, the MESCOM, in its Tariff application, did not submit the IP-set data based either on the meter readings of individual IP sets or based on the consumption recorded in energy meters provided to the bifurcated agriculture feeders. Instead, MESCOM had submitted the abstracts of the IP- sets' consumption, based on the meter readings of sample DTCs supplying predominantly to IP set installations. As per the data of such readings, it is seen that, only 53% to 86% of the energy meters provided to sample DTCs (predominantly feeding to IP Sets) are functioning and assessment based on such inadequate number of sample meters will lead to data inaccuracy. This also indicates that MESCOM has not taken any measures to rectify the defective meters despite specific directions in the previous Tariff Orders in the matter and it has also not given any attention to the matter it deserves. Further, the Commission notes that there is abnormal consumption in 296 (33%) of the sample meters.

- xiii. In view of the above discussions, the Commission is of the view that the assessment of IP Set consumption shall be based on the data of the energy meters provided to DTCs predominantly feeding to IP sets, whose average consumption per month shall be moderately in the acceptable range i.e., 1,080 units / IP Set / month as explained in (xi) above. It is not proper and correct to arrive at the consumption by considering the data of the DTCs where abnormal specific consumption is indicated. Hence, the Commission has considered the actual consumption recorded in the DTC meters where the average is less than 1080 units / IP set / month and limited the consumption to 1080 units per IP set per month where the consumption recorded in the meters by DTCs is more than 1080 units.
- xiv. Thus, the Commission is unable to accept the assessed IP set energy consumption arrived at by the MESCOM, in its initial filing, as well the submissions made subsequently. The Commission has considered revision of the data of sample meters with reference to the DTCs,

which have recorded abnormal consumptions as compared to 1,080 units / IP / month, in order to arrive at the sales to IP sets and specific consumption for FY19. Since, the size of the sample after limiting of abnormally high recording DTCs is reduced significantly, the Commission has considered addition of 10% energy to account for sampling error. The computation of the revised IP sets energy consumption is as indicated below:

Revised Specific Consumption for FY19

SI.	Particulars	As computed by the Commission		
No.	raniculais	For FY18	For FY19	
1	No of installations	3,06,053	3,26,187	
2	Mid-year No of installations		3,16,120	
3	Extrapolated sales w/r sampling meters without addition towards sampling error-MU by limiting the abnormally recorded DTC to 1,080 units / IP/ month.		1,343.19	
4	Specific consumption in units / installation / annum		4,249	

Revised Sales to IP sets by adding 10% Error margin

SI	Particulars	As computed by the Commission			
No	raniculais	For FY18	For FY19		
1	Specific consumption in units / installation /		4674		
	annum				
2	No of installations	3,06,053	3,26,187		
3	Mid-year No of installations		3,16,120		
4	Total Sales in MU=1x3		1,477.50		

Details of month-wise consumption considered for computing the Specific Consumption is as follows:

TABLE - 4.6 Month-wise Consumption in MESCOM

Month	No of IP sets as per DCB at the end of each month	Total IP set consumption (MU) as submitted by MESCOM	Total IP set consumption (MU) as computed by the Commission	Difference in IP-set consumption (MU)
Apr-18	307619	189.42	153.45	35.97
May-18	309185	164.16	142.24	21.92
Jun-18	310545	97.28	89.9	7.38
Jul-18	311966	55.66	53.27	2.39
Aug-18	313289	58.52	55.17	3.35
Sep-18	314576	78.87	74.74	4.13
Oct-18	316246	108.76	84.68	24.08
Nov-18	317142	106.58	89.52	17.06
Dec-18	318321	149.88	129.56	20.32
Jan-19	320333	171.13	145.33	25.8
Feb-19	322421	221.26	159.6	61.66
Mar-19	326187	229.64	165.73	63.91
Total		1631.16	1343.19	287.97
Sales to IF	sets to be Appro	1,477.50*	153.66	

^{*} By adding a sampling error margin of 10%.

Based on the above computation, the Commission hereby approves 1,477.50 MU of energy, as sales to the IP sets for FY19. Considering the IP set consumption of 1630.90 MU as per audited accounts, the Commission disallows 153.40 (1630.90 – 1477.50) MU of energy in the sales as claimed by MESCOM for FY19.

In the light of the above discussions, the Commission hereby approves energy sales for FY19 as indicated in the following table, including sales of 2.88 MU to KPCL and excluding wheeled energy and sales to MSEZ:

Category-Wise Sales Approved for FY-19 as APR

Tariff Category	Consumer Category	Energy in MU
LT-2a*	Domestic / AEH	1376.94
LT-2b	Pvt. Educational Institutions	13.62
LT-3	Commercial	370.30
LT-4b	IP > 10 HP	0.85
LT-4c	Pvt. Nurseries, Coffee & Tea	6.92
LT-5	LT Industries	133.94
LT-6	Water Supply	123.02
LT-6	Public Lighting	69.82
LT-7	Temporary Supply	20.41
	LT total	2115.82
HT-1	Water Supply & Sewerage	97.81
HT-2a	Industrial	624.76
HT-2b	Commercial	200.43
HT-2c	Govt./Aided Hospital & Edu.	144.58
HT-3a & b	Lift Irrigation & Agriculture	41.20
HT-4	Residential Apartment, Colonies	20.42
HT-5	Temporary Supply	1.73
	HT Total	1130.93
	Total of LT & HT	3246.75
LT 1	BJ/KJ installations	37.29
LT 4(a)	IP sets of 10 HP & below	1477.50
	Sub total of BJ/KJ & IP Sets	1514.79
	Grand total**	4761.54

^{*}Including BJ/KJ installations consuming more than 40 units/month and 2.88 MU of sales to KPCL.

In addition to the above, sales to MSEZ at the interface point of 41.94 MU is also approved. Thus, the total sales approved including sales to MSEZ for FY19 is 4803.48 MU.

4.2.2 Power Purchase for FY19:

MESCOM's Submission:

MESCOM, in its application for Annual Performance Review (APR) for FY19, has submitted the details of actual power purchase made during FY19. As per the details, MESCOM has purchased 5981.65 MU at a cost of Rs.2223.04 Crores for FY19.

^{**}Excludes sale to MSEZ

The following table indicates the source wise power purchased during FY19 as per D - 1 statement with costs:

TABLE - 4.7

Power Purchase for FY19 – Actuals as per filing - MESCOM's Submission

		Actu	als as per	filing
SI. No	Source	Energy in MU	Amount in Cr	Avg. cost in Rs
1	2	6	7	8
1	KPCL_Thermal	223.08	148.08	6.64
2	KPCL_Hydel	2383.51	193.03	0.81
3	CGS:	1559.01	645.08	4.14
4	Bundled Power	309.28	125.64	4.06
5	Udupi Power Corporation Limited_UPCL	234.42	145.59	6.21
6	Other_Hydel:	13.53	12.26	9.06
7	RE Projects including Medium -Term Co- Gen.	1166.01	500.50	4.29
8	Short Term	120.73	50.42	4.18
9	UI Charges	-4.43	1.49	3.36
10	Energy Balancing - including Hydel Energy	41.64	41.64	10.00
11	Energy Sales (Overarching / IEX)	-65.13	-27.56	4.23
12	PGCIL PoC Charges		156.50	
13	POSOCO Charges		0.23	
14	KPTCL Transmission Charges		226.15	
15	SLDC Charges		1.90	
16	Other Charges		2.09	
17	GRAND TOTAL:	5981.65	2223.04	3.72

Commission's analysis and decisions:

The Commission, in its Tariff Order dated 14th May, 2018 had approved power purchase quantum of 5533.28 MU at a cost of Rs.1867.02 Crores, for FY19 against which, the actual power purchase for FY19, as submitted by MESCOM is 5981.65 MU at a cost of Rs.2223.04 Crores.

The Statement of power purchase quantum and costs as per audited accounts and approved is as detailed below:

TABLE - 4.8 Power Purchase for FY19 – Approved V/s Actuals

Amount in Rs.Crores

		KERC Approved for 2018-19			Actuals as per filing			Difference		
SI. No.	Source	Energy in MU	Amount in Cr	Avg. cost in Rs	Energy in MU	Amount in Cr	Avg cost in Rs	Energy in MU (6-3)	Amount in Cr (7-4)	Avg cost in Rupees (85)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL Hydro	2139.07	173.99	0.81	2383.49	193.05	0.81	244.42	19.06	0.00
2	KPCL Thermal	306.17	133.07	4.35	223.08	148.07	6.64	-83.09	15.00	2.29
3	CGS	1576.89	586.16	3.72	1559.01	645.08	4.14	-17.88	58.92	0.42
4	Bundled power	215.85	71.64	3.32	309.28	125.64	4.06	93.43	54.00	0.74
5	UPCL	322.18	153.36	4.76	234.42	145.59	6.21	-87.76	-7.77	1.45
6	RE projects	747.11	299.58	4.01	1026.93	435.74	4.24	279.82	136.16	0.23
7	Other Hydro	24.65	9.29	3.77	8.12	11.73	14.45	-16.53	2.44	10.68
8	Short term and medium term	201.37	87.95	4.37	259.81	115.18	4.43	58.44	27.23	0.07
9	KPTCL transmission charges		224.37			226.15		0.00	1 <i>.7</i> 8	0.00
10	SLDC charges		2.09					0.00	-2.09	0.00
11	Tangedco, Posoco etc.		0.18					0.00	-0.18	0.00
12	ENERGY Balancing				41.64	41.64	10.00	41.64	41.64	10.00
13	Inter Escom energy charges							0.00	0.00	0.00
14	PGCIL Charges		125.34			155.51		0.00	30.17	0.00
15	TNEB					0.04		0.00	0.04	0.00
16	UI Charges				-3.68	1.53		-3.68	1.53	0.00
17	IEX and other charges				-60.45	-22.87		-60.45	-22.87	0.00
18	Grand total	5533.28	1867.02	3.37	5981.65	2223.04	3.72	448.37	356.02	0.34

⁽⁺⁾ indicate excess over approved values.

As per the actuals for FY19 vis-à-vis the approved figures, there is increase in the quantum of power purchased to an extent of 448.37 MU and the cost has increased by Rs.356.02 Crores.

1. The analysis of the source-wise approved and actual power purchases is indicated in the following Table:

TABLE - 4.9
Power Purchase for FY19 from Major Sources

	Source	KERC Approved for 2018-19			Actuals as per filing			Difference		
SI. No.		Energy in MU	Amount in Cr	Avg. cost in Rs	Energy in MU	Amount in Cr	Avg. cost in Rs	Energy in MU (6-3)	Amount in Cr (7-4)	Avg. cost in Rupees (8-5)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL Hydro	2139.07	173.99	0.81	2383.49	193.05	0.81	244.42	19.06	0
2	KPCL Thermal	306.17	133.07	4.35	223.08	148.07	6.64	-83.09	15.00	2.29
3	CGS	1576.89	586.16	3.72	1559.01	645.08	4.14	-17.88	58.92	0.42
4	UPCL	322.18	153.36	4.76	234.42	145.59	6.21	-87.76	-7.77	1.45
5	RE projects	747.11	299.58	4.01	1026.93	435.74	4.24	279.82	136.16	0.23

- 2. It is seen from the above table that while the RE energy and KPCL Hydro energy procured is more than the approved quantities, the procurement from KPCL thermal, CGS and UPCL is lower than the approved quantum.
- 3. As per the actual power purchase cost, there is overall increase in the per unit cost of energy purchased due to the following:
 - a) While approving the ARR for FY19, the power from the new thermal projects viz. BTPS Unit-3 and YTPS was considered as infirm power. However, due to declaration of Commercial Operation of these thermal plants during FY19 and consequent payment of fixed charges, the actual cost per unit of energy has increased;
 - b) Increase in power purchase quantum, change in the source-wise mix of supply and the energy balancing during reconciliation of energy and reconciliation of cost among ESCOMs;
 - c) Payment of additional PGCIL transmission charges of Rs.30.17 Crores from the MESCOM towards PoC charges, over and above approved amount.
 - It is worthwhile to note here that, as the State was paying abnormally high POC charges to PGCIL, the Commission, in its Tariff Order dated 30th May, 2019 had directed MESCOM to take appropriate action immediately, to resolve the issues of payment of abnormally high PoC

charges with the appropriate authorities. The ESCOMs/PCKL were required to constitute a dedicated team, to study the pros and cons of any methodologies/amendments proposed to PGCIL's Transmission tariff or in any such other relevant matters, and to effectively communicate the same to the concerned authorities, at the draft stage itself

In response to the above directions, the MESCOM has stated that the CERC had framed Draft CERC (Sharing of Inter State Transmission Charges and Losses) Regulation and has invited the comments/suggestions and that the KPTCL had constituted a Coordination Committee and comments/suggestion have been submitted to the CERC. Once this is finalized, the transmission charges of PGCIL are likely to be reduced.

The Commission notes that, CERC has issued the final notification on CERC (Sharing of Inter State Transmission Charges and Losses) Regulations. Hence, the Commission directs the KPTCL/ESCOMs to settle the PGCIL charges as per the CERC Regulations and intimate the same.

- 4. In view of the above reasons, the per unit average power purchase cost has increased to Rs.3.72 per kWh, as against the approved rate of Rs.3.37 per kWh.
- 5. The Commission notes that, KPTCL is issuing regular bills to ESCOMs under ABT mechanism and none of the ESCOMs are making payments as per the above bills. Hence, the Commission directs the ESCOMs to take immediate action to make payments as per the bills raised by the KPTCL. Further, KPTCL and ESCOMs shall host the details of implementation of ABT thereof, on their respective websites.
- 6. The Commission in its preliminary observations had observed that, the per unit cost paid to some of the generating Stations of the State, Central and IPPs, including Hydel, Thermal and RE sources, as indicated in the D-1 Format, is on a higher side, as compared to with the per unit cost paid by the BESCOM. The Commission directs the MESCOM to examine the same in detail and recover excess payments, if any, from the generators, under

intimation to the Commission, duly explaining the reasons for the increased per unit cost.

MESCOM in its replies has submitted as follows:

- a. In case of Jurala Project, the MESCOM has accounted short supply penalty amount of Rs.5.84 Crores as income, without adjusting the same in the power purchase cost.
- b. In case of TBHE against the estimate of Rs.0.52 Crores, the actual cost is Rs.0.61 Crores based on actual per unit cost of Rs.1.12 per unit.
- c. In case of UPCL, MESCOM has submitted that it has verified and ascertained that the variable charges are computed considering the parameters as specified in the CERC Regulations, resulting in the variables charges of Rs.3.87 per unit.
- d. The claims of KPCL as per the truing up bills received by MESCOM on 19.08.2019 has been considered.

The Commission notes that, the ESCOMs are adopting different approaches while computing the per unit fixed and variable cost of generation. Hence the ESCOMs are directed to have a common approach while computing the power purchase cost so as to ensure that the payments to the generators are regulated properly and that the per unit cost across the ESCOMs is uniform/ comparable.

In view of the above facts, the Commission hereby decides to approve the actual power purchases of 5981.65 MU at a cost of Rs.2223.04 Crores, for the purpose of Annual Performance Review for FY19.

4.2.3 RPO Compliance for FY19:

MESCOM, in its filings, has filed the details of RPO compliance for non-solar and solar RPO for 2018-19, as indicated below:

TABLE - 4.10
Non-Solar RPO: Compliance

SI. No.	Particulars	Quantum (MU)	Cost (Rs. in Cr.)
1	Total power purchase quantum from all sources excluding Hydro-energy	3566.50	1999.64
2	Non-Solar RE purchased under PPA route at Generic Tariff including Non- Solar RE purchased from KPCL	756.09	283.05
3	Less: Non-Solar RE purchased at APPC	-	-
4	Less: Non-Solar RE (Green Energy) sold to consumers	-12.02	0.60
5	Non-Solar RE purchased from other ESCOMs	-	-
6	Less: Non-Solar RE sold to other ESCOMs	-	-
7	Banked non-solar RE purchased @ 85% of Generic Tariff.	-	-
8	Total Non-Solar RE Purchased [2-3-4+5-6+7]	744.07	282.45
9	Non-Solar RPO Target (%)	13%	-
10	Non-Solar RPO Complied (%)	20.86%	-

TABLE-4.11 Solar RPO Compliance

SI. No.	Particulars	Quantum (MU)	Cost (Rs. in Cr.)
1	Total power purchase quantum from all sources excluding Hydro-energy	3566.50	1999.64
2	Solar RE purchased under PPA route at Generic Tariff including Solar RE purchased from KPCL	524.59	278.68
3	Solar RE purchased at APPC	-	-
4	Less: Solar RE (Green Energy) sold to consumers	-	-
5	Solar RE purchased from other ESCOMs	-	-
6	Less: Solar RE sold to other ESCOMs	-	-
7	Banked solar RE purchased @ 85% of Generic Tariff.	-	-
8	Total Solar RE Purchased [2]	524.59	278.68
9	Solar RPO Target (%)	6%	-
10	Solar RPO Complied (%)	14.71%	-

The Commission in its preliminary observations had noted that the power purchase quantum excluding hydro was indicated as 3566.50 MU and the energy purchased from Shimsha and Shiva was not separately indicated. Hence, MESCOM was directed to furnish the energy purchased from Shimsha and Shiva separately.

MESCOM, in its replies to preliminary observations has submitted that power purchased from Shimsha and Shiva is 14.15 MU and 43.19MU respectively, which is appropriately considered by the Commission while computing RPO for FY19.

Commission's Decision:

The Commission has approved the source-wise power purchase quantum and cost as discussed earlier. Therefore, for the purpose of RPO compliance the Commission has considered the power purchase quantum as per the APR for FY19. The Commission has approved power purchase quantum of 3586.08 MU [5981.65 MU (Total power purchase)- 2383.49 MU (KPCL Hydro)-8.12 MU (Other Hydro) +14.15 MU (Shimsha)- 18.11 (energy balance – D1 Statement)], excluding procurement from hydro sources, based on the audited accounts. The details of Non-solar energy procured is indicated below:

Energy	in Million Units
Co-generation (Power Purchase) (medium term)	139.08
Mini Hydel	348.93
Wind power projects incl. KPCL	268.08
Bio mass	0.00
Shimsha	14.15
Non-Solar Short-term purchase	0
Less Previous year FY18 adjustment as per TO 2019	Nil.
Banked energy purchased*	-
Sold to consumers as green energy	-12.02
Non-solar Total	758.22

*Included in wind & Mini-hydel

Regarding the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 3586.08 MU, the Non-solar RPO target at 13.00% works out to 466.190 MU (466190 MWh after rounding off). MESCOM has purchased 758.22 MU (758220 MWh) of Non-solar energy. Thus, MESCOM has purchased 292.03 MU (292030 MWh) excess non-solar energy beyond the target specified. The Commission holds that MESCOM has met its Non-Solar RPO target of 13% for FY19, in terms of the prevailing Regulations.

As regards the Solar RPO, the details of solar energy purchased is as indicated below:

Energy in	Million Units
Solar PPA Route	409.92
Solar Rooftop	0
Solar KPCL	0
Solar Bundled Power (NTPC, NSM & VVNL)	114.67
Solar New Park	0
Solar Short /medium term purchase	0
Less Previous year FY18 adjustment as per TO 2019	0
Banked energy purchased	0
Sold to consumers as green energy	0
Solar Total	524.59

Considering the input energy (excluding procurement from hydro sources) of 3586.08 MU, the Solar RPO target at 6.00% works out to 215.165 MU (215165 MWh after rounding off). MESCOM has purchased 524.59 MU (524590 MWh) of Solar energy. Thus, MESCOM has purchased 309.425 MU (309425 MWh) excess Solar energy beyond the specified target. The Commission holds that MESCOM has met its Solar RPO target of 6% for FY19, in terms of the prevailing Regulations.

4.2.4 Distribution Loss for FY19:

MESCOM's Submission:

The Commission in its Tariff Order dated 14th May, 2018 had approved distribution loss for FY19 as shown in the table below:

Range	FY19
Upper limit	11.20%
Average	10.95%
Lower Limit	10.70%

MESCOM, as per its audited accounts, has reported distribution loss of 10.52% for FY19 as follows:

3	Distribution losses as a percentage of input energy at IF points	10.52%
	Total sales in MU *	4956.88
1	Energy at Interface Points in MU	5539.73

^{*}Includes sale of 41.94 MU to MSEZ & excludes wheeled energy.

The Commission in its preliminary observations had directed MESCOM to confirm whether the distribution loss of 10.52% for FY19 includes the Open Access and Wheeled Energy for FY19. If not, MESCOM was directed to submit the distribution loss percentage considering the quantum of Open Access and Wheeled Energy for FY19. Also, MESCOM was directed to submit the total quantum of Open Access and wheeled energy allowed/handled in MESCOM distribution network, for FY19. MESCOM in its reply to the preliminary observation has submitted that the distribution loss of 10.52% computed for FY19 does not include the energy handled in respect of open access and wheeling transactions.

MESCOM informed that the total quantum of energy handled in respect of open access and wheeling transactions in FY19 is 110.45 MU and 217.05 MU, respectively. MESCOM added that in case this quantum is considered for distribution loss computation, then the distribution loss would stand at 9.93%.

The Commission also directed MESCOM to explain the reason for considering a transmission loss of 7.39% as against 3.161% claimed by KPTCL in its filling for FY19. MESCOM in its reply has submitted that the 7.39% 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 FY19. In fact, it is the scheduled energy for which MESCOM has released the payment.

Commission's analysis and decisions:

The Commission in the Tariff Order, 2019 had observed that the distribution losses in Chikkamagaluru, Koppa and Kadur divisions are more than 18% and directed MESCOM to make continuous efforts to reduce losses in these divisions. On a perusal of the division-wise losses submitted in its replies, the Commission notes that Chikkamagaluru, Koppa and Kadur divisions have losses in the range of 16.59% to 17.17%, which is substantially higher than the average loss of 10.52% as claimed by MESCOM. The Commission reiterates its direction regarding putting forth continuous efforts to reduce the losses in these divisions.

The Commission notes that, the MESCOM's distribution loss of 10.52% is arrived at without considering the open access and wheeled quantum of 110.45 MU and 217.05 MU, respectively, for FY19. Further, MESCOM, while computing the distribution loss, has reckoned 41.94 MU being the energy sold to MSEZ as reported by MSEZ and as approved by the Commission for FY19, to arrive at the energy at interface point. The Commission, as indicated in the pre-paras, has approved the energy sale to IP sets of 1477.50 MU as against 1630.90 MU worked out by the MESCOM for FY19. Thus, the total sales for FY19 is 4803.48 MU excluding wheeled energy. Accordingly, the Commission has works out the distribution loss at 13.29% [(5539.73 MU-4803.48MU)/5539.73MU] for FY19, without the wheeled energy.

Further, as per the practice being followed in the previous Tariff Order for the computation of penalty / incentive for the excess / reduced distribution loss as compared with the targeted loss, the Commission has recognised only the wheeled energy of 217.05 MU, as reported by the MESCOM for FY19. Accordingly, based on the revised sales of 5020.53 MU including the wheeled energy and interface energy of 5756.78 MU (including the wheeled energy), the distribution loss of MESCOM is worked out as under:

4	Distribution loss as a percentage of input energy at IF points	12.79%
3	Distribution loss in MU	736.25
2	Total sales including wheeling energy in MU*	5020.53
1	Energy at Interface Points including wheeled energy in MU	5756.78

*Revised Sales as per APR for FY19 including sales to MSEZ

Thus, to levy the penalty for exceeding the targeted distribution loss for FY19, the Commission decides to consider the distribution loss of 12.79%, which exceeds the upper loss target of 11.20% fixed by the Commission for FY19 by 1.59 percentage point. Thus, in terms of the provisions of MYT Regulations, the Commission decides to impose Rs.38.29 Crores as penalty for non-achievement of the approved loss reduction target to the extent of 1.59 percentage point which is computed as indicated below:

TABLE - 4.12
Penalty for exceeding the targeted Loss Levels in FY19

Actual Input energy at IF points accounted in MU	5756.78
Retail Sales as Revised in the APR for FY19 - MU	5020.53
Percentage Distribution losses as a percentage of input energy at IF points	12.79%
Target Upper limit of distribution loss levels in Percentage	11.20%
Increase in Percentage Points loss	1.59%
Input at upper limit of Target Loss for actual sales - MU	5653.75
Increase in input energy at IF point due to increase in loss - MU	103.03
Average cost of power as per actuals – Rs./kWh	3.7164
Penalty for increase in power purchase cost due to increased losses Rs.Crores	38.29

Accordingly, with the above penalty the Commission consider the distribution loss for FY19 at 12.79%.

4.2.5 Capital Expenditure for FY19

A. MESCOM Submission:

The MESCOM, in its application for APR for FY19, has indicated a capital expenditure of Rs.839.17 Crores. The capital expenditure of Rs.839.17 Crores for FY19 is against the Commission approved capex of Rs.763.50 Crores for the FY19. The MESCOM has furnished the breakup of category-wise expenditure of Rs.839.17 Crores for FY19 as shown below:

TABLE – 4.13
Capital expenditure of the MESCOM for FY19

			Actuals			
SI. No	Particulars	As approved in T.O. 2018	Expenditure relating to Work Orders sanctioned during FY19	Expenditure relating to work orders sanctioned during previous years' Work	Total	% of Budget utilized
1	Extension & Improvement (Addl. DTCs, Link-Lines, HT/LT Reconductoring, providing intermediate poles, HVDS, etc.)	150.00	40.71	59.33	100.04	66.69%
2	DTC Metering	0.25	0.00	18.44	18.44	7376.00%
3	Replacement of MNR / DC & Electromagnetic meters by Static meters and providing SMC meter protection box wherever required.	5.00	0.88	0.41	1.29	25.80%
4	Replacement of faulty	5.00	25.99	3.44	29.43	588.60%

	DTCs					
5	Service Connections	45.00	14.39	9.24	23.63	52.51%
6	Rural Electrification (General)					
a.	Electrification of Hamlets	2.00	0.00	0.00	0.00	0.00%
b.	Energization of IP sets (including providing infrastructure of UA IP sets)	75.00	25.35	16.35	41.70	55.60%
C.	Kutir Jyothi	0.25	0.00	0.02	0.02	8.00%
7	Tribal Sub Plan					
a.	Electrification of Tribal Colonies	1.50	0.00	0.41	0.41	27.33%
b.	Energization of IP Sets	0.75	0.24	0.21	0.45	60.00%
C.	Kutir Jyothi	0.05	0.00	0.01	0.01	20.00%
8	Special Component Plan					
a.	Electrification of S.C. Colonies	1.00	0.01	0.03	0.04	4.00%
b.	Energization of IP sets	1.00	0.79	0.47	1.26	126.00%
C.	Kutir Jyothi	0.10	0.00	0.01	0.01	10.00%
9	Tools & Plants and Computers	5.00	8.07	0.03	8.10	162.00%
10	Civil Engineering Works	16.00	0.80	23.25	24.05	150.31%
11	33 kV Sub stations & Line works	37.50	0.39	19.66	20.05	53.47%
12	Schemes					
a.	DDUGJY	170.00	246.27	41.07	287.34	169.02%
b.	IPDS	63.00	116.97	0.00	116.97	185.67%
C.	Providing infrastructure to regularised UIPs	185.00	105.99	32.26	138.25	74.73%
d	Improvement works for Model Electricity Village	0.10	0.00	0.00	0.00	0.00%
13	Solar Rooftop on MESCOM/Govt. Buildings	0.00	3.89	2.15	6.04	
14	Improvement works : Model Sub Divisions	0.00	14.00	0.00	14.00	
15	Soubhagya	0.00	7.64	0.00	7.64	
GRA	ND TOTAL:	763.50	612.38	226.79	839.17	109.91%

B. Commission's Analysis and Decision:

In the Tariff Order 2018, the Commission had approved capex of Rs.763.50 Crores for MESCOM for FY19. Now, the MESCOM has indicated a capital expenditure of Rs.839.17 Crores.

The Commission, in the preliminary observations, requested MESCOM to submit the comparison of capital expenditure incurred with reference to the approved amounts under different items of capex for FY19 in the format approved by the Commission in the Tariff order 2018, with reasons for

deviations, if any. However, MESCOM did not furnish the compliance on this.

From the details furnished in the filing, it is noted that the expenditure relating to work orders sanctioned during FY19 amounts to Rs.612.38 Crores and Expenditure relating to Work orders sanctioned during previous years amounts to Rs.226.79 Crores, totalling to Rs.839.17 Crores.

The Commission, after reviewing the capex achieved by MESCOM for FY19, decides to allow capex of Rs.839.17 Crores, subject Prudence Check.

Prudence Check of Capital Expenditure incurred by MESCOM during FY17 and FY18:

The Commission, in its Tariff Orders dated 30th March 2016 and 11th April 2017 had allowed Capital expenditure incurred by the MESCOM for the period FY17 and FY18 respectively subject to carrying out the prudence check of the various works undertaken by MESCOM. Accordingly, the Commission had entrusted conducting prudence check work of MESCOM to M/s RSA & Co, Kolkata.

M/s RSA & Co. have submitted the report in the matter. As per their report, the following is the summary of findings in respect of work of Prudence Check for FY17 and FY18:

Financial Year	FY17		FY18	
Particulars of works executed and selected for				
prudence check	(Nos.)	(Rs in Cr)	(Nos.)	(Rs in Cr)
Works executed, costing above Rs. 5 Lakhs	458	84.64	983	140.96
Works Selected for carrying out prudence check	80	61.14	140	86.30
Percentage of works selected for carrying out	17.47%	72.24%	14.24%	61.22%
prudence check				
Abstract of Prudent / Non-Prudent works	(1)	Nos.) (Nos.)		los.)
Total no. of Prudent works		78	1	40
Total no. of works non-prudent works		2	0	
Abstract of Cost over run works	(Nos.) (No		los.)	
No. of works with no cost over-run		63	1	07
No. of works with cost over-run upto 10%		10	18	
No. of works with cost over-run between 10% and				
25%		6		12
No. of works with cost over-run exceeding 25%	1		3	
Abstract of Time over Run works	(1)	los.)	(N	los.)

Financial Year	FY17	FY18
No. of works with no time over-run	62	116
No. of works with time over run of upto 1 year	15	23
No. for works with time over run of between 1 to 2		
years	3	1
No. of works with time over run more than 2 years	0	0

The Commission forwarded a copy of the Report of the Consultant to MESCOM for information and to submit its comments on the findings of the report in the matter of imprudent works.

After analyzing MESCOM's replies on the findings of the Consultant on the non-prudent works and justifications furnished by MESCOM, the Commission has decided to consider the Two imprudent works of FY17 as prudent.

MESCOM is directed to keep in view, the following recommendations made in respect of prudence check and take suitable actions/measures in future, while implementing capex schemes / projects:

- i) The area of project monitoring may be extended to procure & monitor details of performance of the capital works post commissioning, especially major works like substations/lines etc. to ensure that the objective for taking up of the project are met. This is essential at least during the first performance phase of the work.
- ii) The field officers are required to be made aware of the capital expenditure guidelines. This would facilitate in better understanding of the relevance of prudence check and implications of not meeting the specified parameters. Further, availability and quality of data would also improve.
- iii) There should be proper system of comprehensive post execution evaluation, especially in case of major works, where in the data with regard to achievement of objective, as prescribed by the prudence check guidelines are to be provided. The data in respect of all the works should be analysed and thereafter, sample should be selected for validation/prudence check. This would make the prudence check exercise more effective.

- iv) The DPR/Estimate should quantify the objectives to be achieved. This would facilitate in evaluation of the achievement post execution. Further, alternatives possible/considered are also to be provided in the DPR.
- v) Optimization studies have been taken up by MESCOM with reference to transformer capacities or establishing transformers in stages particularly in urban areas based on the load growth and avoidance of excess capacity creation. Hence, it is suggested to carry out similar initiatives wherever required.
- vi) For the reduction of energy losses and efficiency improvement on substation levels, desired action plan can be effectively implemented.
- vii) Stores comprise a significant proportion of the expenditure of MESCOM. Centralized store accounting and monitoring system should be put in place. This would be helpful in more effective internal control over the stores and facilitate need based store procurement.
- viii) MESCOM should also adopt a system of ABC analysis of stock.
 - ix) MESCOM should implement the system of periodical (preferably annual) physical verification of stores with special emphasis on major items. This exercise should also include identification of slow/non- moving items apart from obsolete items. The exercise should also verify the costing system of the stores as that impacts the cost of capital works.
 - x) MESCOM should follow a system of post execution productivity approval of the Capital works commissioned during a period by the project approval committee. This would ensure that the objectives for each project are clearly defined and the same is monitored post execution and corrective measures, if necessary, are taken up in time.
- xi) MESCOM should have a system of speedy approvals of deviations so that delay in execution on that account is minimized.
- xii) MESCOM should develop a strong and effective Vendor rating system.
- xiii) MESCOM should have central data repository of information which would provide all the details of a project.

xiv) MESCOM should provide the project data in the format prescribed by KERC within a specified period after commissioning of the project.

4.2.6 Operation and Maintenance Expenses:

MESCOM's Submission:

The MESCOM, in its application, has sought approval of O&M expenditure of Rs.558.38 Crores for FY19, as per the audited accounts. The break-up of O&M expenses are as follows:

TABLE – 4.14

O & M Expenses - MESCOM's submission

	Amount in Rs. Crores		
Particulars	FY19		
Employee cost	392.40		
Administrative & General Expenses	106.84		
Repairs and Maintenance	59.14		
Total O & M Expenses	558.38		

MESCOM has submitted that while approving the ARR for FY19, the impact of pay revision was not considered and the Commission, while carrying out APR of FY18 had factored Rs.47.94 Crores as the impact of pay revision for FY18. Hence, it is submitted that the proposed O & M expenses are fairly reasonable.

Commission's analysis and decisions:

The Commission in its Tariff Order dated 14th May, 2018 had approved O&M expenses for FY19 as follows:

TABLE – 4.15

Approved O&M Expenses as per Tariff Order dated 14.05.2018

Particulars	FY19
No. of installations	2362756
Weighted Inflation Index	8.1059%
CGI based on 3 Year CAGR	3.15%
Actual O&M expenses for FY16 in Rs. Crores.	
Additional employees cost towards recruitment of 441 employees during FY18 (Rs. Crores)	31.04
Total approved O&M Expenses for FY19 (Rs. Crores)	491.33

The MESCOM in its filing, had claimed total O&M expenses of Rs.558.38 Crores for FY19 as against the approved O&M expenditure of Rs.491.33 Crores. This amount consists of Rs.59.14 Crores towards R&M expenses, Rs.392.40 Crores towards Employees cost and Rs.106.84 Crores towards A&G expenses, being the actual expenses, as per the audited accounts for FY19. The employees cost of Rs.392.40 Crores also includes the terminal benefits of Rs.73.80 Crores, which is considered as an additional employee cost towards the contribution to Pension & Gratuity (P&G) Trust.

The observations of the Commission and replies furnished by MESCOM on the O & M expenses are as follows:

a. Pay Revision Arrears for FY18 and Actual Employees Cost for FY19:

The Commission, in its Tariff Order 2019, while undertaking the APR for FY18, had allowed the provisions made for the arrears of revision of pay scale to the employees from 01.04.2017 to 31.03.2018 for Rs.47.94 Crores as an additional employees cost and Rs.21.78 Crores towards the additional contribution to P&G Trust on the arrears of pay revision on the basis of the audited accounts for FY18. Hence, MESCOM was directed to furnish the actual amount towards payment of arrears to its employees on account of pay revision for FY18 during FY19 and the additional contribution made to P&G Trust there on. Further, MESCOM was also directed to furnish the actual employees cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust thereon, for the FY18.

MESCOM in its replies to the preliminary observations, has submitted the following:

- I. Regarding pay revision arrears of FY18 paid in FY19, MESCOM has submitted that against the provision of Rs.47.94 Crores for FY18, the actual payment made during FY19 is Rs.48.08 Crores. Thus, the short-provision of Rs.0.14 Crores is included in FY19.
- II. Details of P&G Trust contribution relating to FY18 but paid in FY19 is submitted as follows:

Particulars	Provision made in FY18 accounts	Actual payment during FY19	Short Provision	
P&G Trust contribution w.e.f. 01.04.2	2017			
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	
P&G Trust contribution due to revision of rates for FY18 (No provision is created in FY18 accounts for the arrears of FY17	8.48	8.61	0.13	
Total	21.78	22.05	0.27	

III. Details of actual employee cost incurred during FY19 excluding the arrears of pay revision and P&G Trust contribution is submitted as follows:

SI. 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 FY19	391.99

b. Terminal Benefits:

As regards terminal benefits, the Commission observed that MESCOM, has claimed Rs.74.19 Crores, towards Terminal Benefits for FY19. The Commission directed MESCOM to furnish the computations for claiming the terminal benefits with clear break- up of the amounts relating to the employees recruited prior to 31.3.2006 and those employed after 31.3.2006.

MESCOM in its replies to the preliminary observation, has submitted the following details relating to terminal benefits:

		Rs.in Cr.			
SI. No.	Particulars	Employees recruited prior to 31.03.2006	Employees recruited after 31.03.2006		
1.	Contribution to P&G Trust				
a.	Actual contribution for FY19 (excluding pay arrears)	39.60	12.37		
b.	Actual contribution for pay arrears	11.54	1.90		
c.	Contribution at revised rates for FY17 as reconciled with P&G Trust	8.86	-		
d.	Contribution at revised rates for FY18 as reconciled with P&G Trust	8.61	-		

		Rs.in	Rs.in Cr.		
SI. No.	Particulars	Employees recruited prior to 31.03.2006	Employees recruited after 31.03.2006		
e.	Provision created for contribution payable on OSL as on 31.03.2019	0.33	-		
f.	Total contribution payable during FY19	68.94	14.27		
g.	Already provided in FY18 accounts	19.92	1.88		
h.	Net expenditure booked in FY19 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	-		
5.	Pension & leave contribution of deputed employees	0.11	-		
Total terminal benefits for FY19 61.80 74.19			12.39 19		

c. Administrative & General Expenses:

The Commission in its preliminary observations had noted that MESCOM, had claimed Rs.62.02 Crores under administration and general expenses towards remuneration to contract agencies for FY19. Further, MESCOM had also claimed Rs.11.24 Crores towards Conveyance and Vehicle Hire charges for FY19. As per the provisions of MYT Regulations, the O&M expenses are controllable expenditure and every ESCOM need to control this expenditure by utilizing the available resources within its control in a prudent manner. As such, MESCOM was directed to furnish the reasons for incurring huge expenditure under this head of account, along with breakup details for FY19, besides re-examining the amount proposed for FY21.

The MESCOM, in its replies, has stated that it has incurred higher A&G expenses, as the number of installations have increased by 85,544 numbers as compared to the previous year. Also, a new zonal office at Shimoga has started operations during FY19, along with two new sub-divisions & 8 new section offices, resulting in increased A & G expenses.

The Commission has taken a note of the above replies furnished by MESCOM and has appropriately considered the same while computing the O & M expenses. The Commission would like to reiterate its direction that, the O&M expenses are classified as controllable expenses as per the MYT Regulations and the MESCOM should take necessary action to minimize

these expenses, in future, to bring down the O&M expenses within the approved levels.

The Commission, in accordance with the provisions of the MYT Regulations and the methodology adopted while approving the ARR for FY19 and earlier APRs, proceeds with the determination of normative O&M expenses, based on the 12 Year data of WPI and CPI, besides considering the three year compounded annual growth rate (CAGR) of consumers. Considering the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, Government of India and Consumer Price Index (CPI) as per the data available from the Labour Bureau, Government of India and adopting the methodology followed by the CERC with CPI and WPI in a ratio of 80:20, the allowable rate of inflation for FY19 is computed as follows:

TABLE-4.16
Allowable inflation for FY19

Year	WPI	СРІ	Composite Series	Yt/Y1 =Rt	Ln Rt	Year (t-1)	Produc t [(t-1)* (LnRt)]
2007	73.6	130.8	119.36				
2008	80.0	141.7	129.36	1.08	0.08	1	0.08
2009	81.9	157.1	142.06	1.19	0.17	2	0.35
2010	89.7	175.9	158.66	1.33	0.28	3	0.85
2011	98.2	191.5	172.84	1.45	0.37	4	1.48
2012	105.7	209.3	188.58	1.58	0.46	5	2.29
2013	111.1	232.2	207.98	1.74	0.56	6	3.33
2014	114.8	246.9	220.48	1.85	0.61	7	4.30
2015	110.3	261.4	231.20	1.94	0.66	8	5.29
2016	110.3	274.3	241.50	2.02	0.70	9	6.34
2017	114.1	281.2	247.78	2.08	0.73	10	7.30
2018	118.9	294.8	259.62	2.18	0.78	11	8.55
A= Sum of the product column						40.16	
B= 6 Times of A						240.97	
C= (n-1)*n*(2n-1) where n= No of years of data=12						3036.00	
D=B/C					0.08		
g(Exponential factor)= Exponential (D)-1					0.0826		
e=Annual Escalation Rate (%)=g*100				8.2604			

As per CERC Notification No. Eco T I / 2019-CERC dated 02.04.2019 weightage considered at 80% on CPI and 20% on WPI

While determining the normative O & M expenses for FY19, the Commission has considered the following:

- a) The actual O & M expenses as per the audited accounts for FY16, as the base year expenses and the approved normative O & M expenses for FY17 and FY18, excluding contribution to Pension and Gratuity Trust.
- b) The three-year compounded annual growth rate (CAGR) of 3.25% for the number of installations considering the actual number of installations as per the audited accounts up to FY19.
- c) The weighted inflation index (WII) at 8.2604% as computed above.
- d) Efficiency factor at 1% as considered in the earlier control periods.

Thus, the normative O & M expenses for FY19 will be as follows:

TABLE - 4.17
Normative O & M Expenses

Particulars	FY19
No. Of Installations	2369278
CGI based on 3 years CAGR	3.25%
Inflation index	8.2604%
Base Year O&M Cost (FY16 as per actuals	
without contribution to P&G trust)-Rs. Crores	304.47
Approved O&M Cost (FY17 as per actuals	
without contribution to P&G Trust) Rs. Crores	337.16
Approved O&M expenses for FY18 without	
contribution to P&G trust + pay revision	
arrears of FY18 + Pay revision arrears of FY18	
for FY18 (372.66 + 47.94) Rs. Crores	420.60
Allowable normative O&M expenses for	
FY19 Index= 0&M (t-1)*(1+WII+CGI-X)- Rs.	
Crores	464.96

The above normative O & M expenses have been computed by reckoning the pay revision effect without considering the contribution to the Pension and Gratuity Trust for FY19.

MESCOM, as per its audited accounts has booked an amount of Rs.74.07 Crores towards Contribution to Pension and Gratuity Trust for other funds for FY19. The Commission notes that, as per the replies furnished by MESCOM, this amount also includes Rs.0.2758 Crores being the contribution towards provident fund and contributions of deputed employees which is

considered and allowed under normative O & M expenses for FY19. Thus the net contributions for P&G Trust is Rs.73.799 Crores for FY19.

Thus, the Commission, as per the provisions of the MYT Regulations, decides to treat employee costs on account of Contribution to P&G Trust as uncontrollable O&M expenses. This component has been allowed in addition to the normative O&M expenses to enable MESCOM to meet its actual employee costs.

Based on the above, the allowable O&M expenses for FY19 are as follows:

TABLE – 4.18
Allowable O & M Expenses for FY19

SI. Particulars FY19

1 Normative O & M expenses 464.96

2 Additional employee cost (uncontrollable 73.80 O & M expenses) towards contribution to P & G trust

3 Allowable O & M expenses for FY19 538.76

Thus, the Commission decides to allow an amount of Rs.538.76 Crores as O&M expenses for FY19.

4.2.7 Depreciation:

MESCOM's Submission:

MESCOM, in its application has claimed an amount of Rs.125.69 Crores as the net depreciation as per the audited accounts for FY19. The same is worked out after deducting an amount of Rs.45.12 Crores being the depreciation on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS)–12 and requested the Commission to allow the same for FY19.

Commission's analysis and decisions:

The Commission notes that as per the audited accounts for FY19, MESCOM, has booked an amount of Rs.125.69 Crores as the net depreciation after having reckoned the depreciation on Rs.515.17 Crores of assets created out of consumer's contribution / grants upto 31.03.2016. The depreciation on the assets created out of consumer's contribution / grants from 01.04.2016

of Rs.18.01 Crores has been accounted under other income in the audited accounts for FY19.

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The Commission proceeds to determine the depreciation for FY19, in accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and its subsequent amendments. Based on the opening and closing balances of gross blocks of fixed assets for FY19 and the depreciation as per annual accounts, the weighted average rate of depreciation works out to 4.80%.

The Commission as per the Accounting Standards (AS)-12, has reckoned and deducted Rs.18.01 Crores of depreciation on the assets created out of consumers' contribution / grants as per the audited accounts, under other income in arriving at the depreciation and allowed of Rs.107.68 Crores, as net depreciation for FY19.

Accordingly, the approved asset-wise depreciation for FY19 is as follows:

TABLE - 4.19 Allowable Depreciation for FY19 **Amount in Rs.Crores**

	7411001111111110101010
Particulars	Depreciation
Buildings	2.98
Civil	0.15
Other Civil	0.03
Plant & M/c	
Line, Cable Network net of the	
deducting Rs.270.47 Crores of assets	114.01
created out of consumers	
contribution/grants	
Vehicles	0.41
Furniture	0.42
Office Equipment	0.37
Released assets re-used to works	0.00
Land	0.00
Total GFA	118.37
Intangible Assets	7.32
Grand Total	125.69
Less: Depreciation on assets created	18.01
consumer contribution/ Grant	
Allowable Depreciation	107.68

Thus, the Commission decides to allow the net depreciation of Rs.107.68 Crores for FY19.

4.2.8 Interest and Finance Charges:

a) Interest on Capital loan:

MESCOM's Submission:

MESCOM in its application has claimed an amount of Rs.69.63 Crores by including Rs.1.84 Crores of cost of raising finance as interest on capital loans drawn from Banks/Financial Institutions as against Rs.80.75 Crores approved by the Commission for FY19.

MESCOM has claimed the interest on capital loans of Rs.67.79 Crores as indicated below:

Amount in Rs. Crores

Particulars	FY19
Long term secured & unsecured loans	729.87
Add new Loans	309.70
Less Repayments	-157.87
Total loan at the end of the year	881.70
Average Loan	805.79
Interest paid on long term loans as per filing	69.63
Weighted average rate of interest based on the interest projected on average loans in %	8.64%

Source-Annexure 1(a) of filing

Commission's analysis and decisions:

The Commission has noted the status of opening and closing balances of capital loans as per the audited accounts for FY19, and as submitted under Format D-9 and the additional details submitted under Annexure 1(a) of the filings with new loans borrowed and repayment of loans details, while allowing the interest on capital loan as shown in the following Table:

TABLE – 4.20
Allowable Interest on Loans – FY19

Amount in Rs. Crores

Particulars	FY19	
Opening Balance of Long term secured & unsecured loans	729.86	
Add: New Loans Borrowed during the year	309.69	
Less; Repayments of loans during the year	157.86	
Total loan at the end of the year		
Average Loan	805.78	
Interest paid on long term loans as per filing	67.79	
Weighted average rate of interest based on the interest projected on average loans.	8.41%	
Allowed Interest on capital loan		

Considering the average loan of Rs.805.78 Crores and an amount of Rs.67.79 Crores incurred towards interest on capital loans, the weighted average of interest rate works out to 8.41%. The actual weighted average rate of interest of 8.41% is less than the prevailing rate for long term loan.

Thus, the Commission decides to allow an amount of Rs.67.79 Crores towards interest on capital loans for FY19.

b) Interest on Working Capital:

MESCOM's Submission:

MESCOM has submitted the details of short term loans / overdraft details for FY19 to meet the day to day expenditure (working capital).

MESCOM, as per the audited accounts, has incurred an amount of Rs.30.96 Crores towards interest on short term loans / overdraft during FY19. However, MESCOM in its application has claimed an amount of Rs.49.99 Crores based on the norms prescribed in the MYT Regulations at the rate of interest of 11.00% p.a as against Rs.64.31 Crores as approved by the Commission for FY19. The interest on working capital computed by MESCOM is as follows:

TABLE - 4.21 Interest on Working Capital for FY19-MESCOM's Submission

Particulars	As Filed (Rs.in Crores)	
1/12th of O&M Expenses	46.54	
Opening GFA	2223.25	
1% of opening GFA	22.23	
1/6th of Revenue	558.71	
Total Working Capital	627.48	
Normative Interest on Working Capital @ 11%	69.02	
Actual interest on working capital incurred in FY-19	30.96	
Interest on working capital claimed	49.99	

Commission's analysis and decisions:

Karnataka Electricity Regulatory Commission

The Commission has been computing the interest on working capital considering the Marginal Cost of Fund-based Lending Rates (MCLR). For availing the working capital loans, MESCOM in its filing has submitted that the short term loans and overdraft were availed at the interest rate of 8.55% to 8.70% p.a. for FY19. Therefore, for computation of normative interest on working capital, as per the provisions of the MYT Regulations, the Commission decides to consider the interest rate of 11.00% as considered while approving the ARR, by considering the MCLR rate at the beginning of the financial year with a spread of basis points for FY19.

As per the audited accounts, the MESCOM has incurred an amount of Rs.30.96 Crores towards interest on short term loans/over drafts for FY19.

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the Commission has computed the allowable interest on working capital for FY19 as in the following Table:

TABLE - 4.22 Allowable Interest on Working Capital for FY19

Amount in Rs. Crore

Particulars	FY19
One-twelfth of the amount of O&M Expenses	44.90
Opening GFA	2231.38
Stores, materials and supplies 1% of Opening balance of GFA	22.31
One-sixth of the Revenue	545.13
Total Working Capital	612.34
Rate of Interest (% p.a.)	11.00%
Normative working capital Interest	67.36
Actual Interest on Working Capital incurred by MESCOM as per audited accounts for FY19	30.96
Allowable Interest on Working Capital (Actual interest	
on WC + 50% of the difference between normative	
WC and the actual interest on WC).	49.16

Since the actual interest on working capital is less than the normative interest on working capital, as per the provisions of the MYT Regulations, the Commission decides to allow the actual interest on working capital of Rs.30.96 Crores plus 50% of the difference between normative interest on working capital and the actual interest on working capital of Rs.18.20 Crores.

The Commission, therefore decides to allow Rs.49.16 Crores, towards interest on working capital for FY19.

c) Interest on Consumers' Security Deposits:

MESCOM's Submission:

Karnataka Electricity Regulatory Commission

MESCOM as per the audited accounts has claimed an amount of Rs.34.15 Crores towards payment of interest on consumers' security deposits for FY19.

Commission's analysis and decisions:

The Commission notes that, based on the actual amount of consumer security deposits collected by MESCOM, the interest on consumer security deposits amounting to Rs.34.15 Crores has been claimed by MESCOM as per the audited accounts for FY19.

As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits shall be allowed as per the bank rate prevailing on the 1st of April of the relevant year. The bank rate as on 1st April, 2018 was 6.25%. The weighted average rate of interest claimed by MESCOM, as per the audited accounts, is within the applicable bank rate. The Commission therefore decides to consider the actual interest on consumer security deposit booked on the basis of audited deposit held by MESCOM and payment of interest thereon for FY19.

Thus, the Commission decides to allow an amount of Rs.34.15 Crores towards interest on consumer security deposits for FY19.

d) Interest and Finance Charges:

As per the audited accounts, MESCOM has claimed an amount of Rs.1.84 Crores towards Other Interest & Finance Charges for raising the loans for FY19. The Commission decides to allow the same in the APR for FY19.

e) Capitalization of Interest and other expenses:

MESCOM in its filing, has claimed Rs.2.10 Crores as the interest capitalized on capital loans used during construction for FY19. The Commission, as per the audited accounts, decides to allow an amount of Rs.2.11 Crores towards capitalization of Interest on loans for computation of APR for FY19.

As per the above discussions, the total allowable interest and finance charges for FY19 are as follows:

TABLE – 4.23 Allowable Interest and Finance Charges

Amount in Rs. Crore

SI. No.	Particulars		
1.	Interest on Loan capital	67.79	
2.	Interest on working capital	49.16	
3.	Interest on consumer deposits	34.15	
4.	Other interest and finance charges	1.84	
5.	Less: Interest and other expenses capitalized	-2.11	
	Total interest and finance charges	150.83	

4.2.9 Other Debits:

MESCOM's Submission:

MESCOM, in its application has claimed Rs.18.42 Crores towards other debits for FY19.

Commission's analysis and decisions:

The Commission notes that as per the audited accounts, the allowable other debits excluding the provision for bad and doubtful debts of Rs.0.87 Crores for FY19 are as detailed in the following Table:

TABLE – 4.24
Allowable Other Debits

	Amount i	n Rs. Crores	
SI. No	SI. No Particulars		
1	Small and Low value items written off	0.222	
2	Losses relating to fixed assets	1.465	
3	Assets decommissioning cost	0.846	
4	Interest/penalty paid to GST/service tax department	0.018	
5	Miscellaneous losses and write offs	14.913	
	Total	17.46	

Thus, the Commission decides to allow Rs.17.46 Crores as other debits for FY19.

4.2.10 Extraordinary Items:

MESCOM's Submissions:

MESCOM in its application has claimed an amount of Rs.36.60 Crores towards extraordinary expenses for FY19.

MESCOM in its filings has submitted that consequent to divesting of the bulk supply business from KPTCL with effect from 10.06.2005, GOK, in its Order dated 31.07.2017, had ordered KPTCL to transfer the ESCOMs related current assets and liabilities i.e. RE subsidy and power purchase dues of KPCL and interest on power purchase dues of KPCL to the respective ESCOMS. As per the said GOK order, MESCOM related activities were as below;

- i. To account RE subsidy of Rs.77.22 Crores as receivable from GOK.
- ii. To account power purchase dues of KPCL of Rs.69.58 Crores as payable to KPCL.
- iii. To account interest on power purchase dues of Rs.36.60 Crores as payable to KPCL.
- iv. To write back the interest on power purchase dues of Rs.36.60 Crores. (Since the same has already been waived off by KPCL in their books of accounts)
- v. To account the difference in receivables and payables resulting from the above transactions to be adjusted in the net worth of MESCOM.

MESCOM, while giving the effect to the above stated activities, has considered reducing Rs.28.96 Crores from the net worth. (Rs.77.22 Crores – Rs.69.58 Crores - Rs.36.60 Crores) and also accounted Rs.44.24 Crores as 'miscellaneous income' in the Annual Accounts for FY17.

MESCOM has informed that it was supposed to add Rs.7.64 Crores to the net worth (Rs.77.22 Crores – Rs.69.58 Crores) and not to consider interest income Rs.36.60 Crores as 'miscellaneous income' since the same had been written off by KPCL.

As such, MESCOM has submitted that, the error has been rectified in the Annual Accounts for FY19 by adding Rs.36.60 Crores to the net worth and also taking Rs.36.60 Crores as expenses under 'Extraordinary Items'.

Commission's analysis and decision:

The Commission notes that as per the audited annual accounts of MESCOM for FY19, an amount of Rs.36.60 Crores has been included in the ARR for FY19 towards Extra-ordinary items of expenditure. The Commission notes that, as per the audited accounts of MESCOM for FY17, an amount of Rs.36.60 Crores being the interest on power purchase dues of KPCL transferred from KPTCL as per the GoK Orders dated 31.07.2017 has been accounted as other income for FY17. The Commission while approving MESCOM revised ARR for FY17, has not considered this amount as an

income under other income. In view of this, the question of claiming this amount for rectifying the previous entries by accounting an amount of Rs.36.60 Crores, as an extraordinary item of expenditure, does not arise.

4.2.11 Return on Equity:

MESCOM's Submission:

MESCOM in its application has claimed Return on Equity at Rs.92.55 Crores for FY19 as follows:

TABLE – 4.25 Return on Equity for FY19- MESCOM's Submission

Amount in Rs. Cro		
Particulars	FY19	
Opening balance of paid up share capital	358.07	
Opening balance of Share Deposit	105.13	
Opening balance of Accumulated Surplus	131.43	
Less: Recapitalized Security Deposit	(-)26.00	
Total Equity	568.63	
Rate of RoE in %	15.50%	
RoE on opening balance of equity for FY19	88.14	
RoE on equity infused during FY19	4.41	
Total RoE considered for APR	92.55	

Commission's analysis and decisions:

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

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

TABLE – 4.26 Status of Debt Equity Ratio for FY19

Amount in Rs. Crores

Particulars	GFA (Actuals)	Debt (Actuals)	Equity (Networth) (Actuals)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GF	%age of actual equity on GF
Opening Balance (GFA – Intangible assets)	2738.79	729.86	568.83	1917.15	821.64	26.61	20.77
Closing Balance (GFA – Intangible assets)	3228.06	881.69	690.52	2259.64	968.42	27.31	21.39

From the above table it is evident that the debt and equity amount lie within the amounts as per the normative debt equity ratio of 70:30 on the opening and closing balances of GFA for FY19.

ii) Return on Equity (RoE):

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the Commission has computed the allowable Return on Equity at 15.5% on the opening balance of net-worth of MESCOM for FY19.

The Commission as per the provisions of Clause 3.9.1 of the KERC (Terms & conditions for Determination of Tariff for Retail Sale of Electricity) (Second Amendment), Regulations, 2015, has allowed the RoE on the opening balance of equity (net-worth) amount at 15.5% and also allowed the additional RoE on the equity amount infused by the GoK during the year as per Clause 3.9.2 of the Regulations, for FY19.

Accordingly, as per the provisions of MYT Regulations and in line with the practice being followed in the previous Tariff Orders, the Commission has considered the opening balance of share capital and share deposit plus the accumulated balance of profit/loss as per audited accounts and also after factoring in the recapitalization of security deposit of Rs.26.00 Crores in compliance with the Orders of the Hon'ble ATE in appeal No.46/2014, while allowing the RoE, without grossing up with MAT for FY19 is determined as follows:

TABLE – 4.27 Allowable Return on Equity

Amount in Rs. Crores

	1 100. 010103
Particulars	FY 19
OB: Paid Up Share Capital	358.07
OB: Share Deposit	105.13
OB; Reserves & Surplus	131.43
Less Recapitalized Security Deposit	26.00
Total Opening Balance of Equity	568.63
Allowable RoE at 15.50 %	88.14

Further, as reported by MESCOM, an additional equity of Rs.65.50 Crores has been received during the year from Government of Karnataka in various Government Orders. Considering the actual date of receipt of this additional equity, the Commission as per provisions of the MYT Regulations, has determined the allowable return on additional equity as shown in the following Table:

TABLE – 4.28

Allowable Return on equity for the additional equity received during FY19

Additional Equity received during FY19	Amount in Rs. Crores	Received on	No. of Months	RoE allowed Rs. Crores
EN_53_PSR_2018_Dt.22-05-2018	15.00	01-06-2018	9	1.74
EN_120_PSR_2018_Dt.10-08-2018	0.50	28-08-2018	7	0.05
EN_120_PSR_2018_Dt.10-08-2018	0.12	24-08-2018	7	0.01
EN_129_PSR_2018_Dt.30-08-2018	2.00	07-09-2018	6	0.16
EN_53_PSR_2018_Dt.10-09-2018	15.00	25-09-2018	6	1.16
EN_53_PSR_2018_Dt.17-10-2018	15.00	17-11-2018	4	0.78
EN_129_PSR_2018_Dt.17-10-2018	1.00	07-11-2018	4	0.05
EN_120_PSR_2018_Dt.31-10-2018	1.00	14-11-2018	4	0.05
EN_120_PSR_2018_Dt.31-10-2018	0.24	17-11-2018	4	0.01
EN_53_PSR_2018_Dt.25-01-2019	14.00	04-02-2019	1	0.18
EN_129_PSR_2018_Dt.25-01-2019	1.00	02-02-2019	1	0.01
EN_120_PSR_2018_Dt.25-01-2019	0.50	05-02-2019	1	0.01
EN_120_PSR_2018_Dt.25-01-2019	0.14	04-02-2019	1	0.00
TOTAL 65.50				
Return on Equity allowed on Additional Equity Infusion in FY19				

The allowable return on equity on the additional equity infused during FY19 is Rs.4.21 Crores.

Thus, the Commission decides to allow total Return on Equity of Rs.92.35 Crores for FY19.

4.2.12 Income tax:

MESCOM in its filing, has claimed Rs.0.16 Crores towards the net Income Tax (MAT) for FY19. The Commission notes that, as per the audited accounts, the current income tax is Rs.12.0878 Crores, and also factored Rs.11.9244 Crores towards MAT credit entitlement for FY19. Thus, the Commission decides to allow the net income tax of Rs.0.16 Crores for FY19.

4.2.13 Other Income:

MESCOM's Submission:

MESCOM in its application has considered an amount of Rs.75.84 Crores as Other Income for FY19. MESCOM submitted that the above amount of Rs.75.84 Crore includes Rs.18.01 Crore relating to depreciation on the assets created out of consumers' contribution and grants.

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts, the total amount of other income is indicated as Rs.111.24 Crores for FY19. This includes income from rent, rebate for collection of electricity duty, incentive received for early payment of power purchase bills, other income relating to purchase of power and miscellaneous recoveries, delayed payment charges from consumers and depreciation on the assets created out of consumer contribution grants.

Further, as decided in the earlier Tariff Orders, to encourage and bring in financial discipline in timely payment of monthly power purchase bills, the Commission continues to allow Rs.2.70 Crores being 10% of the total incentive of Rs.27.01 Crores received on account of early payment of power purchase bills, to be retained by MESCOM for FY19. Further, an amount of Rs.35.40 Crores towards Interest on delayed payment from consumers and Rs.18.01 Crores towards depreciation on assets created out consumer's contribution / Grants, have not been considered under this head. By excluding these items, the Commission decides to allow an amount of Rs.55.12. Crores, for FY19.

4.2.14 Fund towards Consumer Relations / Consumer Education:

The Commission has allowed an amount of Rs.0.50 Crore towards consumer relations / consumer education, in the approved ARR for FY19, in its Tariff Order 2018 dated 14th May, 2018. MESCOM in its filing has reported that an amount of Rs.0.39 Crores has been incurred towards Consumer Relations / Consumer Education and CSR for FY19. The Commission notes that, as per

the audited accounts, the MESCOM has incurred an amount of Rs.0.39 Crores towards consumer relation/consumer education for FY19.

Accordingly, the Commission decides to allow an amount of Rs.0.39 Crores as expenditure towards Consumer Relations / Consumer Education for FY19.

4.2.15 Subsidy for FY19:

The Commission in its Tariff Order dated 14.05.2018 has approved tariff subsidy of Rs.22.78 Crores and Rs.733.35 Crores towards the sale of power to BJ/KJ installations and IP sets for FY19 respectively, in accordance with the prevailing Policy of the Government of Karnataka, in the matter of free power supply to BJ/KJ installations and IP sets installations of 10HP & below. MESCOM in its application has claimed an amount of Rs.894.57 Crores towards Tariff subsidy for BJ/KJ installations and IP sets for FY19.

The Commission notes that, as per the audited accounts, Rs.27.24 Crores and Rs.867.33 Crores has been factored in as tariff subsidy for BJ/KJ and IP Set installations respectively and the same is factored in the subsidy statement attached to the audited account for FY19. The Commission, while computing the revised ARR as per APR for FY19, has considered tariff subsidy of Rs.894.63 Crores, towards sale of power to BJ/KJ installations and IP sets for FY19, to be received from the Government. However, the Commission, while validating the IP sets energy sales of MESCOM for FY19 has disallowed 153.40 MU of energy in the energy sales to IP sets for FY19. Hence, the subsidy of Rs.81.46 Crores (at the rate of Commission Determined Tariff of Rs.5.31 per unit x 153.40 MU) is not allowed by the Commission. Thus, the Commission decides to approve the net subsidy of Rs.813.17 Crores for FY19.

4.2.16 Revenue for FY19:

MESCOM, in its application has considered Rs.3352.25 Crores as total revenue from sale of power from consumers including Rs.894.57 Crores of subsidy from IP sets and BJ/KJ installations for FY19.

The Commission notes that as per the audited accounts for FY19, the revenue from sale of power is Rs.3352.26 Crores by excluding Rs.35.40 Crores being the delayed payment charges from consumers, which has been included in the audited accounts under other income, as a part of revenue for FY19.

After setting right misclassification of the above item of revenue/ other revenue, the Commission decides to consider Rs.3352.26 Crores as revenue from sale of power to the consumers and other operating revenue. Further, as discussed in pre-para, the Commission has also disallowed the revenue subsidy of Rs.81.46 Crores, towards IP sets for FY19. Thus, after disallowing the amount, the Commission decides to consider Rs.3270.80 Crores as revenue from sale of power to the consumers, in approval of revised ARR, as per the APR for FY19.

4.3 Abstract of Approved ARR for FY19:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR for FY19 is as follows:

TABLE – 4.29

Approved revised ARR for FY19 as per APR

Amount in Rs. Crores

		APR FY19			
SI. No.	Particulars	As Appd in TO 14.05.2018	As filed	As approved	
1	Energy at Gen Bus (With MSEZ) - MU	5533.27	5,981.66	5981.65	
2	Energy at Interface in MU	5317.36	5,539.73	5539.73	
3	Distribution Losses in %	10.95%	10.52%	13.29%	
	Sales in MU				
4	Sales to other than IP & BJ/KJ	3320.80	3288.69	3288.69	
5	Sales to BJ/KJ	33.23	37.29	37.29	
6	Sales to IP	1381.08	1630.90	1477.50	
	Total Sales	4735.11	4,956.88	4803.48	
	Revenue at existing tariff in Rs. Crores				
7	Revenue from tariff and Misc. Charges	2489.57	2457.68	2457.63	
8	RE Subsidy to BJ/KJ	22.78	27.24	27.24	
9	RE Subsidy to IP (with disallowance of the Sales to IP sets)	733.35	867.33	785.93	
	Total Existing Revenue	3245.70	3352.25	3270.80	
	Expenditure in Rs. Crores		_		
10	Power Purchase Cost	1640.56	1994.99	1994.99	

SI. No.	Particulars	APR FY19		
		As Appd in TO 14.05.2018	As filed	As approved
11	Transmission charges of KPTCL	224.37	226.15	226.15
12	SLDC Charges	2.09	1.90	1.90
	Power Purchase Cost including cost of transmission	1867.02	2223.04	2223.04
13	Employee Cost		392.40	
14	Repairs & Maintenance		59.14	
15	Admin, & General Expenses		106.84	
	Total O&M Expenses	491.33	558.38	538.76
16	Depreciation	97.02	125.69	107.68
	Interest & Finance charges			
17	Interest on Loans	80.75	67.79	67.79
18	Interest on Working capital	64.31	49.99	49.16
19	Interest on belated payment on PP Cost	0.00	0.00	0.00
20	Interest on consumer deposits	35.57	34.15	34.15
21	Other Interest & Finance charges	3.95	1.84	1.84
22	Less: interest and other expenditure capitalized	-2.39	-2.10	-2.11
	Total Interest & Finance charges	182.19	151.67	150.83
23	Other Debits/Extraordinary items	0.00	18.42	17.46
24	Net Prior Period Expenses/Income (Debit/Credit)	0.00	36.60	0.00
25	Return on Equity	121.67	92.55	92.35
26	Taxation/MAT Credit		0.16	0.16
27	Funds towards Consumer Relations/Consumer Education	0.50	0.39	0.39
28	Other Income	-67.87	-75.84	-55.12
29	Net ARR	2691.87	3131.06	3075.54
30	Deficit for FY18 carried forward	-553.83	0.00	0.00
31	Disallowance due to prudence check of capex	0.00		
32	Less: Penalty for not achieving target loss			-38.29
33	Total ARR for FY19	3245.70	3131.06	3037.25

4.3.1 Gap in Revenue for FY19:

As against an approved ARR of Rs.3245.70 Crores, the Commission, after the Annual Performance Review of MESCOM, decides to allow a revised ARR of

Rs.3037.25 Crores for FY19. Considering the revised revenue of Rs.3270.80 Crores, the revenue surplus for the FY19 is Rs.233.55 Crores.

Thus, the Commission decides to carry forward the surplus of Rs.233.55 Crores of FY19 to the revised ARR for FY21, as discussed in the subsequent Chapter of this Order.

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

MESCOM, in its application has submitted the details of year-wise trued up amounts, Net Revenue and the deficit/ surplus from 2007-08 to 2016-17 and has arrived at a total deficit of Rs.1111.98 Crores. MESCOM has stated that the process of tariff revision along with the truing up exercise is being carried out without considering previous year/s trued up amount in the truing up exercise of the year under consideration, resulting in under recovery of overall deficit and consequently the loss to MESCOM and has prayed before the Commission to consider the trued up deficit balances to the extent of Rs.1111.98 Crores, during the truing up exercise of the FY19.

Commissions Views / Decisions:

The Commission, in its earlier Order has made it clear that, during the Annual Performance Review (APR) of the relevant years, the expenditure, based on the audited accounts has been fully allowed subject to norms as per MYT Regulations and the revenue gap or surplus thereon has been carried forward to the subsequent year's ARR of the Company. The Tariff approved for the relevant year is inclusive of the deficit/ surplus found in the APR of the relevant year and carried forward to the ARR of the subsequent year. Thus, MESCOM was allowed to fully recover the APR gap along with the gap found in the ARR in the retail supply tariff approved by the Commission for the relevant years. If MESCOM has not recovered the said ARR fully due to its inefficiency, the question of claiming the deficit of earlier years once again, in the APR of FY19 does not arise. The Commission had observed that there is no provision in the Regulations to consider once again the previous years' revenue deficit to the ARR of the subsequent years which would results in un-necessary inflating the current year's ARR and the gap for FY21 and which would result in imposing double burden on the end consumers and therefore had directed MESCOM to submit its explanation for claiming the so called 'deficit' in the APR of FY19. **The explanation submitted by MESCOM was not satisfactory and hence the claim is rejected.**

It is to be further pointed out that by the Commission that the so called cumulative deficit indicated by MESCOM does not exist in the audited accounts of FY19. As per the audited accounts, MESCOM has shown surplus in every year and is having an accumulated surplus of Rs.284.04 Crores as at the end of FY19. Therefore, the claims made by MESCOM is fictitious and arbitrary.

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.