

CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY18

4.0 GESCOM's Application for APR for FY18:

The GESCOM had filed its application on 30th November, 2018, for Annual Performance Review (APR) for FY18 based on the audited accounts and for determination of Annual Revenue Requirement (ARR) for the control period 20-22, along with the revision of retail supply tariff for FY20, under the provisions of the relevant Regulations.

The Commission in its letter dated 18th December, 2018 had communicated its preliminary observations on the application of the GESCOM. The GESCOM, in its letter dated 28th December, 2017, has furnished replies to the preliminary observations of the Commission.

The Commission in its Tariff Order dated 11th April, 2017, had approved the GESCOM's revised Annual Revenue Requirement (ARR) of Rs. 4,523.29 Crores along with the retail supply tariff for FY18.

The revised Annual Revenue Requirement (ARR) of GESCOM as per annual performance review of GESCOM for FY18, 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 FY18 based on the Audited Accounts, as follows:

TABLE – 4.1
ARR for FY18 – GESCOM's Submission

Amount in Rs. Crores

Sl. No	Particulars	FY18	
		As Appd 11.04.2017	As filed 30.11.2018
1	Energy at Gen Bus in MU	8856.29	8117.44
2	Transmission Losses in %	3.37%	4.07%
3	Energy at Interface in MU	8557.83	7787.36
4	Distribution Losses in %	16.00%	16.39%
	Sales in MU		
5	Sales to other than IP & BJ/KJ	3608.26	3297.51
6	Sales to BJ/KJ	128.44	256.51
7	Sales to IP	3451.88	2956.88
8	Total Sales	7188.58	6510.90
	Revenue from tariff and Misc. Charges:		
9	Revenue from tariff and Misc. Charges	2540.51	2475.63
10	Tariff Subsidy for BJ/KJ	80.79	165.82
11	Tariff Subsidy for IP	1901.99	1650.31
	Total Revenue	4523.29	4291.76
	Expenditure:		
12	Power Purchase Cost	2765.03	2963.57
13	Transmission charges of KPTCL	352.75	610.62
14	SLDC Charges	2.97	2.97
	Total Power Purchase Cost ;	3120.75	3577.16
15	Employee Cost	-	444.71
16	Repairs & Maintenance	-	32.96
17	Admin & General Expenses	-	102.96
	Total O&M Expenses	516.20	580.63
18	Depreciation	147.43	141.30
	Interest & Finance charges;		
19	Interest on Loans	133.09	96.53
20	Interest on Working capital	85.18	107.94
21	Interest on belated payment on PP Cost	0.00	114.71
22	Interest on consumer deposits	31.53	31.75
23	Other Interest & Finance charges	0.00	0.75
24	Less; interest capitalized	-4.49	0.00
	Total Interest & Finance charges	245.31	351.68
25	Other Debits	0.00	67.00

Sl. No	Particulars	FY18	
		As Appd 11.04.2017	As filed 30.11.2018
26	Net Prior Period Debit/Credit	0.00	0.00
27	Return on Equity	46.13	0.00
28	Provision for taxation	0.00	0.00
29	Funds towards Consumer Relations/Consumer Education	0.50	0.00
30	Other Income	-43.66	-74.43
31	Deficit of FY16 Carried Forward	490.97	0.00
32	Disallowance for prudence check of FY14 capex	-0.34	0.00
	Net ARR	4523.29	4643.35

Considering the revenue of Rs.4291.76 Crores against the net ARR of Rs.4643.35 Crores, the GESCOM has reported a gap in revenue of Rs.351.59 Crores for FY18.

4.2 GESCOM's Financial Performance as per the Audited Accounts for FY18:

An overview of the financial performance of the GESCOM for FY18 as per its Audited Accounts is given below:

TABLE – 4.2
Financial Performance of GESCOM for FY18

Amount in Rs. Crores

Sl. No.	Particulars	FY18
1	Revenue from sale of power	4291.76
2	Other Income	74.43
3	Total Revenue	4366.19
4	Expenditure :	
5	Power Purchase Cost	3577.16
6	Employee cost	444.71
7	Interest and Finance Cost	351.68
8	Depreciation	141.30
9	Other Expenses	202.92
10	Regulatory Income/ expenses	-456.35
11	Regulatory Income/ expenses (Net) in respect of earlier years	577.39
12	Total Expenditure	4838.81
13	Net Loss for the year	-472.63

As per the Audited Accounts, the GESCOM has incurred loss of Rs.472.63 Crores for FY18. 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 FY10	-216.60
Profit earned in FY11	61.30
Losses incurred in FY12	-4.62
Losses incurred in FY13	-188.58
Profits earned in FY14	37.52
Losses incurred in FY15	-109.86
Losses incurred in FY 16	-131.25
Losses incurred in FY 17	-324.86
Losses incurred in FY 18	-472.63
Accumulated losses as at the end of FY18	-1349.58

As seen from the above table, the GESCOM has accumulated losses of Rs.1349.58 Crores, as at the end of FY18.

Commission's analysis and decision:

As per the provisions of the MYT Regulations, the Commission has taken up the Annual Performance Review for FY18, 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 11th April, 2017. 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 FY18:

A. Sales -other than IP Sets:

The Commission, in its Tariff Order,2017, dated 11.04.2017, had approved the total sales to various consumer categories at 7188.58 MU, as against the GESCOM's proposal of 7266.02 MU. The actual sales of GESCOM as per the current APR filing [D-2 FORMAT] is 6510.90 MU indicating a decrease in sales to the extent of 677.68 MU as against the approved sales. There is decrease in sales to LT-categories by 482.01 MU and HT-categories by 195.67 MU. It is noted that, as against approved sales of 3608.26 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by GESCOM is 3297.51 MU, resulting in decrease of sales to

these categories by 310.75 MU. Further, GESCOM has sold 3213.39 MU to BJ/KJ and IP category against approved sales of 3580.32 MU resulting in decreased sales to these categories by 366.93 MU.

The category-wise sales approved by Commission in Tariff Order, 2017 and the actuals as filed by GESCOM for the FY18 are indicated in the following table:

TABLE- 4.4
Category-wise sales approved & actuals for FY18
Energy in Million units

Category	Approved	Actuals	Difference
LT-2a	1205.26	1084.24	-121.02
LT-2b	11.54	11.97	0.43
LT-3	321.72	312.87	-8.85
LT-4b	3.61	1.43	-2.18
LT-4c	1.51	0.92	-0.59
LT-5	168.67	165.13	-3.54
LT-6	227.63	260.18	32.55
LT-6	245.39	236.52	-8.87
LT-7	21.12	18.11	-3.01
HT-1	93.86	107.56	13.70
HT-2a	1106.17	897.53	-208.64
HT-2b	83.31	68.67	-14.64
HT-2c	16.06	22.90	6.84
HT-3a & b	83.82	83.82	0
HT-4	13.16	12.50	-0.66
HT-5	5.43	13.16	7.73
Sub total	3608.26	3297.51	-310.75
BJ/KJ	128.44	256.51	128.07
IP	3451.88	2956.88	-495.00
Sub total	3580.32	3213.39	-366.93
Grand total	7188.58	6510.90	-677.68

The Commission had noted that the major categories contributing to the reduction in sales as compared with the estimate are: LT-2a (121.02 MU), HT-2a Industries (208.64 MU), HT-2b (14.64 MU) and LT-4a (495.00 MU). Further, the Commission observed that there is increase in sales to LT-1 BJ/KJ (128.07 MU) and the GESCOM was directed to analyse the same and furnish the reasons thereon.

Further, the Commission in its preliminary observations had noted that approved sales for FY18, indicated at Sl. No.4 & 5 and the total sales, at page-7, are not correctly shown. Similarly, the approved figures for the number of installations and sales indicated in the table at page 13, are not

correctly shown. Further, at page -13, reference had been made to the Tariff Order dated 14.05.2018. In the said order, the Commission had approved sales for FY19 and not FY18. Hence, GESCOM was directed to consider the approved sales figures as in Tariff Order-2017 and to compare the FY18 actuals with respect to FY18 approved figures.

In response, the GESCOM has submitted the following details:

TABLE- 4.5
Category-wise sales-GESCOM

Category	Approved by the Commission for FY-18		GESCOM	
	Installation	Sales	Installation	Sales
	No.	MU	No.	MU
LT-2a	1618948	1205.26	1610211	1084.24
LT-2b	4512	11.54	4503	11.97
LT-3	255348	321.72	255209	312.87
LT-4(b)	3304	3.61	2051	1.43
LT-4(c)	548	1.51	407	0.92
LT-5	62376	168.67	61845	165.13
LT-6 – WS	17181	227.63	20304	260.18
LT-6 - PL	13938	245.39	11779	236.52
LT-7	33155	21.12	27513	18.11
HT-1	148	93.86	136	107.56
HT-2(a)	1502	1106.17	1474	897.53
HT-2(b)	392	83.31	359	68.67
HT2 C	138	16.06	162	22.90
HT-3 (a) & (b)	366	83.82	365	83.82
HT-4	32	13.16	29	12.50
HT-5	32	5.43	33	13.16
Sub-total other than BJ/KJ and IP Sets	2011919	3608.26	1996380	3297.51
BJ/KJ	618687	128.44	597675	108.14
IP Sets	362821	3451.88	351627	2956.88
Sub-total BJ/KJ and IP Sets	981508	3580.32	949302	3065.02
Total	2993427	7188.58	2945682	6362.53

Source: GESCOM replies to preliminary observations Table-1, Pg-1

The Commission notes that GESCOM in the above table has considered sales as 6,362.53 MU. Subsequently, through e-mail dated 10.01.2019,

GESCOM has confirmed that sales for FY18, as per D-2 format of original petition is correct, which is reckoned by the Commission for the APR.

The Commission also notes that GESCOM has not analyzed the reasons for reduction in sales and henceforth directs the GESCOM to analyse the same, while submitting the petition for APR.

The Commission, in order to validate the sales, had requested GESCOM to furnish data pertaining consumption under Open access/wheeling in the specified format for HT-categories. GESCOM in their replies have submitted that, only HT-2a, industrial category, have opted for OA/wheeling in GESCOM and the details as requested has been submitted. The Commission has considered the same appropriately, for estimating the sales for the control period FY20-FY22.

Further, the Commission had directed GESCOM to furnish the breakup of installations consuming less than or equal 40 units and above 40 units for the FY18, which is furnished. GESCOM has furnished the details as indicated below for FY18:

Particulars	No. of Installations	Consumption in MU
Installations Consuming less than 40 Units	587276	213.77
Installations consuming more than 40 units and build under LT 2a	10399	42.74

B. Sales to IP-sets:

- a) The specific consumption of IP sets for FY18, as approved by the Commission, in the Tariff Order dated 11.04.2017 is 9,743 Units / IP / Annum. As per the data furnished by GESCOM in the D-2 Format, the specific consumption for FY18 works out to 8,554.97 Units / IP / Annum. It is observed that there is a decrease in specific consumption by 1,188.08 Units / IP / Annum, amounting to a decrease of 12.91%.
- b) The total IP-set consumption reported for FY18, as per the D-2 Format is 2,956.88 MU, whereas the IP-set consumption approved by the Commission was 3,451.88 MU. The difference in consumption

between the approved and reported consumption for FY18 is 495 MU. Thus, the quantum of sales to the IP-sets has decreased by around 14.34 per cent over the approved figure.

- c) The Commission had approved 3,62,821 as the number of IP-set installations for the FY18. The actual number of installations, as reported by the GESCOM in D-2 Format and its audited accounts is 3,51,627. The difference in the number of installations is 11,194 and this corresponds to decrease in the number of installations by about 3.1 per cent, as against the approved number of installations for the FY18.
- d) The Commission in its Tariff Order dated 11th April, 2017, had directed the GESCOM to furnish feeder-wise IP-set consumption based on the 11 kV feeders' energy meter reading data, every month, to the Commission, in respect of exclusive agricultural feeders segregated under NJY, considering that the energy consumed by the IP sets can be measured at the 11 kV level at the substations after deducting the losses prevailing in the distribution system.

GESCOM has not submitted the month-wise IP-set consumption based on the feeder-wise meter reading data of 11 kV segregated agricultural feeders regularly, to the Commission. Also, the GESCOM did not submit, in its Tariff filing, the data indicating the distribution losses prevailing in 11 kV lines, distribution transformers & LT system, which is deducted from the gross consumption to arrive at the net IP sets' consumption and also did not furnish the methodology adopted to arrive at the loss figures for FY18.

- e) The Commission, in its preliminary observations, had directed the GESCOM to furnish necessary month-wise, feeder-wise consumption data as per the energy recorded in the segregated agricultural feeders, in support of its claims of IP-set consumption for the FY18, including the details of initial & final readings and the net consumption considering the multiplying constant as per the prescribed format.

- f) Further, during the KPTCL and ESCOMs Review meeting held on 16.11.2018, the GESCOM had submitted that, out of 3,39,444 number of IP sets for which GPS survey was completed, 16,237 (8456 + 7781) IP sets have been declared as not-in-use / dried up installations. Hence, the GESCOM had to deduct 16,237 number of dried up installations from the number of installations indicated in the accounts of FY18, as identified by itself, while conducting the GPS survey and submit revised consumption for FY18 considering GPS survey data. In the replies to the preliminary observations, GESCOM has not furnished any explanation/ information on the dried up/ not-in-use installations.
- g) The GESCOM, in its reply to the preliminary observations, has submitted the month-wise, feeder-wise consumption data as per the energy recorded in the segregated agricultural feeders in the formats prescribed by the Commission, in its previous tariff orders. It has also, submitted the consolidated subdivision-wise month-wise IP-set data on the consumption in respect of the 11 kV exclusive agricultural feeders segregated under NJY.
- h) On verification of the said data, it is observed that the percentage of distribution loss in the 11 kV feeders / LT lines reckoned to compute the net IP-set consumption, is not based on actual calculation considering the distribution network single line diagram. GESCOM has not indicated the basis for arriving at the energy losses in the feeders while computing the IP-set consumption, but has taken 5% loss, uniformly for all the feeders. Therefore, henceforth the GESCOM is directed to calculate the actual losses considering the distribution network single line diagram instead of standard losses, to arrive at the net consumption.
- i) On verification of the data of assessment of IP set consumption, it is found that the GESCOM has furnished the number of IP set installations as 3,57,474 numbers. Whereas the number of IP sets furnished in D-2 Format and audited accounts is 3,51,627 numbers. As per the information in the D2 format and audited accounts,

3,51,627 numbers of IP set installations are considered. However, the GESCOM is directed to furnish the correct and specific information to the Commission, henceforth.

- j) Similarly, the GESCOM has furnished the sales to IP set installations as 2956.88 MU in the D-2 Format and audited accounts. As per the feeder wise, month wise, IR and FR data sheet, the sales of 2,956.88 MU to IP sets furnished by GESCOM is justified. Since, GESCOM has justified the sales to IP sets as in the D-2 Format and audited accounts, the sales of 2,956.88 MU as per the assessment which is less than the approved sales of 3,451.88 MU by 14.34%. The Commission, therefore, decides to approve 2,956.88 MU towards the sale of energy to the IP-sets, on the basis of the energy meter readings data of the segregated agricultural feeders, reported for the FY18.

Based on the above discussion, the Commission approves total sales for FY18 as indicated in the following table:

TABLE-4.6

Category wise sales – GESCOM

Energy in Million Units

Category	Approved
LT-2a*	1126.98
LT-2b	11.97
LT-3	312.87
LT-4b	1.43
LT-4c	0.92
LT-5	165.13
LT-6	260.18
LT-6	236.52
LT-7	18.10
HT-1	107.56
HT-2a	897.53
HT-2b	68.67
HT-2c	22.90
HT-3a & b	83.82
HT-4	12.50
HT-5	13.16
Sub total	3340.24
BJ/KJ	213.77
IP	2956.88
Sub total	3170.65
Grand total	6510.89

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

4.2.2 Distribution Loss for FY18:

The Commission in its Tariff Order dated 11th April,2017 had approved the distribution loss for FY18 as follows:

Range	FY18
Upper limit	16.50%
Average	16.00%
Lower Limit	15.50%

The GESCOM, in its annual accounts, has reported the distribution loss at 16.39 per cent for FY18 as under:

1	Energy at Interface Points in MU	7,787.36
2	Total sales including wheeled energy in MU	6510.89
3	Distribution loss as a percentage of input energy at IF points	16.39%

Commission's Analysis and Decisions:

GESCOM has reported the actual distribution loss of 16.39%, as per the audited accounts, as against 16.00% approved by the Commission, in its Tariff Order dated 11th April 2017. The actual loss level is more than the approved loss level by 0.39 percentage point for FY18. Considering the achievement made by the GESCOM in reduction of distribution losses during the previous years and the amount of capex incurred in the recent years and also during FY18, the efforts made by the GESCOM in deduction of distribution losses for FY18 is not up to the mark. The Commission directs GESCOM to take remedial measures to reduce the distribution losses by at least 1% to 2% every year.

Further, GESCOM is directed to identify the high loss making divisions and submit the report to the Commission with action plan to reduce the losses within one month of issue of this Order.

The actual distribution losses of 16.39 per cent reported by GESCOM falls within the approved upper limit and lower limit of losses of 16.50 per cent and 15.50% for FY18, respectively. Therefore, allowing any incentive or levy of any penalty for non-achievement of loss targets, will not arise.

Thus, the Commission decides to approve the distribution loss of 16.39% for FY18.

4.2.3 Power Purchase for FY18:

GESCOM's Submission:

The Commission, in its Tariff Order dated 11th April, 2017, had approved power purchase quantum of 8856.29 MU for GESCOM, indicating source-wise quantum and cost of power purchase for FY18. GESCOM, in its application has submitted the details of actual power purchase for FY18 for the purpose of Annual Performance Review as under:

TABLE- 4.7
Power Purchase for FY18- Approved and Actuals

Source of Generation	Approved for 2017-18			Actuals for 2017-18			Difference			% increase (+)/decrease (-) over approved figures	
	Energy in MU	Amount in Crores	Avg. cost in Rs/kWh	Energy in MU	Amount in Crores	Avg. cost in Rs/kWh	Energy in MU	Amount in Crores	Avg. cost in Rs/kWh	Energy (MU)	Amount in Crores
	1	2	3	4	5	6	7=4-1	8=5-2	9=6-3	10	11
KPCL Hydel Stations	2852.91	175.87	0.62	1656.55	130.54	0.79	-1196.36	-45.33	0.17	-41.93	-25.77
KPCL-Thermal Stations	1522.11	658.43	4.33	1274.19	644.00	5.05	-247.92	-14.43	0.72	-16.29	-2.19
CGS	2808.12	998.61	3.56	3169.24	1197.32	3.78	361.12	198.71	0.22	12.86	19.90
Major IPPs	606.05	296.96	4.90	524.48	262.20	5.00	-81.57	-34.76	0.10	-13.46	-11.71
Minor IPPs(RE Projects)*	870.74	401.63	4.61	961.08	445.26	4.63	90.34	43.63	0.02	10.37	10.86
Other State Hydro Projects	16.13	6.69	4.15	14.80	9.02	6.09	-1.33	2.33	1.94	-8.23	34.82
Short/Medium , UI & Sec 11**	180.23	72.94	4.05	494.48	203.85	4.12	314.25	130.91	0.07	174.37	179.47
Transmission Charges (KPTCL/PGCIL)	0.00	506.17	-	0.00	610.62	-	0.00	104.45	0.00	-	-
SLDC Charges	0.00	2.97	-	0.00	2.97	-	0.00	0.00	0.00	-	-
PCKL Rev Expr./ Posco	0.00	0.48	-	0.00	1.532	-	0.00	1.05	0.00	-	-
Energy Balancing	0.00	0.00	-	8.60	17.47	20.31	8.60	17.47	20.31	-	-
Banked Energy	0.00	0.00	-	10.34	3.71	3.59	10.34	3.71	3.59	-	-
Infirm Power	0.00	0.00	-	1.15	0.40	3.47	1.15	0.40	3.47	-	-
South Western Railway	0.00	0.00	-	2.69	0.00	-	2.69	0.00	0.00	-	-
Provisions	0.00	0.00	-	0.00	48.26	-	-	-	-	-	-
KSEB	0.00	0.00	-	-0.16	0.00	-	-0.16	0.00	0.00	-	-
Total	8856.29	3120.75	3.52	8117.44	3577.16	4.41	-738.85	456.41	0.89	-8.34	14.62
<p>Note: *includes medium term power purchase from Cogeneration **Excludes medium term power purchase from Cogeneration</p>											

Commission's analysis and decisions;

1. The actual power purchase for FY18, as per the annual accounts submitted by GESCOM is 8117.44 MU at a cost of Rs. 3577.16 Crores, as against the approved quantum of 8856.29 MU at Rs 3120.75 Crores. This indicates that there is a decrease in the quantum of power purchased to an extent of 738.85 MU and there is also an increase in the cost by Rs. 456.41 Crores.
2. As against the approved cost of energy amounting to Rs 3120.75 Crores, the actual cost of power purchased by GESCOM is Rs 3577.16 Crores for FY 18, which accounts for an increase of 14.62% over the approved cost.
3. On an analysis of the source-wise approved and actual power purchases, it is observed that, there is deviations in the quantum of energy purchased and its cost. There is shortfall in the supply from sources of power from State Owned Hydel projects and Thermal projects and also Major IPPs as indicated below:

Source of Generation	Approved Energy for 2017-18 in MU	Actual Energy for 2017-18 in MU	Shortfall Energy in MU
KPCL Hydel Stations	2852.91	1656.55	1196.36
KPCL-Thermal Stations	1522.11	1274.19	247.92
Major IPPs	606.05	524.48	81.57
Total	4981.07	3455.22	1525.85
Actual total consumption is less than the Approved consumption by 738.85 MU.	-738.85	0.00	-738.85
Grand Total	4242.22	3455.22	787.00

The shortfall from the cheaper source of KPCL Hydel projects was due to poor monsoon and the short fall from KPCL Thermal projects and major IPPs was due to shortage of coal. The above shortfall has been made good by procuring power, at an additional cost, on short term/medium term basis and un-requisitioned surplus power from CGS and through Minor IPPs, as indicated below:

Source of Generation	Approved Energy for 2017-18 in MU	Actual Energy for 2017-18 in MU	Excess Energy in MU
CGS	2808.12	3169.24	361.12
Short/Medium , UI & Sec 11**	180.23	494.48	314.25
Minor IPPs(RE Projects)	870.74	961.08	90.34
Total	3859.09	4624.80	765.71

4. There is overall increase in the per unit cost of energy purchased due to the following reasons:
 - a) The PGCIL Transmission charges have increased by 68% to Rs.257.87 Crores, when compared to the approved cost of 153.42 Crores.
 - b) The power from the new thermal projects like Kudgi STPS, BTPS Unit-3 and YTPS was considered as infirm power. The actual cost per unit of energy has increased, consequent to achievement of Commercial Operation of these thermal plants due to applicability of preferential tariff, for which tariff is yet to be determined.
 - c) The increase in power quantum of purchase, the change in the source-wise mix of supply and the reconciliation of energy and its cost among ESCOMs, have resulted in increase in average power purchase cost of GESCOM.

5. **The explanation furnished/provided by GESCOM that it is making payment towards PGCIL transmission charges in accordance with bills submitted by PGCIL, is not satisfactory. The Commission notes an abnormal contribution from the State towards payment of PGCIL transmission charges. Due to this there will be a substantial financial impact, resulting in an increase in the retail supply tariff to the end consumers. The Commission, therefore, directs ESCOMs/PCKL to take appropriate action immediately, to resolve the issues with the appropriate authority regarding the PGCIL transmission tariff. Henceforth, ESCOMs/PCKL shall constitute a dedicated team, to study the pros and cons of any methodologies/amendments proposed to the PGCIL's Transmission tariff or in any such other relevant issue, and appropriately communicate the same to the concerned authorities, at the draft stage itself. The Commission will not allow such tariff in future, if it considers that the ESCOMs / PCKL have not taken effective and prompt steps to ensure that the PGCILs transmission tariff is fair and equitable to the State.**

6. The Commission notes that, the per unit cost paid to some of the State and Central Power Stations including Hydel (including Jurala HEP) and Thermal sources, indicated in the D-1 Format, is on a higher side as compared to the per unit cost paid by the BESCOM. The Commission directs GESCOM to

examine the same and recover the excess payments, if any, from the generators, under intimation to the Commission, besides explaining the reasons for the difference.

In the above circumstances, the Commission hereby decides to approve the actual power purchases of 8117.44 MU at a cost of Rs 3577.16 Crores, for the purpose of Annual Performance Review for FY18, subject to recovery of excess payments made to generators, if any as stated in sub para-6 above.

4.2.4 Renewable Purchase Obligation (RPO) compliance by GESCOM for FY18:

1. GESCOM in its tariff petition, had stated that it has met solar RPO of 5.31% against target of 2.75% and Non-solar target of 10.31% against target of 6.00% in FY-18. For validating the RPO compliance and to work out APPC, GESCOM was directed to furnish the data as per the specified format, duly reconciling the data with the audited accounts for the FY18.
2. The GESCOM, in its replies, has furnished the following details:

TABLE-4.8

Non-solar RPO Compliance by GESCOM for FY18

Sl. No	Particular	Quantum in MU	Cost Rs. In Crs
1	Total power purchase quantum from all sources Excluding Hydro Energy	6484.686	3367.354
2	Non- Solar Renewable energy purchased under PPA route at Generic tariff including Non-Solar RE purchased from KPCL	666.19	256.913
3	Non-Solar short -term purchase from RE sources, excluding sec-11 purchase	0.000	0.000
4	Non-Solar short -term purchase from RE sources under sec-11 of EA, 2003	0.000	0.000
5	Non-solar RE purchased under APPC	9.659	2.995
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	2.285	0.726
10	Total Non-Solar RE Energy purchased	678.134	260.635
11	Non-Solar RE accounted for the purpose of RPO (2+9)	668.475	257.640
12	Non- solar RPO complied in % [No11/No1]/100	10.31%	7.65%

TABLE-4.9
Solar RPO Compliance by GESCOM for FY18:

Sl. No	Particular	Quantum in MU	Cost Rs. In Crores
1	Total power purchase quantum from all sources Excluding Hydro Energy	6484.686	3367.354
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	284.433	185.106
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	51.72	25.46
10	Solar energy purchased from any other sources like banked energy purchased at 85% of generic tariff	8.054	2.985
11	Total-Solar Energy purchased	344.212	213.555
12	Solar energy accounted for the purpose of RPO (2+9+10)	344.212	213.555
13	Solar RPO complied in % [No 12/ No1]*100	5.31%	6.34%

3. The Commission has taken note of the replies furnished by the GESCOM. As per the APR, the Commission has approved power purchase quantum of 6453.11 MU (8117.44-14.80-1656.55+7.02), excluding procurement from hydro sources, based on the audited accounts. The details of Non-solar energy procured is indicated in the following Table:

Source	Million units
Co-generation (Power Purchase)	239.07
Mini Hydel	110.09
Wind mill incl. KPCL	315.50
Bio mass	11.20
Shimsha	7.02
Less; power purchased under REC mechanism at APPC	-9.66
Plus; Banked energy purchased as Per GESCOM	2.29
Non-solar Total	675.51

4. As regards the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 6453.11 MU, the Non-solar RPO target at 6.00% works out to 387.19 MU. GESCOM has purchased 675.51 MU of Non-solar energy. Thus, there is a surplus of 288.32 MU in meeting the Non-solar RPO. **Therefore, the Commission holds that GESCOM has met its Non-Solar RPO target of 6.00% for FY18, in terms of the prevailing Regulations.**
5. Regarding the Solar RPO, considering the input energy (excluding procurement from hydro sources) of 6453.11 MU, the Solar RPO target at 2.75% works out to 177.46 MU. GESCOM has purchased 344.20 MU (PPA: 284.43 MU+NTPC VVNL: 6.82 MU, NTPC JNNSM 44.90 MU & banked energy 8.054 MU) of Solar energy including 8.054 MU of banked energy purchased. Thus, GESCOM has purchased 166.74 MU excess of solar energy beyond the target specified. **Therefore, the Commission holds that GESCOM has met its Solar RPO target of 2.75% for FY18, 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.580.63 Crores for FY18. The break-up of O&M expenses are as follows:

TABLE – 4.10

O & M Expenses – GESCOM's submission

Amount in Rs. Crores	
Particulars	FY18
Employee cost	444.71
Administrative & General Expenses	102.96
Repairs and Maintenance	32.96
Total O & M Expenses	580.63

Commission's analysis and decisions:

The Commission in its Tariff Order dated 11th April, 2017 had approved O&M expenses for FY18, as indicated in the following Table:

TABLE – 4.11**Approved O&M Expenses as per Tariff Order dated 11.04.2017**

Particulars	FY18
No. of installations as per actuals as per Audited Accts	2993427
Weighted Inflation Index	7.71%
CGI based on 3 Year CAGR	4.89%
Actual O&M expenses for FY16 - in Rs. Crores.	422.65
Total approved O&M Expenses for FY18 – in Rs. Crores.	516.20

The Commission, in its preliminary observations had noted that, GESCOM in its APR filing, had claimed an amount of Rs.580.63 Crores as the O&M expenses as against the approved amount of Rs.516.20 Crores without giving the basis for computation of O&M expenses for FY18. The Commission noted that, as per the audited accounts for FY18, the actual employees cost for FY17 and FY18 is Rs.335.17 Crores and Rs.444.71 Crores respectively. Thus, there is an increase in the employees cost by Rs.109.54 Crores for one year in FY18. Further, GESCOM had projected Rs.572.80 Crores as employees cost for FY19, and further there is an increase of Rs.128.09 Crores over FY18. Hence, GESCOM was directed to furnish the basis for claiming the abnormal increase in the employees cost along with the computation sheets for FY18 and FY19.

Further, GESCOM its filings of APR for FY18 under format D6- employees cost, had claimed Rs.69.48 Crores towards contribution of terminal benefits to P&G Trust. Hence, GESCOM was directed to furnish the break up details with computation sheet for the same along with submission of the relevant Actual Valuation Report.

GESCOM in its replies has stated that, as per KPTCL Order dated 04.06.2018 the revision of pay scale to the employees of KPTCL / ESCOMs has been made effective from 01.04.2017 with the hike of 26% from the existing salaries and the arrears was given from April-17 to March-18. Because of this there is an increase in the employees cost for FY18. Regarding the contribution to P&G Trust, separate computation sheet has not been submitted by the GESCOM.

The Commission notes the replies submitted by GESCOM. As per the audited account, the actual O&M expenses reported by GESCOM are

more than the approved O&M expenses by Rs.64.43 Crores. The Commission, in accordance with the provision of MYT Regulations and the methodology adopted while approving the ARR for FY18 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 FY18 is computed as follows:

TABLE-4.12
Computation of Allowable Inflation Rate

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2006	70.2	122.9	112.36				
2007	73.6	130.8	119.36	1.06	0.06	1	0.06
2008	80.0	141.7	129.36	1.15	0.14	2	0.28
2009	81.9	157.1	142.06	1.26	0.23	3	0.70
2010	89.7	175.9	158.66	1.41	0.35	4	1.38
2011	98.2	191.5	172.84	1.54	0.43	5	2.15
2012	105.7	209.3	188.58	1.68	0.52	6	3.11
2013	111.1	232.2	207.98	1.85	0.62	7	4.31
2014	114.8	246.9	220.48	1.96	0.67	8	5.39
2015	110.3	261.4	231.196	2.06	0.72	9	6.49
2016	110.3	274.3	241.5	2.15	0.77	10	7.65
2017	114.1	281.2	247.78	2.21	0.79	11	8.70
A= Sum of the product column							40.23
B= 6 Times of A							241.40
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							0.0828
e=Annual Escalation Rate (%)=g*100							8.2760

For the purpose of determining the normative O & M expenses for FY18, 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, 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 FY18 at 4.33%.
- c) The weighted inflation index (WII) at 8.276% as computed above.
- d) Efficiency factor at 2% as considered in the earlier control periods.

Thus, the normative O & M expenses for FY18 are computed as follows:

TABLE-4.13
Normative O & M Expenses

Particulars	Rs. Crores
	FY18
No of installations as per actuals as per Audited Accts	29,45,682
Consumer growth as per actuals / projections (3 Year CAGR)	4.33%
Inflation Index	8.2760%
Base year O&M expenses (As per actuals of FY16)	362.19
Approved O&M expenses for FY17	400.25
O&M Index= O&M (t-1)*(1+WII+CGI-X)	442.69

The above normative O & M expenses have been computed without considering the contribution to the Pension and Gratuity Trust and arrears of pay revision paid during FY18.

The Commission notes the GESCOMs replies for having included Rs.78.20 Crores as per the audited account as an additional employees cost on account of revision of pay to its employees from 1st April, 2017 to 31st March,2018 for FY18.

The Commission further notes the revision of pay to the employees of KPTCL / ESCOMs with effective from 01.04.2017 and the consequential additional employees cost thereon. Accordingly, the Commission decides to consider the additional employees cost on account of pay revision of Rs.78.20 Crores

which is being included under employee cost as per the audited accounts of GESCOM as an additional O&M cost for FY18.

The Commission has also noted that as per the audited accounts for FY18, the GESCOM has claimed an amount of Rs.69.48 Crores towards contribution of terminal benefit to P&G Trust, for FY18.

Considering the request of the GESCOM to treat the pension and gratuity contribution to P&G Trust, as per the provisions of the MYT Regulations, the Commission decides to consider an amount of Rs.69.48 Crores towards the Contribution of terminal benefits to P&G Trust as an uncontrollable O&M expenses for FY18.

The Commission, as per the provision of the MYT Regulations, has treated the employee costs on account of contribution of terminal benefits to P&G Trust and arrears of pay revision, arrears amount for FY18, 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 FY18 is as under:

TABLE – 4.14

Allowable O & M Expenses for FY18

Sl. No.	Particulars	Rs. Crores
		FY18
1	Normative O & M expenses	442.69
2	Additional employee cost (uncontrollable Contribution to P&G Trust)	69.48
3	Additional employee uncontrollable cost on account of revision of pay	78.20
4.	Allowable O & M expenses for FY18	590.38

The Commission notes that as per the audited accounts of GESCOM, the actual O & M expenses inclusive of additional O & M expenses of Terminal Benefits and revision of pay, is Rs. 577.16 Crores for FY18. The allowable O & M expenses of Rs.590.38 Crores for FY18 computed as above, as against the GESCOMs claims of Rs.580.63 Crores and is more than the actual total O & M expense by Rs.13.21 Crores. The Commission also notes that the additional O& M expense on account of revision of pay of Rs. 78.20 Crores is already included in the salary item of expenditure. The Commission, in its earlier Orders, has been consistently stressing the need to control the controllable

O&M expenses and opines that allowing O&M expenses, by including the contribution to P&G Trust and revision of pay arrears beyond the actual amount of O&M expenses incurred and accounted in the audited accounts, will burden the end consumers, if included as part of cost recoverable in the retail supply tariff, to be approved for FY20. Thus, the Commission decides to limit the expenses to the actuals and allow Rs. 577.16 Crore as the allowable expenses for FY18.

The Commission has been continuously in its earlier Orders stressing the need to control the controllable O&M expenses. The Commission is of the view that any revision of pay scale should reflect in improved productivity and efficiency for the betterment of services rendered by the GESCOM to the consumers of the State. As per the decision of the Commission in the similar situation in the earlier Tariff Orders the GESCOM is required to justify any increase in pay scale with commensurate increase in real employee's productivity.

Thus, the Commission decides to allow an amount of Rs.577.16 Crores as O&M expenses for FY18 with the directions to control the O&M expenditure in future to the approved level.

4.2.6 Depreciation:

GESCOM's Submission:

The **GESCOM** in its application as per the audited accounts for FY18, has claimed an amount of Rs.141.30 Crores as the net depreciation, after deducting an amount of Rs.35.73 Crores towards the depreciation on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS) – 12.

The asset-wise depreciation claimed by GESCOM is shown in the following Table:

TABLE – 4.15
Depreciation for FY18- GESCOM's submission

Particulars	Opening Balance of GFA as on 01.04.2017	Amount in Rs. Crores FY 18	
		Depreciation	Closing Balance of GFA
Buildings	60.74	2.39	69.84
Other Civil	8.403	0.11	9.31
Plant & M/c	609.82	33.25	653.46
Line, Cable Network	2879.91	140.43	3127.87
Vehicles	5.86	0.24	5.86
Furniture	5.31	0.27	5.91
Office Equipment	6.16	0.34	6.82
Total	3576.19	177.03	3879.07
Land	923.09		924.79
GFA	4499.28		4803.86
Less: Depreciation withdrawn as proposed by GESCOM	689.44	35.73	689.44
Net Depreciation		141.30	

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts of GESCOM for FY18, the amount of net depreciation factored is Rs.141.30 Crores after considering the amount of the depreciation withdrawn on the assets created out of consumer contribution and grants for Rs.35.73 Crores.

In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the Commission has determined the depreciation for FY18, based on the opening and closing balances of gross blocks of fixed assets for FY18 and the depreciation as per the audited accounts, the weighted average rate of depreciation works out to 4.75%.

Further, as per the audited accounts and the Accounting Standards (AS)-12, the Commission has recognized an amount of Rs.35.73 Crores of depreciation on assets created out of consumer contribution / grants for FY18.

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

TABLE – 4.16
Allowable Depreciation for FY18

Amount in Rs. Crores

Particulars	Opening Balance of Asset as on 01.04.2017	FY18	Closing Balance of Asset as on 31.03.2018
		Depcn.	
Buildings	60.74	2.39	69.84
Other Civil	8.40	0.11	9.31
Plant & M/c	609.82	33.25	653.46
Line, Cable Network	2879.91	140.43	3127.87
Vehicles	5.86	0.24	5.86
Furniture	5.31	0.27	5.91
Office Equipment	6.16	0.34	6.82
Total	3576.19	177.03	3879.07
Land	923.09		924.79
GFA	4499.28		4803.86
Less: Depreciation withdrawn on assets created by consumer's contribution grants	689.44	35.73	689.44
Net Depreciation		141.30	

Based on the above, the Commission decides to allow the net depreciation of **Rs.141.30 Crores** for FY18.

4.2.7 Capital Expenditure for FY18:

Annual Performance Review for FY18:

The GESCOM, in its application for APR for FY18, has indicated a capital expenditure of **Rs 304.75 Crores** as against the Commission approved capex of **Rs 698.00 Crores** for the FY18. The GESCOM has furnished the breakup of category-wise expenditure of **Rs.304.75 Crores** for FY18 as shown below:

TABLE- 4.17

Capital expenditure of the GESCOM for FY18

Sl.No.	Categories of works	Capex approved for FY18 (Rs. in Crores)	Actual Expenditure for FY18 (Rs. in Crores)	% Deviation
1	33kV Sub-station, 33kV line works & Augmentation of 33kV S/S's	10.00	10.80	7.95%
2	RGVY works REC	40.00	0.00	-100.00%
3	RAPDRP works			
	Part-A	3.00	0.00	-100.00%

Sl.No.	Categories of works	Capex approved for FY18 (Rs. in Crores)	Actual Expenditure for FY18 (Rs. in Crores)	% Deviation
	Part-B	20.00	8.41	-57.95%
	IPDS	100.00	2.77	-97.23%
4	Reconductoring works:			
	a) 33kV lines	2.00	0.00	-99.95%
	b) 11kV lines	4.00	1.54	-61.60%
	c) L.T Lines	4.00	3.88	-3.07%
5	DTC metering works (RAPDRP area)	2.00		-100.00%
6	Water supply works	3.00	5.34	78.14%
7	Additional DTC's works:			
	a) New DTC's	4.00	11.79	194.65%
	b) Enhancement of DTC's	2.00	3.86	92.83%
8	Replacement failed 11 KV transformers	10.00	67.03	570.34%
9	Replacement of Power transformers	1.00	0.00	-100.00%
10	Replacement of MNR meters	3.00	1.37	-54.48%
11	Providing ETV meters	0.50	0.00	-100.00%
12	Providing HT metering Cubicles for ring fencing	0.50	0.00	-100.00%
13	Service Connection works			
	a) General works	10.00	3.49	-65.09%
	b) IP set works	1.00	1.86	86.30%
14	SI works (33KV link line /Express feeders)	1.00	0.00	-100.00%
	SI works (11KV Link line /Express feeders.)	10.00	3.64	-63.60%
15	a) Nirantara Jyoti works	80.00	4.02	-94.97%
	b) Deen Dayal Upadhaya Gram Jyothi Yojane	138.00	22.73	-83.53%
16	a) Major Replacements in S/S's & lines	0.50	0.00	-100.00%
	b) Replacement of Age old Equipment in existing S/S & lines	4.00	0.00	-100.00%
17	Civil Engineering works	6.00	7.04	17.32%
18	IT initiatives	2.00	45.91	2195.57%
19	HVDS Works	60.00	0.00	-100.00%
20	Providing ABC , UG Cables & RMUs	100.00	2.05	-97.95%
21	SCADA works	0.50	0.00	-100.00%
22	SCP & TSP works:			
	a) Energisation of IP sets	0.50	10.16	1932.66%
	b) Electrification of HB's/JC's	0.50		-100.00%
	c) Kutir Jyoti	0.50		-100.00%
23	Ganga Kalyan scheme Works	20.00	56.26	181.31%

Sl.No.	Categories of works	Capex approved for FY18 (Rs. in Crores)	Actual Expenditure for FY18 (Rs. in Crores)	% Deviation
24	T & P Articles	0.50	0.54	8.92%
25	Replacing of Electro Magnetic meters by Static Meters	2.00	0.31	-84.63%
26	Metering of IP/St. Lights/BJ&KJ sets	1.00	0.06	-94.00%
27	Providing Infrastructure to Regularization of Unauthorized IP sets	35.00	2.93	-91.62%
28	R.E General works:			
	a) Kutir Jyoti	8.00	0.00	-100.00%
29	Prevention of electrical accident & safety	3.00	13.54	351.32%
30	Electrification of Rehabilitation villages	3.00	0.08	-97.45%
31	Feeder Metering	2.00	0.00	-100.00%
32	Other Works	-	-	-
	a. SDP Works	-	12.16	-
	b. DDUGJY	-	0.98	-
	c .DTC Metering of non RAPDRP	-	0.00	-
	d. Providing SMC Box to DTCs.	-	0.20	-
	Total	698.00	304.75	-56.34%

Commission's Analysis and Decision:

The Commission notes that the GESCOM has incurred around Rs 304.75 Crores which is 44% of the capex of Rs 698.00 Crores approved for FY18. This shows that, the GESCOM's planning, monitoring and execution of its capex is not properly managed and is not as per the 'Capital expenditure guidelines' issued by the Commission.

GESCOM, in replies to the preliminary observations, regarding the actual expenditure being less than the approved budget, has provided the following reasons:

- 1) Delay in finalization of tender of DDUGJY and IPDS;
- 2) Delay in finalization of Sub-station tender;
- 3) Delay in finalization of UNIP tenders.

However, as it is observed, the GESCOM has underutilized the capex provision in respect of RGGVY, RAPDRP, Nirantara Jyothi Scheme, HVDS Works and Providing

ABC, UG Cables & RMUs. The Commission notes that, majority of these works which are to be taken up with grants and non-timely completion of these works will result in financial loss, to the GESCOM. Each scheme/project will have individual objectives, which would not be realized, due to non-implementation of the scheme.

The Commission, in the MYT Order for FY16, had directed GESCOM that, the failed transformers should be replaced by repaired good transformers only and it should be accounted under revenue expenditure. In case, the failed transformer is scrapped it can be replaced by a new transformer which can be accounted under capital expenditure. GESCOM has not implemented this direction during FY18.

As regards the system strengthening works, for the period from FY17 to FY21, Commission, in the MYT Order, 2016 had directed GESCOM to ascertain as to whether the proposed capex would result in loss reduction and improvement of reliability by conducting Techno-economic analysis and GESCOM should take up system improvement works such as:

- a) Reactive power compensation to improve the PF to 0.9-0.95 lag.
- b) Reconfiguration of distribution lines.
- c) Replacement of conductors by higher size wherever required.
- d) Drawing express feeders to bifurcate the loads.
- e) Establishing new 33kV substations and proposing for Establishment of new transmission voltage substations by KPTCL.
- f) Installing additional DTCs and shifting DTCs to load centers to reduce the LT line lengths.

The capex provided in the ARR has not been utilized to the extent it could have been utilized, in taking up the above works.

Further, GESCOM is yet to provide 48 nos. of TOD meters, regularize 1,05,175 number of unauthorized IP sets and yet to meter 21,334 number of DTC's (6402 no. of DTC's and 720 no. of feeders have losses more than 15%), as per 2nd quarter data of FY19 furnished during the review meeting held on 16.11.2018.

The Commission is not satisfied with the progress made in capex and for not implementing the directions issued by the Commission from time to time. Further,

the GESCOM should mandatorily follow the “Capital Expenditure Guidelines for ESCOMs” in which the capital investment planning process, prioritization and post-commissioning analysis to be adopted by the ESCOMs are elaborated. Further, the Commission has been directing the ESCOMs to conduct energy audit, by listing out high loss making 11kV feeders and take up strengthening works to reduce losses. Prioritizing of such projects to be taken up for execution should be based on payback period and benefit to cost ratio. The GESCOM should also move in this direction and list the high loss making feeders, based on the input energy to each of the feeders and sale of energy in that feeder. The GESCOM should mandatorily adhere to the guidelines and plan its capex carefully to achieve the desired benefits.

The Commission, after reviewing the capex achieved by GESCOM for FY18, and the explanations furnished, decides to allow the capex of Rs. 304.75 Crores. The same shall be treated as Rs.247.72 Crores (if, Rs 57.03 Crores under replacement of failed transformers is accounted under Revenue Expenditure out of 67.03 Crores, allowing only Rs.10 Crores under Capex), subject to submission of physical and financial progress along with time lines in respect of the above said works within a month from the issue of this Order.

The Commission has entrusted the work of carrying out prudence check of capital expenditure for FY17 & FY18 to the Consultants. On receipt of final report in this regard, the Commission will take a view on disallowance of the costs associated with imprudent works.

4.2.8 Interest and Finance Charges:

a) Interest on Capital loan:

GESCOM's Submission:

The GESCOM in its application has claimed an amount of Rs.96.53 Crores towards interest on capital loans drawn from Banks/Financial Institutions for FY18 and requested the Commission to approve the same. Considering the opening balance of loans, new borrowings, repayment and the closing balance of capital loan amount as per the D-9 format, the weighted average

rate of interest on the interest on capital loan claimed by GESCOM works out to 13.87%.

Commission's analysis and decisions:

The Commission has noted the loan portfolios of GESCOM with opening and closing balances of capital loans as per the audited accounts for FY18 and the data in format D9 of the filings and the additional information furnished by GESCOM to the Commission. The loan details and the interest amount indicated under D9 format by GESCOM is totally not tallied to the audited accounts figures. The GESCOM in its filing under format D9 has mixed the both long term capital loans and short term loans availed for working capital amount and the interest thereon. Hence Commission in its preliminary observations had directed GESCOM to furnish the Bank / Financial Institution-wise details in the D9 format, for long term and short term loan separately for FY18 and the actuals up to November,2018, indicating the details of the opening balance, receipt, repayment, term of loan, rate of interest, purpose of loan, interest amount and the closing balance of loans.

The GESCOM, in its replies to the preliminary observations and the additional information sought by to the Commission, has furnished the bifurcated figures for the capital loans and interest amount towards long term and short term loans separately duly tallying to figures as per the audited accounts for FY18:

As per the audited accounts of the GESCOM for FY18 and as per details submitted to the Commission, the interest on capital loan is Rs.77.64 Crores. Considering the average loan of Rs.701.04 Crores and an amount of Rs.77.64 Crores incurred towards interest on capital loans, the weighted average of interest works out to 11.07%. Considering the rate of interest at which the capital loan borrowed 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 FY18 is indicated in the following Table:

TABLE – 4.18
Allowable Interest on Loans – FY18
Amount in Rs. Crores

Particulars	FY18
Opening Balance of Long term secured & unsecured loans	745.25
Add: new Loans	0.00
Less: Repayments	88.42
Total loan at the end of the year with 70% capex	656.83
Average Loan	701.04
Interest paid on long term loans	77.64
Weighted average rate of interest based on the actual interest on long term loans in %	11.07%
Allowable Interest on capital loans	77.64

Thus, the Commission decides to allow an amount of Rs.77.64 Crores towards interest on capital loans for FY18.

b) Interest on Working Capital:

GESCOM's Submission:

The GESCOM in its application has claimed an amount of Rs.107.94 Crores as interest on short term loans and overdraft from the Commercial Banks and financial Institutions for FY18 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 to the preliminary observations of the Commission, the GESCOM has incurred an interest of Rs.25.53 Crores on short term loans and overdraft to meet its working capital requirement for FY18.

The Commission in its Tariff Order dated 11th April, 2017 while approving the ARR for FY18, has computed the working capital interest at 11.00 %. The Commission notes that, GESCOM has availed the short term loans and the overdraft at the interest rate of 10.95% to 12.25% from REC and Commercial Banks during the FY18 is on the higher side when compared to the interest

rate at which the other ESCOMs had availed the working capital. The Commission notes that GESCOM has not availed the benefit of the reduced rate of interest offered by the Banking sector in recent year in availing the working capital requirement.

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

Thus, the Commission decides to allow working capital loans at a normative interest rate of 11.00% for FY18.

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 FY18 as follows:

TABLE – 4.19
Allowable Interest on Working Capital for FY18

Amount in Rs. Crores	
Particulars	FY 18
One-twelfth of the amount of O&M Expenses	48.10
Opening GFA as per Audited Accounts	4499.28
Stores, materials and supplies 1% of Opening balance of GFA	44.99
One-sixth of the Revenue	715.29
Total Working Capital	808.38
Rate of Interest (% p.a.)	11.00%
Normative Interest on Working Capital	88.92
Actual interest on Working capital as per audited account	25.53
Allowable interest on Working capital	57.23

Thus, the Commission, decides to allow an amount of Rs.57.23 Crores towards interest on working capital for FY18.

c) Interest on Consumers' Security Deposits:

GESCOM's Submission:

The GESCOM in its application as per audited accounts has claimed an amount of Rs.31.75 Crores towards payment of interest on consumers' security deposits for FY18 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 FY18. The actual interest on the consumer deposit as per the audited accounts submitted by the GESCOM is Rs.31.74 Crores for FY18. Based on the average amount of consumer security deposits, the actual interest on consumer security deposits amounting to Rs.31.74 Crores as per its audited accounts works out to the weighted average rate of interest of 6.71%. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumers' security deposits is to be allowed as per the Bank Rate prevailing on the 1st of April of the relevant year. The bank rate as on 1st April, 2017 was 6.75%. The weighted average rate of interest claimed by the GESCOM as per the audited accounts is well within the applicable bank rate.

Thus, the Commission decides to allow an amount of Rs.31.74 Crores towards interest on consumers' security deposits for FY18.

d) Other Interest and Finance charges:**GESCOM Submission:**

The GESCOM, as per the audited accounts has claimed an amount of Rs.0.75 Crores towards other interest and finance charges paid to raise the loans from banks / financial institutions for FY18. The Commission decides to allow the same for FY18.

e) Interest on belated payment of Power Purchase Cost:**GESCOMs Submission:**

GESCOM's, in its filing has claimed an amount of Rs.114.71 Crores towards the interest on belated payment of power purchase bills for FY18 and requested the Commission to approve the same.

Commission's Analysis and decision:

The Commission notes that, as per the audited accounts, the GESCOM has incurred an amount of Rs.216.02 Crores towards interest on belated payment of Power Purchase dues for FY18. The Commission has been

consistently allowing the interest on working capital as per the norms under MYT Regulations to meet the day to day expenses of the ESCOMs. Therefore, there is no justification for the delay in arranging payment of the power purchase bills and incurring the interest on power purchase dues. The Commission directs the GESCOM to settle the power purchase bills by availing the working capital loan and avoid payment of interest thereon. Hence, the Commission decides not to allow any interest on power purchase dues in the APR for FY18.

The total allowable interest and finance charges for FY18 are as follows:

TABLE – 4.20

Allowable Interest and Finance Charges for FY18

Amount in Rs. Crores

Sl. No.	Particulars	FY18
1.	Interest on Loan capital	77.64
2.	Interest on working capital	57.23
3.	Interest on consumers' security deposits	31.74
4.	Interest on Power Purchase dues	0.00
5.	Other interest and finance charges	0.75
	Total interest and finance charges	167.36

4.2.9 Other Debits:

GESCOM's Submission:

The GESCOM, in its application has claimed an amount of Rs.67.00 Crores towards Other debits for FY18 by including the provision for bad and doubtful debts and asset decommissioning cost for FY18.

Commission's analysis and decisions:

The Commission notes from the items of expenditure accounted under other debits for FY18 that the other debits also include the provision for Bad and Doubtful Debts of Rs.66.89 Crores as per the audited account of GESCOM for FY18. As per the provisions of MYT Regulations, the allowable Other debits excluding the provision for bad and doubtful debts for FY18 are as detailed below:

TABLE – 4.21
Allowable Other Debits for FY18

Amount in Rs. Crores		
Sl. No	Particulars	FY18
1	Compensation for death, injuries and damages	1.41
2	Assets decommissioning cost	0.11
3	Bad & doubtful debts written off / provided for	0.00
4	Miscellaneous losses and write offs	1.56
	Total	3.08

Thus, the Commission decides to consider an amount of Rs.3.08 Crores as other debits for FY18.

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 FY18.

Commission's analysis and decisions:

i. 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 FY18 as per the actual data as per the audited accounts are indicated as follows:

TABLE – 4.22
Status of Debt Equity Ratio for FY18

	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	4499.28	745.25	71.76	3149.50	1349.78	16.56	1.59
Closing Balance	4803.86	656.83	-209.36	3362.70	1441.16	13.67	0.00

From the above table, it is evident that the amounts of debt equity are within the normative debt equity amounts in of 70:30 ratio on the opening and closing balances of GFA for FY18.

ii. Return on Equity (RoE):

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 computed on the share capital, share deposit, accumulated balance of profit/loss under reserve & surplus account as per the audited accounts at the beginning of the year and also factoring the recapitalization of consumers' security deposit amount in compliance with the Orders of the Hon'ble ATE in appeal No.46/2014. The allowable RoE for FY18 accordingly is considered. The total net worth at the beginning of FY18 is Rs.71.76 Crores and hence, the allowable RoE is determined as detailed below:

TABLE – 4.23
Allowable Return on Equity for FY18
Amount in Rs. Crores

OB of Paid Up Share Capital	776.77
OB of Share Deposits	193.95
OB of Carried forward Profit/loss	-876.95
Less Recapitalized Security Deposit	-22.00
Equity Reserves & Surplus at the beginning of the year	71.76
Allowable RoE	11.12

Further, as reported by the GESCOM, an additional equity of Rs.191.50 Crores has been received during the year at different dates from Government of Karnataka. Considering the actual date of receipt of this additional equity as reported and as per the provisions of the MYT Regulations, the Commission has determined **the allowable return on additional equity as indicated the following Table:**

TABLE-4.24
Return on equity for the additional equity received during FY18

Additional Equity received during FY18	Amount in Crs.	Received on	No. of Months	RoE allowed Rs. Crores
EN2 PSR 2017 dated 05.05.2017	15.00	18.05.2017	10	1.94
EN 40 PSR 2017 dated 05.05.2017	30.00	18.05.2017	10	3.88
EN 25 PSR 2017 dated 23.06.2017	2.40	10.07.2017	8	0.25
EN 2 PSR 2017 dated 28.07.2017	15.00	16.08.2017	7	1.36
EN 40 PSR 2017 dated 28.07.2017	30.00	16.08.2017	7	2.71

Additional Equity received during FY18	Amount in Crs.	Received on	No. of Months	RoE allowed Rs. Crores
EN 25 PSR 2017 dated 23.06.2017	0.68	10.07.2017	8	0.07
EN 25 PSR 2017 /P2 dated 28.07.2017	2.40	16.08.2017	7	0.22
EN40 PSR 2017 dated 16.10.2017	30.00	04.11.2017	4	1.55
EN 2 PSR 2017 dated 16.10.2017	15.00	04.11.2017	4	0.78
EN 40 PSR 2017 dated 20.01.2018	30.00	07.02.2018	1	0.39
EN 2 PSR 2017 dated 07.02.2018	15.00	07.02.2018	1	0.19
EN25 PSR/P2 2017 28.07.2017	0.68	16.08.2017	7	0.06
EN 25 PSR 2017/P2 dated 16.10.2017	2.40	04.11.2017	4	0.12
EN 25 PSR 2017 /P2 dated 16.10.2017	0.68	04.11.2017	4	0.04
EN 25 PSR 2017 /P2 dated 25.01.2018	1.76	07.02.2018	1	0.02
EN25 PSR 2017/P2 dated 25.01.2018	0.50	07.02.2018	1	0.01
TOTAL	191.50			13.58
Return on Equity allowed on Additional Equity Infusion in FY18				13.58

Considering the additional equity received during FY18, RoE works out to Rs.13.58 Crores for FY18. Accordingly, the GESCOM is entitled to Return on Equity of Rs.24.70 Crores (11.12+13.58) for FY18.

Thus, the Commission decides to allow Rs.24.70 Crores towards RoE for FY18.

4.2.11 Other Income:

GESCOM's Submission:

The GESCOM in its application has claimed an amount of Rs74.43 Crores as Other Income for FY18.

Commission's analysis and decisions:

As per the audited accounts of GESCOM, Rs.74.44 Crores has been factored as other income for FY18. This includes income from interest earned, income from sale of scrap, income from rent, rebate for collection of electricity duty, other miscellaneous income and also an amount of Rs.13.62 Crores pertaining to incentive received for early payment of power purchase bills is considered as other income. Further, as decided in the earlier Tariff Orders, to encourage and bring in financial discipline by ensuring timely payment of monthly power purchase bills, the Commission

continues to allow 10% of the total incentive amounting to Rs.1.36 Crores towards early payment of power purchase bills, to be retained by GESCOM for FY18.

Thus, the Commission decides to allow an amount of Rs.73.08 Crores as other income for FY18.

4.2.12 Fund towards Consumer Relations / Consumer Education:

The Commission has been allowing an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. The GESCOM has not claimed any amount on the Consumer Relations/Consumer Education in its filing. The Commission as per the audited accounts notes that, an amount of Rs.2.24 Crores has been incurred towards Consumer Relations/Consumer Education for FY18. Thus, the Commission by considering the excess incurred expenditure of Rs.1.74 Crores under O&M expenses item decides to consider the approved amount as per ARR for Rs.0.50 Crores as expenses towards consumer relations education for FY18.

Thus, the Commission decides to approve Rs.0.50 Crores towards Consumer Relations / Consumer Education for FY18.

4.2.13 Revenue for FY18:

The GESCOM, in its application has considered Rs.4291.76 Crores as revenue from sale of power from consumers and miscellaneous charges from consumers for FY18. As per the audited accounts for FY18, as submitted by the GESCOM, the revenue from sale of power is Rs.4291.76 Crores. **Accordingly, the Commission decides to consider Rs.4291.76 Crores as revenue from sale of power and miscellaneous charges from consumers** in the approval of revised ARR as per APR of GESCOM for FY18.

4.2.14 Subsidy for FY18:

The Commission in its Tariff Order dated 30th March, 2016 has approved the tariff subsidy of Rs.1982.78 Crores towards sale of power to BJ/KJ and IP sets installations for FY18 in accordance with the prevailing Government Order. The Commission notes that, as per the audited accounts and the replies to the preliminary observations of the Commission, the tariff subsidy towards

sale of power to BJ/KJ and IP Sets installations is Rs.1799.32 Crores for FY18. Thus the Commission while computing the revised ARR as per the APR for FY18 has considered the revised tariff subsidy of Rs.1799.32 Crores towards sale of power to BJ/KJ and IP sets installations for FY18. Thus, the GESCOM is entitled for Rs.1799.32 Crores as the tariff subsidy for FY18. The difference of Rs.183.46 Crores to the originally approved tariff subsidy during ARR for FY18 and the tariff subsidy computed during the APR of FY18 is required to be adjusted/refunded to the GoK by GESCOM.

4.3 Abstract of Approved ARR for FY18:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR for FY18 is as follows:

TABLE – 4.25
Approved revised ARR for FY18 as per APR

Amount in Rs. Crores

Sl. No	Particulars	As Appd 11.04.2017	As filed 30.11.2018	Approved As per APR
1	Energy at Gen Bus in MU	8,856.29	8,117.44	8,117.44
2	Transmission Losses in %	3.37%	4.07%	4.07%
3	Energy at Interface in MU	8,557.83	7,787.36	7,787.36
4	Distribution Losses in %	16.00%	16.39%	16.39%
	Sales in MU			
5	Sales to other than IP & BJ/KJ	3,608.26	3,297.51	3,340.24
6	Sales to BJ/KJ	128.44	256.51	213.77
7	Sales to IP	3,451.88	2,956.88	2,956.88
8	Total Sales-MU	7,188.58	6,510.90	6,510.89
	Revenue from tariff and Misc. Charges:			
9	Revenue from tariff and Misc Charges	2,540.51	2,475.63	2,492.44
10	Tariff Subsidy for BJ/KJ	80.79	165.82	149.01
11	Tariff Subsidy for IP	1,901.99	1,650.31	1,650.31
	Total Existing Revenue	4,523.29	4,291.76	4,291.76
	Expenditure :			
12	Power Purchase Cost	2,765.03	2,963.57	3,221.44
13	Transmission charges of KPTCL	352.75	610.62	352.75
14	SLDC Charges	2.97	2.97	2.97
	Power Purchase Cost including cost of transmission	3,120.75	3,577.16	3,577.16
15	Employee Cost	-	444.71	-
16	Repairs & Maintenance	-	32.96	-
17	Admin & General Expenses	-	102.96	-
	Total O&M Expenses	516.20	580.63	577.16
18	Depreciation	147.43	141.30	141.30
	Interest & Finance charges:			
19	Interest on Loans	133.09	96.53	77.64

Sl. No	Particulars	As Appd 11.04.2017	As filed 30.11.2018	Approved As per APR
20	Interest on Working capital	85.18	107.94	57.23
21	Interest on belated payment on PP Cost	0.00	114.71	0.00
22	Interest on consumer deposits	31.53	31.75	31.74
23	Other Interest & Finance charges	0.00	0.75	0.75
24	Less: interest capitalized	-4.49	0.00	0.00
	Total Interest & Finance charges	245.31	351.68	167.36
25	Other Debits	0.00	67.00	3.08
26	Net Prior Period Debit/Credit	0.00	0.00	0.00
27	Return on Equity	46.13	0.00	24.70
28	Provision for taxation	0.00	0.00	0.00
29	Funds towards Consumer Relations/Consumer Education	0.50	0.00	0.50
30	Other Income	-43.66	-74.43	-73.08
31	Deficit of FY16 carried forward	490.97	-	-
32	Disallowance on account of prudence check of capex for FY14	-0.34	-	-
33	Net ARR	4,523.29	4,643.35	4,418.19

4.3.1 Gap in Revenue for FY18:

As against the approved ARR of Rs.4523.29 Crores, the Commission, after the Annual Performance Review of GESCOM, decides to allow a revised ARR of Rs.4418.19 Crores for FY18. Considering the revenue of Rs.4291.76 Crores, a deficit in revenue of Rs.126.43 Crores is determined for the year FY18.

The Commission decides to carry forward the deficit of Rs.126.43 Crores of FY18 to the proposed ARR for FY20 as discussed in the subsequent Chapter of this Order.