CHAPTER - 4

ANNUAL PERFORMANCE REVIEW FOR FY19

4.0 GESCOM's Application for APR for FY19:

The GESCOM has filed its application on 29th November, 2019, for Annual Performance Review (APR) of FY19 based on the audited accounts and for revision of Annual Revenue Requirement (ARR) and revision of retail supply tariff for FY21, under the provisions of the MYT Regulations.

The Commission, in its letter dated 18th December, 2019 had communicated its preliminary observations on the application of the GESCOM. The GESCOM, in its letter dated 2nd January, 2020 has furnished replies to the preliminary observations of the Commission.

The Commission, in its Tariff Order dated 14th May, 2018, had approved the GESCOM's revised Annual Revenue Requirement (ARR) of Rs.4707.08 Crores for FY19 and based on the said ARR, allowed revised retail supply tariff for FY19.

The Annual Performance Review (APR) of GESCOM for FY19, based on the audited accounts, is discussed in this chapter.

4.1 GESCOM's Submission:

The GESCOM has submitted its proposals for revision of ARR under APR for FY19 based on the Audited Accounts, as follows:

TABLE - 4.1

ARR for FY19 - GESCOM's Submission

Amount in Rs. Crores

		FY19	FY19		
SI. No	Particulars	As approved in Tariff Order dated 14.05.2018	As filed		
1	Energy at Gen Bus in MU	8474.32	9306.90		
2	Energy at Interface in MU	8213.06	8796.04		
3	Distribution Losses in %	15.00%	14.41%		
	Sales in MU				

		FY19		
SI. No	Particulars	As approved in Tariff Order dated 14.05.2018	As filed	
4	Sales to other than IP & BJ/KJ	3455.84	3767.93	
5	Sales to BJ/KJ	140.78	245.40	
6	Sales to IP	3384.48	3514.97	
7	Total Sales Revenue from tariff and Misc.	6981.10	7528.30	
	Charges:			
8	Revenue from tariff and Misc. Charges	2679.65	2919.90	
9	Tariff Subsidy for BJ/KJ	94.89	159.62	
10	Tariff Subsidy for IP	1932.54	1998.92	
11	Total Revenue	4707.08	5078.44	
	Expenditure:			
12	Power Purchase Cost	2909.59	3589.65	
13	Transmission charges of KPTCL	354.27	356.70	
14	SLDC Charges	2.89	2.89	
	Total Power Purchase Cost	3266.75	3949.24	
15	Employee Cost		529.21	
16	Repairs & Maintenance	557.44	45.85	
17	Admin & General Expenses	-	118.78	
.,	Total O&M Expenses	557.44	693.84	
18	Depreciation	155.22	145.66	
	Interest & Finance charges;			
19	Interest on Loans	127.53	97.54	
20	Interest on Working capital	96.17	156.56	
21	Interest on belated payment on PP Cost	0.00	0.00	
22	Interest on consumer deposits	30.93	31.94	
23	Other Interest & Finance charges	0.00	0.00	
24	Less: interest capitalized	-4.28	-2.26	
	Total Interest & Finance charges	250.35	283.78	
25	Other Debits	0.00	68.91	
26	Net Prior Period Debit/Credit	0.00	0.00	
27	Return on Equity	56.80	0.00	
28	Provision for taxation	0.00	0.00	
29	Funds towards Consumer Relations/Consumer Education	0.50	0.00	
30	Other Income	-45.04	-82.33	
31	ARR Deficit for EV17 carried forward	4242.02	5059.10	
32	Deficit for FY17 carried forward	465.06	0.00	
	Net ARR	4707.08	5059.10	

Considering the revenue of Rs.5078.44 Crores against the net ARR of Rs.5059.10 Crores, GESCOM has reported a surplus in revenue of Rs.19.34 Crores for FY19.

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

An overview of the financial performance of the GESCOM for FY19 as per its Audited Accounts is given below:

TABLE – 4.2
Financial Performance of GESCOM for FY19

	Amount in Rs. Crores		
SI. No.	Particulars	FY19	
1	Revenue from sale of power	5078.44	
2	Other Income	127.65	
3	Total Revenue	5206.09	
4	Expenditure		
5	Power Purchase Cost	3949.24	
6	Employee cost	529.22	
7	Interest and Finance Cost	283.77	
8	Depreciation	190.99	
9	Other Expenses	233.53	
10	Regulatory Income	-328.73	
11	Other Comprehensive income	28.29	
12	Total Expenditure	4886.32	
13	Net profit for the year	319.77	

As per the Audited Accounts, the GESCOM has earned a profit of Rs.319.77 Crores after accounting Regulatory Income of Rs.328.73 Crores for FY19. The yearly profits / losses reported by the GESCOM in its audited accounts in the previous years are as follows:

TABLE – 4.3
GESCOM's Accumulated Profit / Losses

Particulars	Amount in Rs. Crores
Accumulated losses as at the end of FY15	-420.84
Losses incurred in FY 16	-131.25
Losses incurred in FY 17	-324.86
Losses incurred in FY18	-472.63
Profit earned in F19	348.06
Restated Balances	0.92
Accumulated losses as at the end of FY19	1002.44

As seen from the above table, the GESCOM has accumulated losses of Rs.1002.44 Crores, as at the end of 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 vis-à-vis 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 discussed in the following paragraphs:

4.2.1 Sales for FY19:

A. Sales -other than IP Sets:

1. Annual Performance Review for FY19

a. The Commission, in its Tariff Order 2018 dated 14.05.2018, had approved total sales to various consumer categories at 6981.10 MU, as against GESCOM's proposed sales of 7171.82 MU. The actual sales of GESCOM, as per the current APR filing [D-2 FORMAT] is 7528.29 MU, indicating an increase in sales to the extent of 547.18 MU with respect to the approved sales. There is an increase in sales to LT-categories by 288.70 MU and HT-categories by 258.48 MU.

The Commission had noted that, as against the approved sales of 3455.84 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by GESCOM is 3775.84 MU, resulting in increased sales to these categories by 319.99 MU. Further, GESCOM has sold 3752.45 MU to BJ/KJ and IP category against approved sales of 3525.26 MU resulting in increased sales to these categories by 227.19 MU.

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 & actuals for FY19

Energy Sales in MU

Tariff Category	Consumer Category	Approved	Actuals	Difference (MU) (Actuals- Approved)
LT1	Consuming more			
	than 40	00.05	7.00	00.40
17.00	units/month	28.35	7.93	-20.42
LT-2a	Domestic / AEH	1189.46	1122.19	-67.27
LT-2b	Pvt. Educational Institutions	13.04	13.94	0.90
LT-3	Commercial	317.25	325.51	8.26
LT-4b	IP >10 HP	2.41	9.65	7.24
LT-4c	Pvt. Nurseries,			
	Coffee & Tea	1.66	1.04	-0.62
LT-5	LT Industries	167.88	171.63	3.75
LT-6	Water Supply	243.51	356.66	113.15
LT-6	Public Lighting	235.81	252.69	16.88
LT-7	Temporary Supply	20.45	20.10	-0.35
HT-1	Water Supply &			
	Sewerage	105.45	111.45	6.00
HT-2a	Industrial	906.94	1144.22	237.28
HT-2b	Commercial	79.36	72.98	-6.38
HT-2c	Govt./Aided Hospital & Edu.	25.50	26.28	0.78
HT-3a & b	Lift Irrigation &	25.50	20.20	0.70
111 50 & 5	Agriculture	94.71	113.55	18.84
HT-4	Residential	7 117 1	110.00	10.01
	Apartment,			
	Colonies	13.07	14.40	1.33
HT-5	Temporary Supply	10.99	11.62	0.63
Sub total	, , , , ,	3455.85	3775.84	319.99
LT-1	BJ/KJ consuming	140.78	237.48	96.70
	upto 40			
	units/month			
LT4(a)	IP Sets upto 10 HP	3384.48	3514.97	130.49
	& below			
Sub total		3525.26	3752.45	227.19
Grand total		6981.11	7528.29	547.18

- b. The Commission had observed that the major categories contributing to the reduction in sales with respect to the estimates are LT-2(a) and HT2(b) and those contributing to the increase in sales were LT6 Water Supply, HT-2(a), BJ/KJ and IP set installations.
- c. GESCOM had attributed the reduction in sales in LT2a category to DSM measures like installation of LED bulbs, SWHs etc. However, GESCOM had

not quantified the energy savings. Hence, GESCOM was directed to quantify the energy savings in FY19 due to DSM measures.

GESCOM in its replies has submitted that, the actual number of installations in FY19 is less by 9,550 numbers than that approved, resulting in lower consumption with respect to approved figures. Further, it is submitted that, during February, 2016 to March 2019, 1,23,114 numbers of 9W LED bulbs, 7358 numbers of 20 W LED Tube lights and 2279 numbers of energy efficient fans have been distributed, resulting in savings of 65.614 MU, 0.42 MU and 0.122 MU respectively.

The Commission notes that the total savings of 66.156 MU indicated by GESCOM is based on cumulative additions of LED bulbs, LED tube-lights and Energy efficient fans. However, GESCOM should have considered only the number of such installations added during FY19 to assess the impact of DSM during FY19.

- d. GESCOM had attributed the increase in HT-2a sales to 49 consumers opting for special incentive scheme. GESCOM was directed to quantify the sales month-wise and the increase due to special incentive scheme and submit the same.
 - GESCOM has submitted that five consumers out of 49 consumers were major consumers under special incentive scheme. Furnishing details for July-18 to September-19 for these consumers, it is submitted that the sales above the base consumption has increased in the range of 23.72% to 166.75%.
- e. Similarly, GESCOM was directed to analyze the reasons for increase in BJ/KJ and LT6 WS sales.

The reason for increase in BJ/KJ installations is attributed to the GoK order increasing the consumption from 18 units/month/installation to 40 units/month/installation.

The Commission notes that the reply furnished is not satisfactory. The specific consumption per month for BJ/KJ installations consuming less than or equal to 40 units/month/ installation has increased from 20 units in FY18

to 33.62 units, which is about 68% increase, indicating inefficient use of electricity. GESCOM shall ensure that BJ/KJ installations use energy efficient LED bulbs, EE fans etc., so that the subsidy burden on GoK is reduced.

Regarding LT Water Supply installations, GESCOM has submitted that based on the action plan of ULBs & RLBs the consumption has increased.

The Commission notes that GESCOM has made a statement which is not supported by any documentary evidence to ascertain the increase in sales to LT-WS.

 GESCOM was directed to furnish the data of sales to HT2(a), HT2(b), HT-2c and HT-4 categories along with the consumption from open access / wheeling for the financial years 2017-18 and 2018-19 in the specified format.

GESCOM has furnished the same in its replies.

B. Sales to IP sets – APR for FY19:

- 1. In its Tariff Order dated 14th May, 2018, the Commission had approved 9,314 units / IP Sets / annum as the specific consumption of IP sets for the FY19. Whereas, the specific consumption as reported by the GESCOM, in its Tariff application for APR for FY19, works out to 9,594 units / IP Sets/annum, indicating an increase in the specific consumption by 280 units / IP Sets / annum accounting for 3.00% increase.
- 2. Total sales to IP sets approved by the Commission for FY19 in the Tariff Order is 3,384.48 MU. As reported by GESCOM in the D-2 format of tariff filing the actual consumption is 3,514.97 MU, indicating an increase of 130.49 MU, i.e., the sales have increased by 3.86%.
- 3. As reported by GESCOM, the number of IP set installations in service at the end of FY19 are 3,81,097 as against the approved numbers of 3,71,965 which corresponds to an increase of 9,141 i.e., the number of installations has increased by 2.45%.

The details of sales to IP sets for FY19 as approved by the Commission, in its Tariff Order 2018 and the actual sales as furnished by GESCOM in its APR application for FY19 are as follows;

Particulars	As approved by the Commission in ARR for FY19	As submitted by GESCOM Mysore for APR of FY19
Number of installations	3,71,965	3,81,097
Mid-year number of installations	3,63,376	3,66,362
Specific consumption in units / installation / annum	9,314	9,594.25
Sales in MU	3,384.48	3,514.97

- 4. The Commission, in its preliminary observations had directed GESCOM to furnish the reasons for increase in sales and specific consumption as compared to the approved figures for FY19 and also for the increase sales and specific consumption, as compared with the actuals of FY18. GESCOM, in its replies to the preliminary observations, has informed that, the increase in consumption is mainly in the Districts of Bellary, Raichur and Koppal, which are rich in paddy cultivation, requiring more water resulting in substantial increase in cultivation during FY19. GESCOM, in its replies, has furnished the data obtained from the Agriculture Department while furnishing replies to the preliminary observations. Also, power supply to the IP set category was made available for a duration of 7 hours in a single batch during the day time, as against supplying power in 2 batches (4 hours during day and 3 hours in the night) made during FY18, which has resulted in increase in the sales and specific consumption of IP sets, during FY19.
- 5. As per the detailed computations of sales to IP sets, feeder-wise, monthwise data submitted by GESCOM for FY19 vide e-mail dated 24.10.2019, the total sales were computed as 3511.47 MU, whereas in the accounts and as per the filing (D-2 Format), it is indicated as 3514.97 MU. Thus a difference of 3.50 MU was observed and it was noticed that GESCOM has furnished different figures in different pages of the Tariff application i.e., 3511.40 MU in Table 10(a) on page No 17, and 3513.94 MU in Table 45(a)

- on page No.143. GESCOM was directed to furnish the reasons for these variations and furnish the correct figures. In its replies to the preliminary observations, GESCOM has informed that, after detailed verification, it has rectified the inconsistency in the data and re-submitted the data substantiating the sales to IP sets.
- 6. The GESCOM has submitted the data of consumption by IP sets by considering a uniform distribution loss of 6% for all agricultural feeders in its submission in feeder-wise, month-wise computations. GESCOM was directed to substantiate its claims for considering the uniform distribution losses for all agricultural feeders and directed it to furnish the distribution losses considered and the consumption by other loads separately. In its replies to preliminary observations, GESCOM has furnished the actual distribution losses of the Urban and Rural feeders that are considered for computation of sales to IP sets. However, the Commission directs GESCOM to consider the losses for the year of assessment as directed by the Commission in the previous Tariff Orders while assessing sales to IP sets in future, by separately providing the distribution loss component and the consumption by other loads.
- 7. The Commission, in its preliminary observations had directed GESCOM to furnish the reasons for the difference in number of IP Set installations as per GPS survey and the IP set assessment data submitted, the action taken to reconcile the number of IP installations with the DCB figures. Whereas, GESCOM, has failed to report the precise details of actual number of IP installations existing in the field, working IP sets, permanently disconnected IP sets for both the authorized and unauthorized categories, action taken to regularize the unauthorized IP sets etc., and the action taken to match the data of the GPS survey with the DCB figures.
- 8. The Commission, hereby directs GESCOM to complete the pending survey work, if any, at the earliest and submit the data of total number of existing IP sets, defunct / dried up etc., within 3 months from the date of this Order, without any ambiguity. 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 of FY19 and ARR of FY21 and would pass necessary orders thereon.

- 9. Based on the actual specific consumption of IP sets per annum for FY19, as reported by GESCOM i.e., 9,594 units per IP Set per annum, the monthly consumption works out to 799.52 units per IP Set per month. Whereas, the specific consumption per IP set per month was found to be very high in few of the Subdivisions, to an extent of 22,429 units, 21,347 units, 18,742 units, 11,952 units, and 10,824 units per IP set per month, in few feeders, especially in the jurisdiction of O&M Subdivision of Koppal, Gangavathi, Raichur RSD, Gangavathi respectively during the month of March 2019 and in other feeders during other months as well. GESCOM was directed to furnish the reasons for such a high specific consumption per IP set per month for all the feeders, where it is seen. In its replies to preliminary observations, GESCOM has furnished that the reasons for abnormal specific consumption are mainly improper tagging of IP set installations to the respective feeders. In view of the above, GESCOM was directed to resubmit the computations of sales to IP sets considering all the relevant facts. GESCOM cited the examples of normal values of specific consumption by considering actual numbers of IP set installations existing in few of the feeders. It is observed that, after considering the actual number of IP installations in those feeders, the average consumption per IP set per month is in the acceptable range. As per the example furnished in its replies to preliminary observations and considering the above facts, GESCOM re-submitted the sales to IP sets, feeder-wise, month-wise, in the Commission's prescribed formats vide e-mail dated 05.02.2020. On a further review of the data, the Commission made further observations in the matter of application of the formula in GESCOM's calculation sheets etc., Finally, GESCOM has re-submitted the corrected calculation sheets vide e-mail dated 08.02.2020 and as per the data, the average consumption per IP per month during all the months is within the acceptable range and the total sales to IP sets works out to 3514.97 MU.
- The details of sales to IP Set installations for FY19, as per the revised submissions are as follows;

Particulars	As submitted by GESCOM for APR of FY19	As approved by the Commission for APR of FY19
Number of installations	3,81,097	3,81,097
Mid-year number of installations	3,66,362	3,66,362
Specific consumption in units / installation / annum	9,594	9,594
Sales in MU	3,514.97	3,514.97

As per the above computation, the Commission hereby approves 3,514.97 MU of energy, as sales to the IP sets for FY19, as computed and submitted by GESCOM.

Based on the above discussion, the total sales for FY19, based on audited accounts data, as approved by the Commission are indicated in the following table:

TABLE - 4.5
Approved Category wise sales for FY19

Energy in Million Units

Category		Approved
LT-2a*	Domestic /AEH	1130.12
LT-2b	Pvt. Educational Institutions	13.94
LT-3	Commercial	325.51
LT-4b	IP > 10 HP	9.65
LT-4c	Pvt. Nurseries, Coffee & Tea	1.04
LT-5	LT Industries	171.63
LT-6	Water Supply	356.66
LT-6	Public Lighting	252.69
LT-7	Temporary Supply	20.10
HT-1	Water Supply & Sewerage	111.45
HT-2a	Industrial	1144.22
HT-2b	Commercial	72.98
HT-2c	Govt./Aided Hospital & Edu.	26.28
HT-3a & b	Lift Irrigation & Agriculture	113.55
HT-4	Residential Apartments –	
	Colonies	14.40
HT-5	Temporary supply	11.63
Sub total		3775.85
LT1	BJ/KJ	237.48
LT4(a)	IP Sets upto 10 HP & below	3514.97
Sub total		3752.45
Grand total		7528.30

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

4.2.2 Distribution Loss for FY19:

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

Range	FY19
Upper limit	15.50%
Average	15.00%
Lower Limit	14.50%

The GESCOM, in its annual accounts, has reported the distribution loss at 14.41 per cent for FY19 as under:

3	Distribution loss as a percentage of input energy at IF points	14.41%
2	Total sales including wheeled energy in MU	7528.30
1	Energy at Interface Points in MU	8796.04

Commission's Analysis and Decisions:

The Commission in its preliminary observation had observed that GESCOM had computed the distribution loss for FY19 by considering the energy at the Interface points for the period March, 2018 to February, 2019, and energy at generation bus and sales figures have been considered for the period April 2018 to March, 2019. GESCOM was directed to compute and submit the distribution losses for FY19 by considering the energy at Interface points for the financial year considering the period as from April to March of a financial year.

GESCOM, in its reply to the preliminary observations, has submitted that the consumption for the month of March will be reflected in April month's sales as the billing for various categories of installations starts from 1st of every month and continues up to 15th, the same is reflected in the next month DCB and accordingly the distribution losses were computed.

The Commission also notes that GESCOM, in its filing as per Table-40, had indicated the actual distribution losses in some of the towns/cities in the range of 14.94% to 21.72% during FY19 and 14.59% to 20.35% up to September, 2019 during FY20, which is more than the actual average

distribution losses of 14.41% of the Company for FY19. The Commission opined that the GESCOM had invested huge capital expenditure during the previous years, and despite this, the distribution losses in the some of the cities/towns were found to be abnormal. The Commission had directed GESCOM to analyze the reasons for the abnormal losses in these cities/towns and to submit an action plan for reduction of the losses.

GESCOM in its replies, had identified that towns like Shahapur (14.94%), Shorapur (14.96%) and Raichur CSC (21.72%) are having higher losses. GESCOM informed that it has initiated measures for reduction of T&D losses. The Commission directs GESCOM to ensure that distribution losses of the towns having higher losses should be reduced and brought down within the approved loss target levels.

The Commission notes that GESCOM has reported the actual distribution loss of 14.41%, as per the audited accounts, as against lower loss level of 14.50% approved by the Commission, in its Tariff Order dated 14th May, 2018. The actual loss level is less than the approved lower limit of loss level by 0.09 percentage point for FY19.

The actual distribution losses of 14.41% reported by GESCOM is lower than the lower limit of 14.50% as specified by the Commission for FY19. Therefore, GESCOM is entitled for incentive for achievement of loss targets as computed below:

Incentive for achieving losses below the targeted Loss Levels in FY19

Particulars	
Actual Input energy at IF points accounted in MU	8796.04
Retail Sales as Revised in the APR for FY19 – MU	7528.30
Percentage Distribution losses as a percentage of input energy at IF points	14.41%
Target lower limit of distribution loss levels	14.50%
Decrease in Percentage Points loss	-0.09%
Input at Target Loss for actual sales - MU	8805.03
Decrease in input energy at IF point due to decrease in	
loss – MU	8.989
Average cost of power as per actuals – Rs./kWh	4.4394
Incentive for achievement of loss targets Rs. Crores	3.99

GESCOM

Thus, the Commission decides to approve the distribution loss of 14.41% for FY19 and allow an incentive of Rs.3.99 Crores for achieving better loss targets vis-à-vis the loss targets fixed by the Commission.

4.2.3 Power Purchase for FY19:

GESCOM's Submission:

GESCOM, in its application for Annual Performance Review (APR) for FY19, has submitted the details of actual power purchase made during FY19. As per these details, GESCOM has purchased 9306.90MU at a cost of Rs.3949.24 Crores for FY19.

The following table indicates the source wise variation statement as per D1 statement:

TABLE- 4.6 Power Purchase for FY19 – Actuals as per filing GESCOM's Submission

GESCOM'S SUBMISSION				
SI.		Actuals as per filing		
No.	Source	Energy in MU	Amount in Crs.	Avg. cost in Rs
1	2	6	7	8
1	KPCL-Hydro	2813.74	239.46	0.85
2	KPCL Thermal	764.81	476.13	6.23
3	Central Projects	2504.71	1074.60	4.29
4	UPCL	526.96	324.89	6.17
5	RE Projects	2366.07	1018.92	4.31
6	Bundled power	580.12	244.64	4.22
7	Other Hydro	16.53	15.12	9.15
8	Short term/Medium Term	358.11	131.63	3.68
9	KPTCL transmission charges		356.70	
10	SLDC charges		2.89	
11	Tangedco, POSOCO etc.		0.35	
12	PGCIL charges		237.94	
13	ENERGY Balancing	-626.40	-238.95	
14	infirm power	68.19		
15	Cost of Banked Energy	40.45	10.97	
16	PCKL Rev Expenses, POSOCO, Tangedco		1.01	
17	prior period expenses /other provisions		46.13	
18	NTPC Transmission Charges		1.82	
19	IEX	-99.75	0.00	
20	UI Charges	-5.63	4.99	
21	South western railway	-1.00		
	Grand total	9306.90	3949.24	4.24

Commission's analysis and decisions:

The Commission, in its Tariff Order dated 14th May, 2018 had approved power purchase quantum of 8474.32 MU at a cost of Rs.3266.75 Crores, for FY19 against which, the power purchase for FY19, as submitted by GESCOM is 9306.90 MU at a cost of Rs.3949.24 Crores.

Based on the above data, the Statement of power purchase quantum and costs as per audited accounts is as detailed below:

TABLE- 4.7
Power Purchase for FY19 Approved Vs actual as per Audited Accounts

		KERC A	pproved fo	r 2018-19	Actuals as per Audited Accounts				Difference	
SI. No.	Source	Energy in MU	Amount in Crs.	Avg. cost in Rs.	Energy in MU	Amount in Crs.	Avg. cost in Rs	Energy in MU (6-3)	Amount in Crs. (7-4)	Avg. cost in Rupees (8-5)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL-Hydro	2498.04	215.26	0.86	2813.74	239.46	0.85	315.70	24.20	-0.01
2	KPCL Thermal	1018.78	439.01	4.31	764.81	476.13	6.23	-253.97	37.12	1.92
3	Central Projects (CGS)	2476.93	931.81	3.76	2504.71	1074.60	4.29	27.78	142.79	0.53
4	UPCL – (IPP)	724.22	344.73	4.76	526.96	324.89	6.17	-197.26	-19.84	1.41
5	RE Projects	1064.55	511.66	4.81	2366.07	1018.92	4.31	1301.52	507.26	-0.50
6	Bundled power	405.32	134.52	3.32	580.12	244.64	4.22	174.80	110.12	0.90
7	Other Hydro	30.11	11.35	3.77	16.53	15.12	9.15	-13.58	3.77	5.38
8	Short term/Medium Term	256.38	114.49	4.47	358.11	131.63	3.68	101.73	17.14	-0.79
9	KPTCL transmission charges		354.27			356.70		0.00	2.43	0.00
10	SLDC charges		2.89			2.89		0.00	0.00	0.00
11	Tangedco, POSOCO etc.		0.31			0.35		0.00	0.04	0.00
12	PGCIL charges		206.44			237.94		0.00	31.50	0.00
13	ENERGY Balancing				-626.40	-238.95		-626.40	-238.95	0.00
14	infirm power				68.19	0.00		68.19	0.00	0.00
15	Cost of Banked Energy				40.45	10.97		40.45	10.97	0.00
16	PCKL Rev Expenses, POSOCO, Tangedco					1.01		0.00	1.01	0.00
17	prior period expenses /other provisions					46.13		0.00	46.13	0.00
18	NTPC Transmission Charges					1.82				
19	IEX				-99.75	-44.32		-99.75	-44.32	
20	UI Charges				-5.63	4.99		-5.63	4.99	
21	South western railway				-1.00	0.00		-1.0		
	Grand total	8474.32	3266.75	3.85	9306.90	3904.92	4.20	832.57	638.17	0.35

Note: 1. (+) indicate excess over approved values.

^{2.} The sale of energy in IEX including cost, is also included under power purchase

- 1. 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 832.57 MU and the cost has increased by Rs.638.17 Crores.
- 2. The analysis of the source-wise approved and actual power purchases as per D1 statement is indicated in the following Table:

		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 (8-5)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL-Hydro	2498.04	215.26	0.86	2813.74	239.46	0.85	315.70	24.20	-0.01
2	KPCL Thermal	1018.78	439.01	4.31	764.81	476.13	6.23	-253.97	37.12	1.92
3	Central Projects	2476.93	931.81	3.76	2504.71	1074.60	4.29	27.78	142.79	0.53
4	UPCL	724.22	344.73	4.76	526.96	324.89	6.17	-197.26	-19.84	1.41
5	RE Projects	1064.55	511.66	4.81	2366.07	1018.92	4.31	1301.52	507.26	-0.50

It is seen from the above that while the energy procured from KPCL hydro, CGS and RE sources is more than the approved quantum, procurement from KPCL thermal and UPCL is lower.

- 3. The shortfall from KPCL Thermal projects and UPCL, has been made good by procuring power from KPCL hydro and RE sources.
- 4. As per the actual power purchase cost, there is overall increase in the per unit cost of energy purchased due to the following:
 - a) The power from the new thermal projects viz BTPS Unit-3 YTPS was considered as infirm power, while approving the ARR for FY19. The actual cost per unit of energy has increased due to declaration of Commercial Operation date of these thermal plants and consequent to payment of fixed charges;
 - b) Increase in power purchase quantum, change in the source-wise mix of supply and the energy balancing during reconciliation of energy and its cost among ESCOMs;
 - c) GESCOM has purchased more RE power than the approved.
 - d) Payment of additional PGCIL transmission charges of Rs.31.50 Crores from the GESCOM towards PoC charges, over and above approved amount.

As the State was paying abnormally high POC charges to PGCIL, the Commission, in its Tariff Order dated 30th May, 2019 had directed GESCOM to take appropriate action immediately, to resolve the issues with the appropriate authorities regarding the PGCIL transmission tariff. 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 GESCOM 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.

- 5. In view of the above reasons, the per unit average power purchase cost has increase to Rs.4.20 per kWh, as against the approved rate of Rs.3.85per kWh.
- 6. The Commission notes that, KPTCL is issuing the 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.

In view of the above facts, the Commission hereby decides to approve the actual power purchases of 9306.90 MU at a cost of Rs.3904.92 Crores, for the purpose of Annual Performance Review for FY19.

4.2.4 Renewable Purchase Obligation (RPO) compliance by GESCOM for FY19:

GESCOM in its tariff petition, has stated that it has met non-solar RPO of 30.32% against target of 7.00% by purchasing 2000.86 MU of Non-solar energy and solar RPO target of 13.92% against target of 6% by purchasing 917.98MU of solar energy, considering power purchase quantum of 6598.68 MU, net of hydro-energy, for FY19.

Commission's Analysis and Decisions:

The Commission in its preliminary observation, had observed that the energy purchase during FY19 net of hydro should be 6476.63 MU [9306.90-16.53 (other hydro)- 2813.74 (KPCL)], whereas for RPO, GESCOM had considered as 6598.68 MU. GESCOM was directed to reconcile the data.

GESCOM in its reply to the preliminary observations, has submitted that the difference of 122.05 MUs is due to under drawal energy from Hydel sources as per energy balance furnished by SLDC.

The Commission also directed GESCOM to indicate the energy break-up for Shimsha and Shivanasamuda projects separately along with the details of hydro energy included in energy balancing.

GESCOM has submitted that it has procured 52.76 MUs from Shimsha Hydro project and 17.28 MU from Shivanasamudram hydro power project. GESCOM submitted that as per energy balancing, total energy purchased from KPCL hydel and Other Hydro projects is 2813.74 MU and 2830.27 MU, respectively.

The Commission also observed that for the purpose of RPO computation, solar energy purchased was indicated as 917.98 MU. However, as per D-1 Format the total solar purchased is 636.83 MU, excluding purchase from NTPC. For NTPC VVNL & NTPC NSM, break up of solar energy and energy under coal was not furnished. GESCOM was directed to reconcile the data accordingly.

GESCOM in its replies, submitted that the total solar energy purchased during FY19 is 917.98 MU for RPO calculations. GESCOM informed that it has

purchased 18.90 MU and 196.44 MU of solar energy from NTPC VVNL and NTPC NSM projects, respectively.

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Further, for computation of non-solar RPO, non-solar energy purchased is indicated as 2000.86 MU. However, as per D-1 Format the total non-solar purchased is 1956.87 MU. GESCOM was directed to reconcile the data accordingly.

GESCOM in its replies, has submitted that it has purchased total non-solar energy of 1956.87MU. GESCOM has subtracted 9.71 MUs of non-solar energy purchased under APPC and then added 15.05 MU and 38.65 MU of banked energy and infirm energy, respectively, to arrive at total energy of 2000.86 MU.

The GESCOM, in its replies, has submitted the data as per the format prescribed by the Commission, duly reconciling the data with audited accounts for FY19, for validating the RPO compliance and to work out the APPC as shown below:

TABLE - 4.8 Non-solar RPO Compliance by GESCOM for FY19

SI. No	Particular	Quantum in MU	Cost Rs. In Crs.
1	Total power purchase quantum from all sources Excluding Hydro Energy	6598.68	3690.54
2	Non- Solar Renewable energy purchased under PPA route at Generic tariff including Non-Solar RE purchased from KPCL	1947.16	753.10
3	Non-Solar short -term purchase from RE sources, excluding sec-11 purchase	0.00	0.00
4	Non-Solar short -term purchase from RE sources under sec-11 of EA, 2003	0.00	0.00
5	Non-solar RE purchased under APPC	9.71	3.74
6	Non- solar RE purchase pertaining to green energy sold to consumer under green tariff	-	-
7	Non-solar RE purchased from other ESCOMs	-	=
8	Non- Solar RE sold to other ESCOMs	-	-
9	Non- Solar RE purchased from other sources like banked energy purchases at 85% of Generic Tariff	53.70	4.41
10	Total Non-Solar RE Energy purchased	2010.57	761.25
11	Non-Solar RE accounted for the purpose of RPO (2+9)	2000.86	757.51
12	Non- solar RPO complied in % [No11/No1]/100	30.32%	

TABLE - 4.9
Solar RPO Compliance by GESCOM for FY19

SI. No	Particular	Quantum in MU	Cost Rs. In Crores
1	Total power purchase quantum from all sources Excluding Hydro Energy	6598.68	3690.54
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	636.829	336.742
3	Solar energy purchased under Short term, excluding Sec-11 purchase	-	-
4	Solar Short-term Purchase from RE Under Sec-11 of EA, 2003	-	-
5	Solar energy purchased under APPC	-	-
6	Solar energy pertaining to green energy sold to consumers under green tariff	-	-
7	Solar energy purchased from other ESCOMs	-	-
8	Solar energy sold to other ESCOMs	-	-
9	Solar energy purchased from NTPC (or others) as bundled power	215.33	118.23
10	Solar energy purchased from any other sources like banked energy purchased at 85% of generic tariff	65.818	14.531
11	Total-Solar Energy purchased	917.981	469.503
12	Solar energy accounted for the purpose of RPO (2+9+10)	917.981	469.503
13	Solar RPO complied in % [No 12/ No1] *100	13.91%	

The Commission has taken note of the replies furnished by the GESCOM. 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 quantum of power purchase as per the APR for FY19. The Commission notes that the total quantum of power purchase of 9306.90 MU has been arrived at after deducting 626.40 MU of energy on account of energy balancing, which includes 122.05 MU of hydel energy. Thus, the total hydel energy purchased after accounting for energy balance, will be 2655.46 MU [2813.74 MU (KPCL Hydro) +16.53 MU (Other Hydro) -52.76 MU (Shimsha)- 122.05 (energy balance)]. Thus, excluding the procurement of 2655.46 MU from hydro sources, the energy purchased by GESCOM based on the audited accounts will be 6651.44 MU (9306.90 MU-2655.46 MU). The details of Non-solar energy procured is indicated below:

Energ	gy in Million Units
Co-generation (Power Purchase) (including medium term)	323.40
Mini Hydel	107.57
Wind power projects incl. KPCL	1495.88
Bio mass	30.02
Shimsha	52.76
Non-Solar Short-term purchase	Nil
Less Previous year FY18 adjustment as per TO 2019	Nil.
Banked energy/infirm energy purchased*	52.56
Purchased at APPC	-9.71
Sold to consumers as green energy	Nil
Non-solar Total	2052.48

^{*}As per e-mail dated 18.02.2020 Non-Solar infirm energy is 38.46 Mu and banked energy is 14.10 MU

As regards the Non-Solar RPO, considering the input energy of 6651.44 MU (excluding procurement from hydro sources), the Non-solar RPO target at 7.00% works out to 465.601 MU (465601 MWh after rounding off). GESCOM has purchased 2052.48 MU (2052480 MWh) of Non-solar energy including purchase of 52.56 MU of banked/infirm energy. Thus, GESCOM has purchased 1586.879 MU (1586879 MWh) excess non-solar energy over and above the target specified. The Commission holds that GESCOM has met its Non-Solar RPO target of 7% for FY19, in terms of the prevailing Regulations.

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

Energy i	in Million Units
Solar PPA Route including KPCL	636.83
Solar Rooftop	9.75
Solar KPCL	0
Solar Bundled Power**	215.34
Solar New Park	0
Solar Short /medium term purchase	0
Less Previous year FY18 adjustment as per TO 2019	0
Banked/infirm energy purchased	56.08
Sold to consumers as green energy	0
Solar Total	918.00

^{*}As per e-mail dated 18.02.2020 solar infirm energy is 29.73 Mu and banked is 26.35 MU

Considering the input energy (excluding procurement from hydro sources) of 6651.44 MU, the Solar RPO target at 6.00% works out to 399.086 MU (399086 MWh after rounding off). GESCOM has purchased 918.00 MU (918000 MWh)

^{**} As per replies furnished to preliminary observations

of Solar energy. Thus, GESCOM has purchased 518.914 MU (518914 MWh) excess Solar energy over and above the target specified. The Commission holds that GESCOM has met its Solar RPO target of 6% for FY19, in terms of the prevailing Regulations.

4.2.5 Operation and Maintenance Expenses:

GESCOM's Submission:

In its application, GESCOM, as per audited accounts, has sought approval of O&M expenditure of Rs.693.84 Crores for FY19. The break-up of O&M expenses are as follows:

TABLE – 4.10
O & M Expenses – GESCOM's submission

Amounti	n ks. Crores
Particulars	FY19
Employee cost	529.21
Administrative & General Expenses	118.78
Repairs and Maintenance	45.85
Total O & M Expenses	693.84

GESCOM in its filing has submitted that:

- a. During FY18, the impact of salaries for the employees recruited during FY18 had a partial year impact and this year, in FY19, it would be for full year which has to be considered separately, while carrying out the APR, as there is no base year data for the above expenses.
- b. The impact of pay revision during FY18 amounting to Rs.61.10 Crores, was not fully considered in the earlier Tariff Order and GESCOM has requested the Commission to consider the same, during APR of FY19.
- c. One-time expense incurred towards P&G Trust account is Rs.58.45 Crores, owing to the revision of the contribution rates, effective from FY17 onwards.
- d. Earned Leave encashment obligation has increased by Rs.33.04 Crores due to the Actuarial Valuation and pay revision.
- e. Repairs & Maintenance expenses have increased by Rs.12.57 Crores as expenses towards of replacement of transformers and the bank charges

of Rs.9.45 Crores including guarantee commission to the Government, has been considered under R&M expenses, instead of Interest and Finances charges.

Commission's analysis and decisions:

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

TABLE – 4.11
Approved O&M Expenses as per Tariff Order dated 14.05.2018

Particulars	FY19
No. of installations as per actuals as per Audited Accts	3087790
Weighted Inflation Index	8.1059%
CGI based on 3 Year CAGR	3.88%
Actual O&M expenses for FY16 - in Rs. Crores.	422.56
Total approved O&M Expenses for FY19– in Rs. Crores.	557.44

The Commission notes that, GESCOM in its filing, has projected the total O&M expenses of Rs.693.84 Crores for FY19 as against the approved O&M expenditure of Rs.557.44 Crores. This amount consists of Rs.45.85 Crores towards R&M expenses, Rs.529.21 Crores towards Employees cost and Rs.118.78 Crores towards A&G expenses, being the actual expenses, as per the audited accounts for FY19. The actual employees cost also included the terminal benefits, which is considered as an additional employee cost towards the contribution to Pension & Gratuity (P&G) Trust for Rs.127.75 Crores.

The Commission, in its Tariff Order 2019, while approving the APR for FY18, has 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.78.20 Crores, as an additional employees cost. The Commission take notes of the reply submitted by GESCOM regarding the actual payment of arrears of Rs.61.10 Crores, to its employees on account of pay revision for FY18 during FY19 and the additional contribution made to the P&G Trust thereon, consequent to the revision of pension and gratuity contribution rates with effect from 1st April 2016. The Commission also directed GESCOM to submit the actual employees cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust thereon for the FY18.

In the matter of new recruitment, GESCOM has informed that Junior Line Men endurance test have been conducted and that the notification for conducting examination for various posts will be issued after getting directions from KPTCL.

The Commission had observed that GESCOM, in its filing under Format D-6, had claimed Rs.127.75 Crores, towards Terminal Benefits for FY19. GESCOM was directed to furnish the details of computation for claiming the said amount with clear bifurcation of the amounts between the employees recruited prior to 31.3.2006 and after 31.3.2006.

The Commission notes that, GESCOM in its reply to the preliminary observations, has submitted the break-up of Rs.127.75 Crores incurred towards contribution of terminal benefits to P&G Trust for FY19, on account of revision in the contribution rate of pension from 33.05% to 42.53% effective from 1st April, 2016. GESCOM informed that the contribution made towards NDCPS is Rs.11.75 Crores.

The Commission further notes the details submitted by GESCOM to the preliminary observation for having incurred higher expenditure under remuneration to Contract agencies and conveyance and travelling charges for FY19. The Commission noted that these expenses are substantially higher and increasing year on year. As per the provisions of MYT Regulations, the O&M expenses are controllable and every ESCOM need to control the expenditure under this head by utilizing the available resources within its control, in a prudent manner.

Further, the Commission notes that as per the audited account, the actual O&M expenses reported by GESCOM are more than the approved O&M expenses by Rs.138.89 Crores. The Commission, in accordance with the provision of MYT Regulations and the methodology adopted, while approving the ARR for FY19 and the APR's of the earlier periods, proceeds with the determination of normative O&M expenses based on the 12 Year data of WPI and CPI besides considering 3 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 - 4.12 Computation of Allowable Inflation Rate

WII FOR ARR19								
Year	WPI	СРІ	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(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	231.196	1.94	0.66	8	5.29	
2016	110.3	274.3	241.5	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								
D=B/C								
g(Exponential factor)= Exponential (D)-1								
e=Annual Esc	alation R	ate (%)=g*1	00				8.2604	

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

For the purpose of 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 O&M 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 the number of installations considering the actual number of installations as per the audited accounts up to FY19 at 3.72%.

- c) The weighted inflation index (WII) at 8.2604% as computed above.
- d) Efficiency factor at 2% as considered in the earlier control periods.

Thus, the normative O & M expenses for FY19 are computed as follows:

TABLE - 4.13
Allowable Normative O & M Expenses for FY19

Amount	in Rs. Crores
Particulars	FY19
No of installations as per actuals as per Audited Accts	3072991
Consumer growth as per actuals / projections (3 Year CAGR)	3.72%
Inflation Index	8.2604%
Base year O&M expenses (As per actuals of FY16)	362.19
Approved O&M expenses without P&G contribution for FY17	
(Rs.in Crores)	400.25
Approved O&M expenses with pay revision arrears and without	
P&G contribution for FY18 (Rs.in Crores)	503.80
Allowable O&M expenses for FY19 Rs.in Crores, O&M Index= 0&M	
(†-1)*(1+WII+CGI-X)	554.06

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

The Commission notes the GESCOMs replies for having included Rs.78.20 Crores as per the audited account as an additional employee cost on account of revision of pay to its employees from 1st April, 2018 to 31st March, 2019 for FY19. As this amount is included in the employee cost of FY19, the Commission has not considered it separately. However, the contribution to the Pension and Gratuity Trust of Rs.127.75 Crores is considered as additional employee cost and allowed.

The Commission, as per the provision of the MYT Regulations, has treated the additional employee costs towards of contribution to P&G Trust for meeting the terminal benefits for FY19, as uncontrollable O&M expenses. This component has been allowed over and above the normative O&M expenses to enable the GESCOM to meet their actual employee costs. The computation of the total allowable O&M expenses for FY19 is as under:

TABLE – 4.14
Allowable O & M Expenses for FY19

Amount in Rs. Crores

SI. No.	Particulars	FY19
1	Allowable Normative O & M expenses	554.06
2	Allowable Additional employee cost	127.75
	(uncontrollable Contribution to P&G Trust)	
3.	Allowable O & M expenses for FY19	681.81

The Commission in its Order, has been stressing the need to control the O&M expenses. The Commission is of the view that allowing the controllable O&M expenses beyond the normative O&M expenses as per the MYT Regulations would be a burden on the end consumers. Therefore, the Commission as per the provisions of MYT Regulations, decides to allow the allowable normative O&M expenses plus allowable additional employees cost towards contribution to P&G Trust for FY19.

Thus, the Commission decides to allow Rs.681.81 Crore as the allowable O&M expenses for FY19.

4.2.6 Depreciation:

GESCOM's Submission:

As per the audited accounts for FY19, GESCOM, in its application has claimed an amount of Rs.145.66 Crores as the net depreciation, after deducting an amount of Rs.45.32 Crores towards the depreciation on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS)-12.

Commission's analysis and decisions:

The Commission, notes the depreciation amount charged on the gross fixed asset as per the GESCOM's audited accounts for FY19. The Commission in accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, has determined the depreciation based on the opening and closing balances of gross blocks of fixed assets for FY19 as per the audited accounts and the weighted average rate of depreciation works out to 4.71%.

Further, based on the Accounting Standards (AS)–12, the Commission has recognized an amount of Rs.45.32 Crores of depreciation on assets created out of consumer contribution / grants accounted under other income as per audited account for FY19 and deducted from the gross depreciation amount for FY19.

The computation of asset-wise depreciation is shown in the following Table:

TABLE – 4.15
Allowable Depreciation for FY19

Amount in Rs. Crores

	Opening	FY19			
Particulars	Balance of Asset as on 01.04.2018	Depreciation	Closing Balance of Asset as on 31.03.2019		
Buildings	69.84	2.73	77.58		
Hydraulic works	9.31	0.13	9.85		
Plant & Machinery	653.46	29.24	701.26		
Line, Cable Network	3127.87	157.99	3427.96		
Vehicles	5.86	0.23	5.86		
Furniture	5.91	0.28	6.27		
Office Equipment	6.82	0.39	7.07		
Land	924.79		897.42		
GFA	4803.86	190.99	5133.26		
Less: Depreciation withdrawn on assets created by consumer's					
contribution grants		45.32			
Net Depreciation		145.67			

Based on the above, the Commission decides to allow the net depreciation of Rs.145.67 Crores for FY19.

4.2.7 Capital Expenditure for FY19:

Annual Performance Review for FY19:

The GESCOM, in its application for APR for FY19, has indicated a capital expenditure of Rs.691.57 Crores. The capital expenditure of Rs.691.57 Crores for FY19 is against the Commission approved capex of Rs.846.00 Crores for the FY19. The GESCOM has furnished the breakup of category-wise expenditure of Rs.691.57 Crores for FY19 along with explanation for the deviations in utilization of budget, as against the Commission approved amounts, as shown below:

TABLE - 4.16

Capital expenditure of the GESCOM for FY19

SI. No.	Categories of works	Capex approved for FY18 (Rs in Crores)	Actual Expenditure for FY18 (Rs in Crores)	% of Budget utilized	GESCOM's Remarks
1	33kV Sub-station, 33kV line works & Augmentation of 33kV S/S's	50.00	33.07	66.14%	There were 12 awarded works. Out of which 02 works completed and commissioned. Other works completed up to 60%. Hence underutilization has occurred.
2	RGGVY works REC	2.00	0.00	0.00%	
	RAPDRP Works				
	Part-A	0.00	0.35		
3	Part-B	0.00	0.32		
	IPDS	133.00	104.94	78.90%	
	Reconductoring works:				These works are merged with
4	a) 33kV lines	0.00	0.00		DDUGJY and IPDS.
	b) 11kV lines	10.00	1.04	10.40%	Hence
	c) L.T Lines	20.00	2.87	14.35%	underutilized.
5	5(a)DTC metering works (RAPDRP area)	0.00	0.09		
3	5(b) DTC metering for Non RAPDRP	5.00	0.00	0.00%	
6	Water supply works	15.00	8.87	59.13%	Some works spilled over to FY-20.
	Additional DTC's works:				
7	a) New DTC's	5.00	16.19	323.80%	To maintain reliable power supply as per prevailing field situation more DTC added.
	b) Enhancement of DTC's	10.00	4.71	47.10%	
8	Replacement failed 11 KV transformers	20.00	31.70	158.50%	New transformers are provided in place of failed transformers where ever failed transformers are

				beyond repair.
Replacement of				
Power	5.00	1.00	20.00%	
Replacement of MNR meters	4.00	1.04	26.00%	
Providing ETV meters	0.00	0.00		
Providing HT metering Cubicles for ring fencing	0.50	0.00	0.00%	
Service Connection works				
a) General works	10.00		33.00%	Works are
b) IP set works (General Category)	3.00	3.30	0.00%	executed as per the actual receipt of application
a) SI works (33KV link line /Express feeders)	1.00	1.48	148.00%	
b) SI works (11KV Link line /Express feeders,)	10.00	4.80	48.00%	
a) Nirantara Jyoti works	10.00	13.02	130.20%	
b) Deen Dayal Upadhay Gram Jyothi Yojane	299.00	269.51	90.14%	
a) Major Replacements in S/S's & lines	2.00		36.00%	
b) Replacement of Age old Equipment in existing S/S & Lines	4.00	0.72	0.00%	
Civil Engineer Works	10.00	12.16	121.60%	
IT initiatives and enumeration of IP sets	1.00	0.79	79.00%	
HVDS Works	0.00	0.00		
Providing ABC, UG Cables & RMUs		0.00		
SCADA Works	0.50	0.00	0.00%	
a) Energization of IP Sets	0.50	9.85	0.00%	The complete Grants by GOK towards SCP/TSP
	Replacement of MNR meters Providing ETV meters Providing HT metering Cubicles for ring fencing Service Connection works a) General works b) IP set works (General Category) a) SI works (33KV link line /Express feeders) b) SI works (11KV Link line /Express feeders,) a) Nirantara Jyoti works b) Deen Dayal Upadhay Gram Jyothi Yojane a) Major Replacements in S/S's & lines b) Replacement of Age old Equipment in existing S/S & Lines Civil Engineer Works IT initiatives and enumeration of IP sets HVDS Works Providing ABC, UG Cables & RMUs SCADA Works	Power transformers Replacement of MNR meters Providing ETV meters Providing HT metering Cubicles for ring fencing Service Connection works a) General works b) IP set works (General 3.00 Category) a) SI works (33KV link line /Express feeders) b) SI works (11KV Link line /Express feeders,) a) Nirantara Jyoti works b) Deen Dayal Upadhay Gram Jyothi Yojane a) Major Replacements in S/S's & lines b) Replacement of Age old Equipment in existing S/S & Lines Civil Engineer Works HVDS Works Providing ABC, UG Cables & RMUs SCADA Works a) Energization of 0.50	Power transformers Foundation Foundati	Power transformers Feplacement of MNR meters Froviding ETV O.00 O.00

	b) Electrification	0.50		0.00%	utilized.
	of HB's /JC's				
	c) Kutir Jyoti	0.50		0.00%	There is no target
23	Ganga Kalyan scheme Works	50.00	79.11	158.22%	for GK works. Applications as when received are energized.
24	T&P Articles	0.50	0.28	56.00%	
25	Replacing of Electro Magnetic Meters by Static Meters	0.50	2.08	416.00%	
26	Metering of IP/St. Lights / BJ&KJ Sets and Water supply	0.50	0.00	0.00%	
27	Providing Infrastructure to Regularization of Unauthorized IP Sets	25.00	6.23	24.92%	Underutilization is due to delay in awarding the works.
28	R.E General Works				
	a)Kutir Jyoti	4.00	0.00	0.00%	
29	Prevention of electrical accident & safety	9.00	4.57	50.78%	
30	Electrification of Rehabilitation Villages	5.00	0.00	0.00%	
31	Replacement of Broken poles	10.00	7.85	78.50%	
32	Feeder Metering		0.00		
33	DDG	1.00	0.00	0.00%	
34	a) LT Line Conversion of 1 Phase 2 wire or 1 Ph 3 wore to 3Ph 5 Wire (Including providing ABC, UG cable etc.)	5.00	0.14	2.80%	Taken up under DDUGJY and IPDS
35	Providing SMC Box to DTCs	2.00	0.00	0.00%	
	a) Energisation of IP Sets Under General category		1.08		
36	b) Energization of IP Sets Under General category (Shigra Samparka Yojane)	2.00	1.62	81.00%	

37	Stations Augmentation	5.00	0.00	0.00%	
38	Providing meters to IP Sets above 10 HP	0.50	0.20	40.00%	
39	Distribution Automation System (DAS)	0.00	14.89		Budget utilized for establishing 05 Nos of 33KV GIS stations.
40	DSM	0.50	0.00	0.00%	
41	Safety Materials	2.00	0.13	6.50%	
42	SDP Works	40.00	13.69	34.23%	The works are sanctioned as per the allocation and some of the works are spilled over to next financial year.
43	HT Conductor by 11 kV AB Cable	10.00	0.05	0.50%	
44	Computers and Printers (T & P Materials)	5.00	0.12	2.40%	
45	Refurbishment of 11 kV lines	0.00	0.00		
46	Providing OLP relapse to stations.	2.00	0.00	0.00%	
47	Shifting of meter from I to O	10.00	23.86	238.60%	over utilization is due to spilled over works of FY-18.
48	R&M to stations	25.00	0.00	0.00%	
49	DTC metering		0.00		
50	Creation of Electrical Infrastructures for conversion of Existing various villages to Model villages		0.00		
51	SOUBHAGYA Scheme		12.80		There was no provision made for these works initially. As per the direction of MOP works are taken up in middle of financial year.
52	Shifting of existing DTC to load center		1.02		
	Total	846.00	691.57	81.75%	

Commission's Analysis and Decision:

The Commission has taken note of the explanation for the deviations in utilization of budget as against the Commission approved budget, as brought out in the above table.

The Commission notes that the Capital Budget of Rs.1120.04 Crores was approved by GESCOM Board for the FY19, as against Commission approved capex of Rs.846 Cores for FY19. In this regard the Commission more often than not, has directed GESCOM to prioritize the works and incur expenditure with in the approved capex. It was made clear to GESCOM that it shall not incur the capex over and above the approved capex. While prioritizing the works, GESCOM was required to take up such work which are intended for system improvement to enable quality and reliable power to the consumers besides ensuring reduction of distribution losses, in order to reduce the burden of losses to the consumers.

The Commission notes the following submission made by GESCOM:

a) Progress under DDUGJY:

SI.	AASI o ako ma Ni awa a	11 21	GESCOM		
No.	Milestone Name	Unit	Target	Achieved	
1	Running of New 11kV Line	KM's	5591.39	4467.49	
2	Re-conductoring of 11kV Line	KM's	2651.31	2019.1	
3	Running of New LT Line	KM's	188.54	144.55	
4	Re-conductoring of LT Line	KM's	549.49	541.86	
5	Providing New DTC	No's	3552	3127	
6	LT AB Cable	KM's	1842.9	914.53	
7	Shifting of Meters from inside to outside	No's	160319	133275	
8	Replacement of Electro Mechanical by Electro Static Meters	No's	434851	292324	
9	DTC - Metering	No's	4841	3342	
10	Feeder Separation	No's	273	254	

b) Progress under IPDS:

SI.			GE	GESCOM	
No.	Milestone Name	Unit Target		Achieved	
1	11 KV New Feeders	Km	237.9	235.33	
2	11 KV Feeder Reconductoring	Km	273.64	266.22	
3	Arial Bunched Cable	Km	852.78	826.28	
4	UG Cables	Km	49.27	47.67	
5	Consumer Meter	Nos	268109	102842	

- c) Apart from DDUGJY and IPDS GESCOM has taken various system strengthening works like Reconductoring, link line construction, providing intermediate poles, rectification of hazardous locations under SDP.
- d) Through effective Vigilance drive GESCOM has taken action to bring down the distribution losses of NJY feeders within the prescribed limit specified by the Commission.
- e) GESCOM through its Demand Side Management wing has taken various steps towards Consumer Awareness Programme on Electrical safety and Energy conservation.
- f) To improve the sales of metering category, GESCOM has taken the following actions.
 - i) Identification of un-authorized water supply installations and their regularization for 2200Nos of W/S installation.
 - ii) Metering of street lights.
 - iii) Replacement of electromechanical meters by static meters. (292324 Nos of meters replaced under DDUGJY as on 30.11.2019).
 - iv) Shifting of meters from inside to outside the installation. (133275 meters shifted from inside to outside the installations under DDUGJY as on 30.11.2019).
 - v) Regularization of UAIP.
 - vi) Conducting monthly review meeting of accounts wing to check for.
 - a) 100% meter reading.
 - b) Zero consumption installations.
 - c) Unbilled installations.
 - d) DC and MNR Installations.
- g) GESCOM has already initiated action to improve the Power factor by providing Capacitor Bank to the Exclusive IP set feeders and putting back the non-operational Capacitor banks to service.
- h) The details of reduction in Reduction in Distribution losses, HT:LT ratio, Transformer failure and theft from FY17 to FY19 are as follows:

FY	Reduction in Distribution Loss in %	Reduction in HT:LT Ratio	Reduction in Transformer failure Rates (in %)	Segregations of Agriculture feeders(Nos)
2016-17	17.33	1.54	12.67	587
2017-18	16.39	1.48	13.21	628
2018-19	14.41	1.41	12.96	678

Reduction in Theft of power

FY	No of Cases Booked	Penalty levied (In Crs)	Amount Collected (In Crs)
2016-17	17597	33.29	12.58
2017-18	17280	41.79	20.61
2018-19	16626	35.02	25.12

With regard to replacement of failed transformers by new transformers during FY19 and furnishing the details of division-wise and capacity-wise transformers failed, repaired, repaired transformers issued to the field and failed transformers considered as not repairable, replacement of failed transformers with new transformers, percentage of DTCs failure and the balance of transformers yet to be repaired during FY19 and also the status thereon up to 30.11.2019 during FY20, GESCOM has submitted that during FY19 replacement of failed distribution transformer with repaired good as well as by new transformer are booked under Capex leading to huge expenditure under Capex. However, GESCOM has issued strict instructions to all the Divisions to book the expenditure for replacement of failed transformer with repaired good one under Revenue budget and by new one under Capex, while annexing the details of transformer failed, replaced and expenditure booked for FY19.

From the above submissions made by GESCOM, the Commission notes that, the Transformer failure rate is on the higher side and GESCOM is not implementing the measures in the field. The failure on the part of GESCOM to reduce the Transformer failure rate effectively in future will be viewed seriously.

From the details of physical and financial progress in respect of major schemes taken up by GESCOM, it is noticed that, GESCOM is implementing most of the schemes without analyzing the financial feasibility and precise benefits derived from it. GESCOM is spending amount on majority of these schemes through loans and its own funds, as indicated in the Table below. Further, if the schemes are not implemented within the timeframe, it will result in time over run and cost overrun.

Name of the Scheme	Total Cost of the Scheme (Rs. in Crores)	Contribution borne by GESCOM in the total capex of the scheme	Scheduled Date of Completion	Target Date of Completion	Cost to Benefit Ratio
DDUGJY	497	10%; Balance : Govt. of Grant: 60% and 30% Loan	Dec-2018	Jan-2020	Not indicated
Soubhagya	73.72	10%; Balance : Govt. of Grant: 60% and 30% Loan	March- 2019	Dec-2019	3.37

Further, the objectives are indicated broadly without indicating specific objectives. GESCOM needs to set the objectives for each work in terms of technical and financial parameters viz. reduction in AT & C losses, Category wise increase in consumption in particular feeder, increase in revenue realization, reduction in interruptions, Improvement in voltage etc.

In the light of the above observations, GESCOM is directed to analyze the financial feasibility of any scheme and precise benefits to be achieved from such schemes before taking up any such schemes. In future, GESCOM shall submit the Capex request for any new work/scheme duly supported by the details of the benefits anticipated/ to be achieved so that the end consumers, who ultimately bear the burden of the cost of investment are kept aware of the benefits of the schemes they are going to get.

The Commission, after reviewing the capex achieved by GESCOM for FY19, decides to allow capex of Rs.691.57 Crores for FY19, which is less than the approved capex of Rs.846.00 Crores for FY19, subject to Prudence Check.

Prudence Check of Capital Expenditure incurred by GESCOM 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 GESCOM for the period FY17 and FY18 respectively subject to carrying out the prudence check of the various works undertaken by GESCOM. Accordingly, the Commission

had entrusted conducting prudence check work of GESCOM to M/s ABPS Infrastructure Advisory Pvt. Ltd., Mumbai.

M/s ABPS Infrastructure Advisory Pvt. Ltd., 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
Abstract of Prudent / Non-Prudent works	(Nos.)	(Nos.)
Total no. of samples selected	65	95
Total no. of Prudent works	65	92
Total no. of works non-prudent	0	3
Abstract of Cost over run works	(Nos.)	(Nos.)
No. of works with no cost over-run	56	87
No. of works with cost over-run up to 10%	4	5
No. of works with cost over-run between 10% and 25%	3	0
No. of works with cost over-run exceeding 25%	2	0
Works not fully completed	0	3
Abstract of Time over Run works	(Nos.)	(Nos.)
No. of works with no time over-run	36	48
No. of works with time over run of upto 1 year	14	42
No. for works with time over run of between 1 to		
2 years	14	1
No. of works with time over run more than 2 years	1	1
Works not fully completed in FY	0	3

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

After analyzing GESCOM's replies on the findings of the Consultant on the non-prudent works and justifications furnished by GESCOM, the Commission has noted that, all the three works listed under imprudent category has been categorized during 2018-19. However, the same has been included in the samples of FY18 by GESCOM. Hence, the Commission decided to take a view on these works during the prudence check of respective year. The Commission directs the GESCOM to be more vigilant while providing the information and avoid such mistakes in future. The Commission will consider imposing suitable penalty on the GESCOM, for not providing correct information.

However, one work which is not meeting prudence norms in KPTCL for FY18 which is attributable to GESCOM (amounting to Rs.7.99 Crores) has been considered for disallowance in the revised ARR due to APR of GESCOM for FY19.

Accordingly, the corresponding depreciation and interest on loans allowed by the Commission, in the ARR have to be disallowed in revised ARR of FY19, as detailed below:

The	The amount to be disallowed for GESCOM due to imprudent works of FY18 (Amount in Rs. In Crores)			
SI.No.	Particulars of works	Amount		
1	Total cost of capital works categorized during the year as per Annual report of GESCOM for FY17	416.63		
2	Total cost of categorized works costing more than Rs. 5 Lakhs considered for prudence check (that was made available by GESCOM for prudence check)	34.49		
3	Total cost of sample works out of Rs 34.49 Crores	13.05		
4	Cost of sample works not meeting prudence norms	0.00		
5	Cost of sample works not meeting prudence norms attributable to other companies (viz. KPTCL & other ESCOMs)	0.00		
6	Net Capex which is not meeting prudence norms as per the Report of Prudence check of GESCOM	0.00		
7	The capex not meeting prudence norms in KPTCL attributable to GESCOM			
8	Name of the imprudent Work: Establishing 1x20 MVA, 110/33/11 kV and 1x10 MVA, 110/11 kV Substation with associated line at Dubalgundi	7.99		
9	Target date for completion, Year of completion and categorization	22.12.2017, 23.03.2018 and 31.03.2018		
10	The capex not meeting prudence norms in KPTCL (Rs 7.99Cr*(300-40)/300 =Rs 6.92 Crore) attributable to GESCOM $^{\wedge}$	6.92		
11	Period for which amount to be disallowed towards works not meeting prudence norms calculated on the basis of weighted average interest and weighted average	23 March 2018 to March		
	depreciation on the amount in above item Amount to be disallowed for 23rd March 2018 to 31st March 2018	0.02		
12	Amount to be disallowed for FY19	0.90		
	Sub-total amount to be disallowed	0.92		

13	Total amount to be disallowed	0.92				
	In the report on prudence work for FY18 of KTPCL, in respect	t of subject				
	work, it is stated that It was observed that 10 MVA transformer, only					
	of capacity load could be achieved in the month of December, 2018					
	In case of 20 MVA transformer, the same remains unutilized since date					
	of commission/capitalization. The KPTCL in its compliance dated 19th					
$\wedge \wedge$	November 2019 has also attributed the imprudence to GESCOM.					
///	The calculations for arriving capex amount that is attributable towards					
	non-prudence of GESCOM: since, total capacity of the st	tation is 30				
	MVA, wherein if total percentage of utilization is considered as 300 fo 30 MVA with 100 for 10 MVA, as per the report, 40% has been utilized out of 10 MVA. Hence, utilized is 260. Proportionately the impruden					
	capex amount works out to Rs.7.99 Cr*(300-40)/300 =6.92 Crore					

While arriving at the above amounts for disallowance, the weighted average rate of interest on loans and depreciation considered is as follows:

	FY1	8	FY19		
Company	Wt. Avg. Depreciation rate	Wt. Avg. Interest on Ioan	Wt. Avg. Depreciation rate	Wt. Avg. Interest on Ioan	
KPTCL	4.44%	8.20%	4.70%	8.25%	

GESCOM is directed to note the following observations made in respect of prudence check and take suitable actions/measures in future while implementing a scheme / project in order to avoid imprudent works and improve in execution of work:

- i) There is no Planning for most of the works such as E&I works, Government scheme etc.
- ii) GESCOM has not been following prudent practices in material procurement.
- iii) The estimates of all works did not indicate any alternative proposals studied before preparing the estimate for a given work.
- iv) Cost to benefit Analysis is not carried out for any of the works.
- v) Cost Overrun is observed in 14% and 9% of the works considered for samples in the FY17 and FY18 respectively.
- vi) Time Overrun is observed in 44% and 52% of the works considered for samples in the FY17 and FY18 respectively. The time overrun more than 2 years is observed.

- ∨ii) There are no clear guidelines/policy, indicating the capex amount beyond which the DPR is mandated.
- Anomalies in data inputs and lack of documentation of the CAPEX works.

In view of the above, the Commission hereby disallows Rs.0.92 Crore for FY18 towards depreciation and interest on loans allowed in respect of imprudent works. Accordingly, the same is ordered to be deducted in GESCOM's APR of FY19.

4.2.8 Interest and Finance Charges:

a) Interest on Capital loan:

Karnataka Electricity Regulatory Commission

GESCOM's Submission:

The GESCOM, in its application has claimed an amount of Rs.97.54 Crores towards interest on capital loans drawn from Banks/Financial Institutions for FY19 and requested the Commission to approve the same.

Commission's analysis and decisions:

The Commission has taken note of the loan portfolios of GESCOM (opening and closing balances of capital loans and the interest thereon) as per the audited accounts for FY19 and the data in Format D-9 of the filings and the additional information furnished. The Commission, in its preliminary observations, had noted that GESCOM, has not furnished details for both the capital loans and working capital loans against the loans availed/proposed to be availed for FY19 to FY21, in its filing, as per Format-D9. Therefore, GESCOM was directed to furnish the details of each loan duly tallied with the audited accounts, for FY19 (Actuals) and up to September, 2019 (Actuals).

The Commission has noted the replies furnished by GESCOM to the preliminary observations made by the Commission.

Further, the Commission notes that as per the audited accounts of GESCOM has incurred interest on capital loan of Rs.76.17 Crores for FY19. Considering the average loan of Rs.764.44 Crores and an amount of Rs.76.17 Crores incurred towards interest on capital loans, the weighted average of interest rate works out to 9.96%. The Commission, considering the capital loan portfolio of GESCOM has observed that GESCOM has availed interest of the loans from PFC and REC at the interest rate ranging from 9% to 11.20%. Considering the rate of interest at which the capital loan barrowed by GESCOM, as indicated in the details of loan furnished in D-9 Format and the additional information submitted, the actual weighted average rate of interest is comparable with the prevailing rate of interest for long term capital loans. Accordingly, the allowable interest on long term capital loan for FY19 is indicated in the following Table:

TABLE – 4.17 Allowable Interest on Loans – FY19

	Amount in Rs. Crores
Particulars	FY19
OB: Secured and unsecured loans	656.83
Add: New Loans	315.50
Less: Repayments	100.29
Total loan at the end of the year	872.04
Average Loan	764.44
Interest paid on long term loans	76.17
Weighted average rate of interest based on the actual interest paid on long term loans in %	9.96%
Allowable Interest on capital loan	76.17

Thus, the Commission decides to allow an amount of Rs.76.17 Crores towards interest on capital loans for FY19.

b) Interest on Working Capital:

GESCOM's Submission:

The GESCOM, in its application has claimed an amount of Rs.156.56 Crores as interest on short term loans and overdraft from the Commercial Banks and Financial Institutions for FY19 and sought approval of the Commission for the same.

Commission's analysis and decisions:

As per the audited accounts and the replies and the additional details submitted on the preliminary observations of the Commission, the GESCOM has incurred of Rs.21.37 Crores towards interest on short term loans and overdraft to meet its day to day working capital requirement for FY19.

The Commission, in its Tariff Order dated 14th May, 2018, while approving the ARR for FY19, has computed the working capital at the interest rate of 11.50%. The Commission notes that, GESCOM has availed short-term loans and overdraft at the rate of 8.85% to 11.25% from REC and Commercial Banks during the FY19 which is on the higher side as compared with the interest rate at which the other ESCOMs have borrowed the working capital. The Commission taking note of the SBI MCL rates charged for the short term loans, further observed that there is downward trend in the MCL rates in the financial market. The Commission also note that GESCOM has not availed the benefit of the reduced rate of interest offered by the Banking sector in recent years, while availing loans towards meeting the working capital requirement.

The Commission directs GESCOM to avail working capital loan at competitive rates offered by the Banking industry, to reduce the interest burden on the consumers.

The Commission, notes that GESCOM has not availed adequate working capital to settle the power purchase dues and incurred an amount of Rs.156.56 Crores towards interest on belated payment of power purchase bills for FY19. The Commission further notes that, GESCOM has incurred actual interest of Rs.21.37 Crores on working capital for FY19. Therefore, the Commission decides to allow working capital loans, at a normative interest rate of 11% for FY19.

As per the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail sale of electricity) Regulations, 2006 and amendments thereon, the Commission has computed the allowable interest on working capital for FY19 as follows:

TABLE – 4.18

Allowable Interest on Working Capital for FY19

Amount in Rs. Crores

Particulars	FY 19
One-twelfth of the amount of O&M Exp.	56.82
Opening GFA as per Audited Accounts	4803.86
Stores, materials and supplies 1% of Opening balance of GFA	48.04
One-sixth of the Revenue	839.02
Total Working Capital	943.88
Rate of Interest (% p.a.)	11.00%
Interest on Working Capital	103.83
Actual Interest on Working Capital incurred	21.37
Allowable interest In on WC (actual interest on working capital + 50% of the difference between normative interest on working capital and the actual interest on WC)	62.60

Thus, the Commission, decides to allow an amount of Rs.62.60 Crores towards interest on working capital for FY19.

c) Interest on Consumers' Security Deposits:

GESCOM's Submission:

The GESCOM in its application as per audited accounts has claimed an amount of Rs.31.94 Crores towards payment of interest on consumers' security deposits for FY19 and sought approval of the Commission for the same.

Commission's analysis and decisions:

The Commission notes the opening and closing balance of consumer security deposit as per audited accounts for FY19. The actual interest on the consumer deposit as per the audited accounts is Rs.31.94 Crores. The weighted average rate of interest on the average of opening and closing balance of deposits works out to of 6.24%. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumers' security 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%. Since the weighted average rate of interest claimed by the GESCOM, as per the

audited accounts, is well within the applicable bank rate, the Commission decides to allow an amount of Rs.31.94 Crores towards interest on consumers' security deposits for FY19.

d) Other Interest and Finance charges:

GESCOM Submission:

The GESCOM has not claimed any amount towards other interest and finance charges for FY19. Hence, the Commission decides not to allow any amount towards other interest and finance charges in the APR for FY19.

The total allowable interest and finance charges for FY19 are as follows:

TABLE – 4.19
Allowable Interest and Finance Charges for FY19

Amount in Rs. Crores

SI. No.	Particulars	FY19
1.	Interest on Loan capital	76.17
2.	Interest on working capital	62.60
3.	Interest on consumers' security deposits	31.94
4.	Less: Interest Capitalised	-2.26
	Total interest and finance charges	168.45

4.2.9 Other Debits:

GESCOM's Submission:

The GESCOM, in its application has claimed an amount of Rs.68.91 Crores towards Other debits by considering only the provision for bad and doubtful debts for FY19.

Commission's analysis and decisions:

The Commission notes that, GESCOM in its filing, without recognising the other items of expenses, has claimed only the provisions created for bad and doubtful debts which is not admissible as per the provisions of MYT Regulations. As per the provisions of MYT Regulations, the allowable Other

debits excluding the provision for bad and doubtful debts for FY19, are as detailed below:

TABLE – 4.20
Allowable Other Debits for FY19
Amount in Rs. Crores

	Amount in ks. croics		
SI. No	Particulars	FY19	
1	Compensation for death, injuries and damages	2.64	
2	Assets decommissioning cost	0.0015	
4	Miscellaneous losses and write offs	-5.16	
	Total	-2.52	

Thus, the Commission decides to consider an amount of Rs.-2.52 Crores as other debit for FY19.

4.2.10 Return on Equity:

GESCOM's Submission:

The GESCOM in its filings has not claimed any Return on Equity on the pretext that, the opening balance of equity as per the audited accounts depicts a negative net worth for FY19.

Commission's analysis and decisions:

Status of Debt & Equity ratio vis-a-vis GFA:

The Commission notes that, the closing balances of gross fixed assets along with break-up of equity and loan component and the details of GFA, debt and equity (net-worth) for FY19 as per the actual data as per the audited accounts are indicated as follows:

TABLE – 4.21
Status of Debt Equity Ratio for FY19

	GFA (Actuals) Rs. Crores	Debt (Actuals) Rs. Crores	Equity (Net- worth) (Actuals) Rs. Crores	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
Opening Balance	4803.86	656.83	-209.36	3362.70	1441.16	13.67	-
Closing Balance	5133.26	872.04	292.24	3593.28	1539.98	16.99	5.69

GESCOM

From the above table, it is evident that the amounts of debt equity ratio are within the normative debt equity ratio of 70:30, on the closing balances of GFA for FY19.

As per the provisions of the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail sale of electricity) Regulations, 2006 and amendments thereto, the allowable Return on Equity at 15.5% has to be allowed on the share capital, share deposit, accumulated balance of profit/loss under reserve & surplus account as per the audited accounts, as at the beginning of the year duly factoring the recapitalization of consumers' security deposit amount in compliance with the Orders of the Hon'ble ATE in appeal No.46/2014. Accordingly, the allowable RoE for FY19 is considered. The total net-worth at the beginning of FY19 is Rs.-209.36 Crores which is a negative balance and hence, GESCOM is not entitled for any RoE for FY19. However, the factual position of opening balance of equity of GESCOM is indicated below:

TABLE - 4.22 Allowable Return on Equity for FY19

	Amount in Rs. Crores
OB of Paid Up Share Capital	1114.96
OB of Share Deposits	47.26
OB of Carried forward Profit/loss	-1349.58
Less: Recapitalized Security Deposit	-22.00
Net Equity at the beginning of the year	-209.36
Allowable RoE	0.00

Further, it is noted that the additional equity of Rs.154.46 Crores has been infused during the year at different dates by the Government of Karnataka as indicated below:

TABLE - 4.23 Return on equity for the additional equity received during FY19

Additional Equity received during FY19	Amount in Crs.	Received on
EN53 PSR 2018 dated 22.05.2018	22.24	04.06.2018
EN120 PSR 2018 dated 10.08.2018	1.62	28.08.2018
EN120 PSR 2018 dated 10.08.2019	0.50	28.08.2018
EN129 PSR 2018 dated	28.00	07.09.2018

Additional Equity received during FY19	Amount in Crs.	Received on
30.08.2020		
EN 53 PSR 2018 dated	22.24	27.09.2018
10.09.2018		
EN 53 PSR 2018 dated	22.24	14.11.2018
17.10.2018		
EN129 PSR 2018 dated	14.18	09.11.2018
17.10.2018		
EN120 PSR 2018 dated	3.24	12.11.2018
31.10.2018		
EN120 PSR 2018 dated	1.00	12.11.2019
31.10.2018		
EN129 PSR 2018 dated	13.82	04.02.2019
25.01.2019	22.24	05.00.0010
EN53 PSR 2018 dated	23.24	05.02.2019
25.01.2019		
EN120 PSR 2018 dated	1.64	06.02.2019
25.01.2019		
EN120 PSR 2018 dated	0.50	06.02.2019
25.01.2019		
TOTAL	154.46	

However, it is noted that even after considering the additional equity received during FY19, the net worth of GESCOM remains negative, and the RoE is not allowable for FY19.

Thus, the Commission decides not to allow any RoE for FY19.

4.2.11 Other Income:

GESCOM's Submission:

The GESCOM in its application has indicated an amount of Rs.82.33 Crores as Other Income under APR for FY19.

Commission's analysis and decisions:

The Commission notes that as per the audited accounts an amount of Rs.127.64 Crores has been accounted under the account head 'other income' for FY19. The other income of Rs.127.64 Crores includes rental income, interest income, profit on sale of scrap, rebate on remittance of electricity duty and other miscellaneous income. This amount also includes an amount of Rs.11.25 Crores pertaining depreciation on the assets created out of grants received from government for Capital works and Rs.34.07 Crores towards depreciation on the assets created out of Consumers'

Contribution for FY19. After deducting the above amounts totaling to Rs.45.32 Crores, the Commission decides to allow an amount of Rs.82.33 Crores as other income for FY19.

4.2.12 Fund towards Consumer Relations / Consumer Education:

GESCOM's Submission:

The GESCOM, in its application, has not claimed any amount towards Consumer Education/Consumer Relation for FY19.

Commission's analysis and decisions:

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. The Commission as per the audited accounts notes that, an amount of Rs.0.01 Crores has been incurred towards Consumer Relations/Consumer Education for FY19.

Thus, the Commission decides to approve Rs.0.01 Crores towards Consumer Relations / Consumer Education for FY19.

4.2.13 Revenue for FY19:

The GESCOM, in its application, has considered Rs.5078.44 Crores as revenue from sale of power from consumers and miscellaneous charges from consumers for FY19.

Commission's analysis and decisions:

As per the GESCOM audited accounts for FY19, revenue from sale of power is Rs.5078.44 Crores. which also includes an amount of Rs.44.32 Crores collected on the sale of power to an extent of MU through IEX. The Commission, while approving the power purchase cost has reckoned this amount and allowed the net power purchase cost of Rs.3904.92 Crores for FY19. Accordingly, the Commission after deducting Rs.44.32 Crores being the amount collected on the sale of power to an extent of 99.75 MU through IEX, decides to consider Rs.5034.12 Crores as revenue from sale of power and miscellaneous charges from consumers in the approval of revised ARR as per APR of GESCOM for FY19.

4.2.14 Subsidy for FY19:

The Commission in its Tariff Order dated 14th May, 2018 had approved the tariff subsidy of Rs.2027.43 Crores towards sale of power to BJ/KJ and IP sets installations for FY19, in accordance with the prevailing Government Order. The Commission notes that, as per the audited accounts, the tariff subsidy towards sale of power to BJ/KJ and IP Sets installations is Rs.2154.89 Crores for FY19. The Commission, while computing the revised ARR as per the APR for FY19, has considered revised tariff subsidy of Rs.2154.89 Crores towards sale of power to BJ/KJ and IP sets installations for FY19. The difference of Rs.127.46 Crores between the originally approved tariff subsidy during ARR for FY19 and the tariff subsidy computed during the APR of FY19, is required to be collected from the GoK by GESCOM.

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 – 4.24
Approved revised ARR for FY19 as per APR

Amount in Rs. Crores

SI. No	Particulars	As approved 14.05.2018	As filed	Approved in APR for FY19
1	Energy at Gen Bus in MU	8474.32	9306.90	9306.90
2	Energy at Interface in MU	8213.06	8796.04	8796.04
3	Distribution Losses in %	15.00%	14.41%	14.41%
	Sales in MU			
4	Sales to other than IP & BJ/KJ	3455.84	3767.93	3775.85
5	Sales to BJ/KJ	140.78	245.40	237.48
6	Sales to IP	3384.48	3514.97	3514.97
7	Total Sales-MU	6981.10	7528.30	7528.30
	Revenue from tariff and Misc.			
	Charges:			
8	Revenue from tariff and Misc. Charges	2679.65	2919.90	2879.23
9	Tariff Subsidy for BJ/KJ	94.89	159.62	155.97
10	Tariff Subsidy for IP	1932.54	1998.92	1998.92
	Total Existing Revenue	4707.08	5078.44	5034.12
	Expenditure			
11	Power Purchase Cost	2909.59	3589.65	3545.33
12	Transmission charges of KPTCL	354.27	356.70	356.70
13	SLDC Charges	2.89	2.89	2.89
	Power Purchase Cost including cost of transmission	3266.75	3949.24	3904.92
14	Employee Cost	557.44	529.21	681.81

SI. No	Particulars	As approved 14.05.2018	As filed	Approved in APR for FY19
15	Repairs & Maintenance		45.85	
16	Admin & General Expenses		118.78	
	Total O&M Expenses	557.44	693.84	681.81
17	Depreciation	155.22	145.66	145.67
	Interest & Finance charges:			
18	Interest on Loans	127.53	97.54	76.17
19	Interest on Working capital	96.17	156.56	62.60
20	Interest on belated payment on PP Cost	0.00	0.00	0.00
21	Interest on consumer deposits	30.93	31.94	31.94
22	Other Interest & Finance charges	0.00	0.00	0.00
23	Less: interest capitalized	-4.28	-2.26	-2.26
	Total Interest & Finance charges	250.35	283.78	168.45
24	Other Debits	0.00	68.91	-2.52
25	Net Prior Period Debit/Credit	0.00	0.00	0.00
26	Return on Equity	56.80	0.00	0.00
27	Provision for taxation	0.00	0.00	0.00
28	Funds towards Consumer Relations/Consumer Education	0.50	0.00	0.01
29	Less: Other Income	-45.04	-82.33	-82.33
	ARR	4242.02	5059.10	4816.01
30	Deficit of FY17 carried forward	-465.06	0.00	0.00
31	Add: Incentive for reduction of losses beyond lower target loss levels	0.00	0.00	3.99
32	Less: Penalty for imprudent works found during prudence check			- 0.92
33	Net ARR	4707.08	5059.10	4819.09
34	Surplus / Deficit (-) for FY19	0.00	19.34	215.04

4.3.1 Gap in Revenue for FY19:

As against the approved ARR of Rs.4707.08 Crores, the Commission, after the Annual Performance Review of GESCOM, decides to allow a revised ARR of Rs.4819.09 Crores for FY19. Considering the revenue of Rs.5034.12 Crores, a surplus in revenue of Rs.215.04 Crores is determined for the year FY19.

The Commission decides to carry forward the surplus of Rs.215.04 Crores of FY19 to the proposed revised ARR for FY21 as discussed in the subsequent Chapter of this Order.