CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY19

4.0 CESC's Application for APR for FY19:

The CESC had filed its application on 28th November, 2019 for Annual Performance Review (APR) for FY19, and the revision of the Annual Revenue Requirement (ARR) for the FY21 and revision of retail supply tariff for FY21. The CESC has sought the Annual Performance Review (APR) for FY19 and approval of revised ARR thereon, based on the Audited Accounts.

The Commission had communicated its preliminary observations on the application of CESC on 16th December, 2019. The CESC has furnished its reply to the preliminary observations of the Commission on 24th December, 2019.

The Commission in its Order dated 14th May, 2018, had approved CESC's revised Annual Revenue Requirement (ARR) of Rs.4129.32 Crores for FY19.

The revised Annual Revenue Requirement (ARR) of CESC as per Annual Performance Review for FY19, based on the Audited accounts, is discussed in this chapter.

4.1 CESC's Submission:

CESC in its application dated 28th November, 2019, has submitted its proposals for revision of ARR under APR for FY19 as indicated in the following Table:

TABLE – 4.1

APR for FY19 – CESC's Submission

Amount in Rs. Crores

Sl. No.	Particulars	APR FY19	
		As approved 14.05.2018	As filed 28.11.2019
1	Energy at Gen Bus- MU	7663.94	7654.19
2	Energy at Interface in MU	7427.66	7225.69
3	Distribution Losses in %	12.75%	12.04%
4	**Sales in MU**		

Sl. No.	Particulars	APR FY19	
		As approved 14.05.2018	As filed 28.11.2019
	Sales to other than IP & BJ/KJ	3415.92	3339.77
	Sales to BJ/KJ	85.20	130.28
	Sales to IP	2979.51	2885.52
	Total Sales	**6480.63**	**6355.57**
5	**Revenue**		
	Revenue from tariff and Misc. Charges	2436.32	2460.21
	Tariff Subsidy to BJ/KJ	54.27	85.65
	Tariff Subsidy to IP	1638.73	1610.53
	Total Existing Revenue	**4129.32**	**4156.39**
	Expenditure in Rs. Crores.		
6	Power Purchase Cost	2465.66	2749.44
	Transmission charges of KPTCL	312.87	315.34
	SLDC Charges	3.01	3.01
	Power Purchase Cost including cost of transmission	**2781.54**	**3067.79**
7	Employee Cost	540.74	528.68
	Repairs & Maintenance		62.40
	Admin. & General Expenses		94.01
	Total O&M Expenses	**540.74**	**685.09**
8	Depreciation	127.45	206.01
9	**Interest & Finance charges**		
10	Interest on Loans	148.49	122.45
11	Interest on Working capital	80.94	58.05
12	Interest on belated payment on PP Cost	0.00	41.57
13	Interest on consumer deposits	36.42	39.81
14	Other Interest & Finance charges	0.52	6.27
15	Less: interest capitalized	-24.00	-2.58
	Total Interest & Finance charges	**242.37**	**265.57**
16	Other Debits	0.00	6.87
17	Net Prior Period Debit/Credit	0.00	0.00
18	Return on Equity	34.69	0.00
19	Provision for taxation	0.00	-100.23
20	Disallowance of Interest & Depreciation on imprudent Investment in FY17	0.00	0.00
21	Funds towards Consumer Relations/Consumer Education	0.50	0.00
22	Other Income	-89.43	-119.03
23	Deficit of FY17 Carried forward	491.45	0.00
	Regulatory assets	0.00	353.67
	Net ARR	**4129.32**	**4365.74**
	Surplus/-Deficit		**-209.35**

Considering the revenue of Rs.4156.39 Crores against a net ARR of Rs.4365.74 Crores, CESC has reported a gap in revenue of Rs.209.35 Crores for FY19.

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

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

TABLE – 4.2
Financial Performance of CESC for FY19

Amount in Rs. Crores

Sl. No.	Particulars	Actuals as per Audited Accounts
	Revenue Receipts	
1	Revenue from sale of Power	4103.78
2	Other Income	171.64
	Total Income	**4275.42**
	Expenditure	
3	Power Purchase Cost	3067.79
4	Employee Benefit Expenses	528.54
5	Depreciation	206.01
6	Finance cost-Net	184.19
7	Other Expenses	244.66
8	Regulatory Income / Expenses (Net)	353.68
9	Current Tax	0.39
10	Deferred Tax	-89.03
11	MAT Credit	-11.58
12	**Total Expenditure**	**4484.65**
13	**Net Loss for FY19**	**209.23**

As per the Audited Accounts, CESC has a deficit of Rs.209.23 Crores for FY19.

The profits / losses reported by CESC in its audited accounts in the previous years are indicated in the following Table:

TABLE – 4.3
CESC's Accumulated Profit / Losses

Particulars	Amount in Rs. Crores
Accumulated losses upto FY15	-642.19
Profits earned in FY16	7.92
Profits earned in FY17	21.44
Restated Balance as at the end of FY17	-54.37
Profit for FY18	0.79
Loss for FY19	-209.23
Accumulated Losses till the end of FY19	-875.64

As seen from the above table, the accumulated loss as at the end of FY19 is Rs.875.64 Crores.

Commission's analysis and decision on APR for FY19:

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

4.2.1 Sales for FY19:

A. Sales Other than IP Sets:

I. Data Inconsistency:

The Commission's observations and response of CESC to the data inconsistencies is discussed in the following paragraphs:

1. The total number of LT2a installations for FY21 in the Format D-21 at page-123 should be 2049658 numbers instead of 2046242 numbers.

CESC Replies:

CESC has submitted to consider the number of installations in D-21 format as 903762 for LT2(a)(i) and 1142480 for LT2(a)(ii) and the total installations as 2046242 for LT-2a.

2. The actual number of LT-3 installations for FY19 as per D-2 format is 246235, whereas at page-42 it is indicated as 246207. The Data shall be reconciled.

CESC Replies:

CESC reconciling the figures has submitted to consider 246235 as the LT-3 number of installations and Station Auxiliary as 205 numbers, totaling to 3165053.

3. At page 56, in the second line below the table, the year should be FY19 and not FY18. This shall be rectified.

CESC Replies:

The correction is incorporated and revised paragraph is furnished.

The replies furnished by CESC is noted by the Commission.

II. Annual Performance Review for FY19

The Commission, in its Tariff Order dated 14.05.2018, had approved total sales of 6480.63 MU to various consumer categories, as against 6744.85 MU proposed by CESC. The actual sales of CESC as per the current APR filing [D-2 FORMAT] is 6350.55 MU, indicating a decrease in sales to the extent of 130.08 MU with respect to the approved sales. There is a decrease in sales of 220.80 MU in LT-categories and increase in sales of 90.72 MU in HT-categories. It is noted that, as against approved sales of 3415.93 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by CESC is 3364.82 MU, resulting in the reduction of sales to these categories by 51.11 MU. Further, CESC has sold 2985.73 MU to BJ/KJ and IP category as against approved sales of 3064.71 MU resulting in decreased sales to these categories by 78.98 MU.

The category-wise sales approved by Commission and the actuals for FY19 are indicated in the following:

TABLE - 4.4
Actual and Approved Sales for FY19

Energy in MU

Tariff Category	Consumer Category	Approved	Actuals	Difference -MU
1	2	3	4	5 = 4-3
BJ/KJ	Consuming more than 40 units/month	34.33	30.07	-4.26
LT-2a	Domestic / AEH	1046.43	981.90	-64.53
LT-2b	Pvt. Educational Institutions	11.08	9.77	-1.31
LT-3	Commercial	309.01	298.45	-10.56
LT-4b	IP > 10 HP	1.05	0.75	-0.30
LT-4c	Pvt. Nurseries, Coffee & Tea	24.78	20.05	-4.73
LT-5	LT Industries	148.58	146.04	-2.54
LT-6	Water Supply	302.10	250.53	-51.57
LT-6	Public Lighting	118.97	117.48	-1.49
LT-7	Temporary Supply	18.16	17.63	-0.53
HT-1	Water Supply & Sewerage	434.18	445.06	10.88
HT-2a	Industrial	701.80	765.28	63.48
HT-2b	Commercial	125.18	132.38	7.20
HT-2c	Govt./Aided Hospital & Edu.	53.32	51.21	-2.11
HT-3a & b	Lift Irrigation & Agriculture	79.11	92.17	13.06
HT-4	Residential Apartment, Colonies	3.74	4.15	0.41
HT-5	Temporary Supply	4.10	1.90	-2.20
Sub total		**3415.93**	**3364.82**	**-51.11**
LT1	BJ/KJ Consuming less than or equal to 40 units/month	85.20	100.21	15.01
LT4(a)	IP Sets of 10 HP & below	2979.51	2885.52	-93.99
	Sub total	**3064.71**	**2985.73**	**-78.98**
	Grand total	**6480.63**	**6350.55**	**-130.08**

The Commission had observed that the major categories contributing to the reduction in sales were LT2a (64.53 MU), LT-6WS (51.57 MU) & IP sets (93.99 MU) and the category contributing to increase in sales was HT-2a.

CESC has attributed the increase in HT sales to reduction in OA/wheeling sales and introduction of ToD tariff. The Commission notes that as compared to FY18, the OA consumption has reduced by 82.69 MU, partially attributing to increase in HT sales.

CESC was directed to explain the reasons for increase in consumption in LT-6 water supply category.

CESC, in its replies has attributed the increase in consumption to the increase in the number of installations by 1349 and specific consumption by 13.7 units/installation.

The CESC had attributed the reduction in LT-2a sales to taking up energy savings measures. However, CESC had not furnished any details of the energy saving program having been taken up for domestic consumers, carried out by it, during FY19. Therefore, CESC was directed to furnish the details of DSM program taken up by it, duly indicating the energy savings for FY19.

CESC, in its replies has submitted that under 'Hosabelaku Yojanae DELP' it has distributed 4,06,086 numbers of 9-W LED bulbs, 9,901 numbers of 20W LED tube lights and 5,886 numbers of 50 Watt energy efficient fans and has saved about 8.36 MU of energy in FY19.

The Commission notes that out of 64.53 MU reduction in sales to LT-2a category, CESC has been able to justify the reduction of 8.36 MU only. The Commission has noted the replies furnished by CESC for other issues raised in the preliminary observations.

B. Sales to IP sets – APR for FY19

1. The Commission, in its Tariff Order dated 14th May, 2018, had approved the specific consumption of IP sets as 7,843 units / IP / annum for the FY19, whereas, the specific consumption as reported by the CESC, in its Tariff filing for APR for FY19, works out to 7,827 units / IP / annum, which indicates a decrease in the specific consumption by 16 units / IP / annum amounting to (-) 0.2% reduction.

2. The total sales to IP sets reported for the FY19 is 2,885.52 MU as against 2,979.51 MU as approved by the Commission, which corresponds to a decrease in sales to an extent of 93.99 MU amounting to a decrease of 3.15%.

3. Further, the Commission had approved 3,90,834 as the number of installations for the FY19, whereas the actual number of installations reported is 3,78,274. The difference in number of installations between the approved and the actuals for FY19 is 12,560. This indicates a decrease of around 3.21 per cent in the number of installations serviced, as compared to the approved number of installations by the Commission for the FY19. Thus, it could be seen that there is insignificant decrease in specific consumption by 16 units per IP set per annum when there is considerable decrease in number of consumers during FY19. CESC has not furnished satisfactory reasons for such decrease in sales and specific consumption when compared to the decrease in number of installations.

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 CESC Mysore, in its Tariff Filing for FY21 are as follows;

Particulars	As approved by the Commission in ARR for FY19	As submitted by CESC Mysore for APR of FY19
Number of installations	3,90,834	3,78,274
Mid-year number of installations	3,79,895	3,68,648
Specific consumption in units / installation / annum	7,843	7,827
Sales in MU	**2,979.51**	**2,885.52**

4. The CESC has submitted the data relating to consumption of IP sets by considering different percentages of distribution losses in respect of all the agricultural feeders, while furnishing the feeder-wise, month-wise computations. Hence, CESC was directed to substantiate its claims for different values of distribution losses for all agricultural feeders and a

different percentage for each month, while assessing the sales to IP sets. Since the replies to the preliminary observations furnished by CESC are not satisfactory, the Commission directs CESC to consider the actual losses for the year of assessment as approved by the Commission in the Tariff Orders while assessing sales to IP sets, in future.

5. The Commission, in its preliminary observations, had also directed CESC to furnish the reasons for the difference in number of IP 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. However, CESC 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 reconcile the data of the GPS survey with that of the DCB figures. **Therefore, the Commission hereby directs CESC to complete the remaining survey work, if any, at the earliest and submit the details without ambiguity in the data of total number of IP sets existing, defunct / dried up etc., within 3 months from the date of this Order. If the data is not received on time, the Commission would restrict the sales to IP sets for FY20, on the data of GPS survey received during the Tariff Filing for APR FY19 and ARR of FY21 and would pass necessary order thereon.**

6. On the basis of the actual specific consumption of 7,827 units per IP set per annum for FY19, as reported by the CESC, the monthly consumption works out to 652.25 units per IP set per month. Whereas, during the month of April 2018, the specific consumption per IP set per month is as high as 23,982.74 units per IP set per month in Bendaravadi Feeder of Nanjangud Rural Sub-division and 8,479.93 units per IP set per month in Madapura Feeder of Nanjangud Rural Sub-division. The CESC was directed to furnish the reasons for such high specific consumption in all such high consumption feeders. In its replies, CESC has explained that, arranging power supply of 6 to 7 hours during F19 and feeders

change over arrangements, are some of the reason for high specific consumption.

7. But the replies furnished by CESC, in this regard, are not satisfactory and acceptable, as the values of average consumption per IP per month noticed are unrealistic and based on the above observations, CESC was directed to submit the assessed consumption by IP sets for FY19, duly furnishing clarity on the data, by revising the computations.

8. As per the data furnished in the Format D-21 for FY20, the average capacity of per IP works out to 4.6 HP (1827677 HP / 397155). Even if it is assumed that, CESC has provided power supply to an extent of 12 hours per day, the average consumption by IP set would approximately be 1,300 units per IP set per month (4.6 x 0.746 x 12 x 31). In view of this, the Commission is of the view that, it is not proper and correct to arrive at the consumption by IP sets considering the feeders which are showing abnormal specific consumptions.

9. Thus, for the above reasons, the Commission is unable to accept the assessment of IP set energy consumption made by the CESC, in its initial filing, as well the submissions made subsequently. The Commission has revised the data of the feeders which have recorded abnormal consumptions and has considered the normal specific consumption of 1,300 units per IP set per month, in order to arrive at the sales to IP sets and specific consumption for FY19. The revised computation is as indicated below:

Revised Specific Consumption for FY19

Sl No	Particulars	As computed by the Commission	
		For FY18	For FY19
1	No of installations	3,59,021	3,78,274
2	Mid-year No of installations		3,68,648
3	Extrapolated sales by limiting the specific consumption to 1300 units in respect high recording feeders **MU**		2,733.39
4	Specific consumption in units / installation / annum		7,415

TABLE - 4. 5

Details of sales to IP sets as computed by the Commission for FY19

Sl. No	Year	O & M Circle	No of Agri. Feeders	Assessed Consumption (In MU)	Metered Consumption in MU	Total IP set consumption (MU) as submitted by CESC	Revised Assessed Consumption in MU by the Commission	Total IP set consumption (MU) as computed by the Commission	Difference in IP set consumption (MU)
1	2018-19	Mysore	193	631.24	2.69	633.93	608.44	611.13	22.80
2	2018-19	Chamarajan-agara & Kodagu	88	468.08	25.94	494.01	468.08	494.01	0.00
3	2018-19	Mandya	198	1055.25	1.94	1057.20	961.37	963.32	93.88
4	2018-19	Hassan	163	696.72	3.66	700.38	661.27	664.93	35.45
Total			**642**	**2851.29**	**34.23**	**2885.52**	**2,699.16**	**2,733.39**	**152.13**

Based on the above computation, the Commission hereby approves 2,733.39 MU as the sales to the IP sets for FY19, by disallowing 152.13 MU of energy in the sales as claimed by CESC for FY19. However, if CESC furnishes revised acceptable data with due justification, the Commission would reconsider the approved sales figures for FY19, in its subsequent Order.

In view of the above and considering the audited accounts, the Commission approves the sales for FY19, as indicated in the table below:

TABLE - 4.6

Approved Sales for FY19 as per APR

Energy in MU

Tariff Category	Consumer Category	Actuals
LT-2a*	Domestic Lighting	1011.97
LT-2b	Pvt. Educational Institutions and Hospital	9.77
LT-3**	Commercial	303.47
LT-4b	IP Sets above 10 HP	0.75
LT-4c	Pvt. Nurseries, Coffee & Tea	20.05
LT-5	LT Industries	146.04
LT-6	Water Supply	250.53
LT-6	Public Lighting	117.48
LT-7	Temporary Power Supply	17.63
HT-1	Water Supply & Sewerage	445.06
HT-2a	Industrial	765.28
HT-2b	Commercial	132.38
HT-2c	Govt./Aided Hospital & Edu.	51.21
HT-3	Irrigation & Agriculture	92.17
HT-4	Residential Apartment,	4.15

Tariff Category	Consumer Category	Actuals
	Colonies	
HT-5	Temporary Supply	1.90
Sub total		**3369.84**
LT-1 Bhagya Jyothi		100.21
LT-4 Irrigation Pump sets		2733.39
Sub total		**2833.60**
Grand total		**6203.44**

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

***** includes 5.02 MU of auxiliary consumption***

Thus, the Commission approves 6203.44 MU as sales for FY19.

4.2.2 Distribution Loss for FY19:

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

Distribution Loss Range	FY19
Upper limit	13.00%
Average	**12.75%**
Lower Limit	12.50%

The CESC, in its APR, application has reported the distribution losses at 12.04% for FY19, which is computed as under:

1	Energy at Interface Points in MU	7225.69
2	Total sales	6355.57
3	**Distribution loss as a percentage of input energy at IF points**	**12.04%**

Commission's Analysis and Decisions:

The Commission, in its preliminary observations had noted that, CESC in its filing, had indicated the actual distribution losses for FY19 as 12.04%, as against 12.75% approved by the Commission, in the Tariff Order 2018. Thus, there is a reduction of 0.71% over and above the approved distribution losses for FY19. CESC had achieved the distribution losses of 13.20% during FY18. CESC, in its provisional audited accounts for FY19, has indicated the distribution losses as 12.17%. Thus, there is difference between the audited accounts and the loss level indicated in the tariff application. As such, CESC was directed to clarify the same.

The CESC, in its replies had submitted that the distribution losses for FY19 is 12.04% only and they had modified and submitted the audited statements accordingly.

The Commission in its preliminary observations, had observed that CESC, in its filing, has indicated a transmission loss of 5.60% as against 3.161% claimed by KPTCL in its filing for FY19. CESC was directed to explain the reason for the substantial variance.

CESC in its replies has submitted that the energy reconciliation statement of all the ESCOMs was submitted vide page 212 along with D-1 Format for FY19. There was a mismatch in actual energy figures drawn in respect of BESCOM for the month of July, 2018 and August, 2018 and the calculation for CESC indicates that there is some more energy under drawal. CESC has informed that for BESCOM, if consumption is more than the actual energy drawn for the month of July and August, may result in higher transmission losses.

The Commission notes the replies submitted by CESC.

As discussed earlier, after disallowing 152.13 MU of sales to IP Sets, the total sales approved for FY19 will be 6203.44 MU. Considering the interface energy of 7225.70 MU, the distribution losses would be 14.15%, which is above the upper limit of the target loss of 13% by 1.15%. Thus in terms of MYT Regulations, the Commission decides to impose penalty of Rs.38.20 Crores for non-achievement of approved loss targets to the extent of 1.15% point which is computed as indicated below:

TABLE-4.7

Penalty for having losses above the targeted Loss Levels in FY19

Particulars	Energy in MU
Actual Input energy at IF points accounted in MU	7225.70
Retail Sales as Revised in the APR for FY19 - MU	6203.44
Percentage Distribution losses as a percentage of input energy at IF points %	14.15%
Target Upper limit of distribution loss levels	13.00%
Increase in Percentage Points loss	1.15%
Input at Target upper limit of Loss for actual sales - MU	7130.39
Increase in input energy at IF point due to Increase in loss - MU	95.31
Average cost of power as per actuals – Rs./kWh	4.008
Penalty for non-achievement of loss targets Rs. Crores	38.20

Accordingly, with the above penalty the Commission decides to consider the distribution loss for FY19 at 14.15%.

4.2.3 Power Purchase for FY19:

CESC's Submission:

CESC, 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, CESC has purchased 7654.19 MU at a cost of Rs.3067.79 Crores for FY19.

The following table indicates the source wise power purchased as per D1 statement filed by CESC:

TABLE-4.8

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

Sl. No.	Source	Actuals as per filing		
		Energy in MU	Amount in Cr	Avg. cost in Rs
1	2	6	7	8
1	KPCL Hydro	2733.32	171.59	0.63
2	KPCL-Thermal	780.93	477.99	6.12
3	Central Projects	2324.83	1014.00	4.36
4	IPPs-Major(UPCL)	244.19	151.66	6.21
5	RE Projects	1194.94	503.15	4.21
6	Bundled Power	446.72	186.14	4.17
7	Non PPA and other /KSEB/Bi- lateral /UI trading/SW railways.	-3.61	2.24	6.20
8	Other Hydro	7.88	6.84	8.68
9	short term purchases/ power purchase from co-gen Medium term	312.42	138.36	4.43
10	KPTCL transmission charges		315.34	
11	SLDC charges		3.01	
12	Tangedco, POSOCO etc.			
13	PGCIL charges		214.67	
14	ENERGY Balancing	-297.22	-104.94	
15	IEX energy sale	-90.21	-40.27	
16	PCKL Rev Expr, POSOCO, Tangedco		1.58	
17	Other Transmission Charges		26.44	
18	**Grand total**	**7654.19**	**3067.79**	**4.01**

Commission's analysis and decisions:

The Commission, in its Tariff Order dated 14th May,2018 had approved power purchase quantum of 7663.94 MU at a cost of Rs.2781.54 Crores, for FY19 against which, the actual power purchase for FY19, as submitted by CESC is 7654.19 MU at a cost of Rs.3067.79 Crores.

The Statement showing the power purchase quantum and costs as approved, actuals as per audited accounts and the difference thereon is given below:

TABLE - 4.9

Power Purchase for FY19 Approved Vs actual as per Audited Accounts

Sl. No	Source	KERC Approved for 2018-19			Actuals as per filing			Difference		
		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	2466.32	157.34	0.64	2733.32	171.59	0.63	267.00	14.25	-0.01
2	KPCL-Thermal	1032.75	444.00	4.30	780.93	477.99	6.12	-251.82	33.99	1.82
3	Central Projects	2270.15	859.29	3.79	2324.83	1014.00	4.36	54.68	154.71	0.58
4	IPPs-Major(UPCL)	335.60	159.75	4.76	244.19	151.66	6.21	-91.41	-8.09	1.45
5	RE Projects	1000.22	466.07	4.66	1194.94	503.15	4.21	194.73	37.08	-0.45
6	Bundled Power	313.73	104.12	3.32	446.72	186.14	4.17	132.99	82.02	0.85
7	Non PPA and other /KSEB/Bi lateral /UI trading/SW railways.				-3.61	2.24	-6.20	-3.61	2.24	-6.20
8	Other Hydro	14.36	5.42	3.77	7.88	6.84	8.68	-6.48	1.42	4.91
9	short term purchases/ power purchase from co-gen Medium term	230.81	102.15	4.43	312.42	138.36	4.43	81.61	36.21	0.00
10	KPTCL transmission charges		312.87			315.34		0.00	2.47	0.00
11	SLDC charges		3.01			3.01		0.00	0.00	0.00
12	Tangedco, POSOCO etc.		0.25					0.00	-0.25	0.00
13	PGCIL charges		167.28			214.67		0.00	47.39	0.00
14	ENERGY Balancing				-297.22	-104.94		-297.22	-104.94	0.00
15	IEX energy sale				-90.21	-40.27		-90.21	-40.27	0.00
16	PCKL Rev Expr. POSOCO, Tangedco					1.58		0.00	1.58	0.00
17	Other Transmission Charges					26.44		0.00	26.44	0.00
18	**Grand total**	**7663.94**	**2781.54**	**3.63**	**7654.19**	**3067.79**	**4.01**	**-9.75**	**286.25**	**0.38**

Note:

1. (+) indicate excess over approved values.
2. As per the actuals for FY19 vis-à-vis the approved figures, there is marginal decrease in the quantum of power purchased to an extent of 9.75 MU but the cost has increased by Rs.286.25 Crores.
3. The analysis of the source-wise approved and actual power purchases is indicated in the following Table:

TABLE - 4.10
Analysis of Differences in Power Purchase in FY19

Sl. No	Source	KERC Approved for 2018-19			Actuals as per filing			Difference		
		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 (8-8)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL Hydro	2466.32	157.34	0.64	2733.32	171.59	0.63	267.00	14.25	-0.01
2	KPCL-Thermal	1032.75	444.00	4.30	780.93	477.99	6.12	-251.82	33.99	1.82
3	Central Projects	2270.15	859.29	3.79	2324.83	1014.00	4.36	54.68	154.71	0.58
4	IPPs-Major(UPCL)	335.60	159.75	4.76	244.19	151.66	6.21	-91.41	-8.09	1.45
5	RE Projects	1000.22	466.07	4.66	1194.94	503.15	4.21	194.73	37.08	-0.45

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

4. The short fall from KPCL Thermal projects and UPCL, has been made good by procuring more power from KPCL Hydel and RE sources.

5. 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 and 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) Change in the source-wise mix of supply;

c) Payment of additional PGCIL transmission charges of Rs.47.39 Crores from the CESC 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 CESC 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 CESC 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.**

6. In view of the above reasons, the per unit average power purchase cost has increased to Rs.4.01 per kWh, as against the approved rate of Rs.3.63 per kWh.

7. 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 7654.19 MU at a cost of Rs.3067.79 Crores, for the purpose of Annual Performance Review for FY19.

4.2.4 RPO Compliance:

CESC in their tariff petition have filed the details of RPO compliance for solar and non-solar for FY19 as indicated below:

TABLE-4.11

Solar RPO details of CESC for FY19

SL. NO	PARTICULARS	QUANTUM IN MU
1	Total Power purchase quantum from all sources	7654.19
2	Total Power purchase quantum from all sources for the purpose of calculation of RPO (As per Fifth Amendment of KERC)	4936.43
3	Solar renewable energy purchased under PPA route	633.01
4	Solar Energy purchased under Short-Term	0.00
5	Solar REC purchased at APPC	0.00
6	Solar energy pertaining to green energy sold to consumers under green tariff	0.00
7	Solar energy purchased from other ESCOMs	0.00
8	Solar energy sold to other ESCOMs	0.00
9	Solar Energy purchased from NTPC as bundled power	166.69
10	Solar energy purchased from any other source (SRTPV)	11.66
11	Total Solar energy purchased	811.35
12	Solar Energy accounted for the purpose of RPO	811.35
13	**Solar RPO Target**	**6.0%**
14	**Solar RPO complied in %**	**16.44%**

TABLE-4.12

Non-Solar RPO details of CESC for FY19

SL. NO.	PARTICULARS	QUANTUM IN MU
1	Total Power purchase quantum from all sources	7654.19
2	Total Power purchase quantum from all sources for the purpose of calculation of RPO (As per Fifth Amendment of KERC)	4936.43
3	Non solar renewable energy purchased under PPA route	551.70
4	Non solar short-term purchase from RE sources only (Incl.Sec-11)	192.29
5	Non-Solar REC purchased at APPC	5.54
6	Non solar RE pertaining to green energy sold to consumers under green tariff	0.00

SL. NO.	PARTICULARS	QUANTUM IN MU
7	Non solar REC purchased from other ESCOMs	0.00
8	Non solar REC sold to other ESCOMs	0.00
9	Surplus Solar REC accounted for the purpose of RPO	0.00
10	Total Non-solar energy purchased	738.46
11	Non solar RE accounted for the purpose of RPO	738.46
12	**Non-Solar RPO Target**	**12.00%**
13	**Non solar RPO complied in %**	**14.96%**

The Commission's preliminary observations and the replies furnished by CESC on RPO is discussed in the following paragraphs:

a) The Commission had observed that, the total power purchase quantum for FY19 is 7654.19 MU and net of hydro, the power purchase quantum would be 4921.23MU [7654.19-2667.55 (KPCL-hydro)-65.77 (VVNL)+8.24 (Shimsha)-4.73 (Jurala)-3.15 (TB Dam)]. Whereas, CESC at page 55, had indicated the same as 4936.43 MU. CESC was directed to clarify the same.

   CESC in its replies to the preliminary observations has submitted that the energy indicated at page 55 of 4936.43 MU, is inclusive of SRTPV energy.

   The Commission notes that in D-1 statement, while arriving at the total power purchase quantum of 7654.19 MU, the SRTPV power purchase quantum of 10.23 MU is also included. As such CESC has not replied satisfactorily in the matter.

b) CESC was also directed to indicate as to how much of hydro energy was added or subtracted under energy balancing.

   CESC in its reply to the preliminary observation, furnishing the details has submitted that hydro energy purchased before balancing was 2733.32 MU and after energy balancing it is 2709.62 MU. Thus, there is reduction of 23.70 MU of hydro after energy balancing, which is reckoned by the Commission.

c) The solar energy purchased under SRTPV indicated in page 55 was 11.66 MU and in D-1 Statement it was 10.23 MU. CESC was directed to reconcile the data and to furnish the correct figures.

CESC submitted that the solar energy purchased under SRTPV indicated in page 55 was 11.66 MU is inclusive of solar banked energy of 1.42 MU.

d) Similarly, CESC was directed to furnish, the break up details for 192.29 MU under short term purchase for Non-solar, duly reconciling the figures with D1 Format and as per accounts.

CESC submitted that the non-solar energy purchased under medium term is given under short-term purchase as there is no reference to medium term purchase in the table specified. Co-gen energy purchased under medium term is 191.68 MU and the remaining 0.61MU is the non-solar banked energy.

For validating the RPO compliance and to work out APPC, CESC was directed to furnish the data as per the format specified by the Commission, duly reconciling the data with audited accounts for FY19. Accordingly, CESC in its replies has furnished the following data:

TABLE - 4.13
Non-solar RPO Compliance – (CESC Submission)

No.	Particulars	Quantum in MU	Cost- Rs. Crores
1	Total Power Purchase quantum from all sources excluding hydro sources	4936.43	2994.31
2	Non–solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL	546.16	193.42
3	Non –solar Short-Term purchase from RE sources, excluding sec-11 purchase	191.69	89.09
4	Non –solar Short-Term purchase from RE sources under sec-11	0.00	0.00
5	Non-solar RE purchased at APPC	5.54	1.95
6	Non-solar RE pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Non-solar RE purchased from other ESCOMs	0.00	0.00
8	Non-solar RE sold to other ESCOMs	0.00	0.00

No.	Particulars	Quantum in MU	Cost- Rs. Crores
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff	0.61	0.14
10	Total Non-Solar RE Energy Purchased [No 2+ No.3+No.4+No.5 +No.7+No.9]	744.00	284.59
11	Non-Solar RE accounted for the purpose of RPO[No.10- No.5- No.6-No.8]	738.46	282.64
12	Non-solar RPO complied in % [No.11/No.1] *100	14.96%	9.44%

TABLE - 4.14
Solar RPO Compliance – (CESC Submission)

No.	Particulars	Quantum in MU	Cost- Rs. Crores.
1	Total Power Purchase quantum from all sources excluding Hydro energy	4936.43	2994.31
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	633.01	304.09
3	Solar energy purchased under Short-Term, excluding sec-11 purchase	0.00	0.00
4	Solar Short-Term purchase from RE under sec-11	0.00	0.00
5	Solar energy purchased under APPC	0.00	0.00
6	Solar energy pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Solar energy purchased from other ESCOMs	0.00	0.00
8	Solar energy sold to other ESCOMs	0.00	0.00
9	Solar energy purchased from NTPC (or others) as bundled power	166.69	92.54
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff	11.66	3.69
11	Total Solar Energy Purchased [No2+ No.3+No.4+No.5+No.7+No.9+No.10]	811.35	400.32
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]	811.35	400.32
13	Solar RPO complied in % [No.12/No.1] *100	16.44%	13.37%

Commission's Decision:

The Commission has approved the source-wise power purchase quantum and cost as discussed earlier. Therefore, for the purpose of RPO compliance the Commission has considered the power purchase quantum as per the APR for FY19. The Commission has approved power purchase quantum of

4944.93 MU [7654.19 MU (Total power purchase)- 2733.32 MU (KPCL Hydro)- 7.88 MU (Other Hydro) + 8.24 MU (Shimsha)+ 23.70 MU (energy balance)], excluding procurement from hydro sources, based on the audited accounts. The details of Non-solar energy procured is indicated below:

TABLE - 4.15

Non-Solar Energy Procured

Energy in Million Units

Co-generation (Power Purchase) (including medium term) (191.69+52.27)	243.96
Mini Hydel	283.48
Wind power projects incl. KPCL	200.29
Bio mass	15.66
Shimsha	8.24
Non-Solar Short-term purchase	0
Less Previous year FY18 adjustment as per TO 2019	0
Banked energy purchased*	0
Sold to consumers as green energy	0
Less: purchased at APPC	-5.54
Non-solar Total	**746.09**

***Details not furnished in D1 Statement**

Regarding the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 4944.93 MU, the Non-solar RPO target at 12.00% works out to 593.392 MU (593392 MWh after rounding off). CESC has purchased 746.09 MU (746090 MWh) of Non-solar. Thus, CESC has purchased 152.698 MU (152698 MWh) excess non-solar energy beyond the target specified. Thus, the Commission holds that CESC has met its Non-Solar RPO target of 12% for FY19, in terms of the prevailing Regulations.

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

TABLE - 4.16

Solar Energy Procured

Energy in Million Units

Solar PPA Route	633.01
Solar Rooftop	10.23
Solar KPCL	0
Solar Bundled Power	166.69
Solar New Park	0
Solar Short /medium term purchase	0
Less Previous year FY18 adjustment as per TO	0

2019	
Banked energy purchased*	0
Sold to consumers as green energy	0
Less: purchased at APPC	0
Solar Total	**809.93**

***Details not furnished in D1 Statement**

Regarding the Solar RPO, considering the input energy (excluding procurement from hydro sources) of 4944.93 MU, the Solar RPO target at 6.00% works out to 296.696 MU (296696 MWh after rounding off). CESC has purchased 809.93 MU (809930 MWh) of Solar energy. Thus, CESC has purchased 513.234 MU (513234 MWh) excess Solar energy beyond the target specified. Thus, the Commission holds that CESC has met its Solar RPO target of 6% for FY19, in terms of the prevailing Regulations.

4.2.5 Operation and Maintenance Expenses:

CESC's Submission:

CESC, in its filing, has requested to approve O&M expenses of Rs.685.09 Crores for FY19 as against the approved O&M expenses of Rs.540.74 Crores. The break-up of O&M expenses as claimed by CESC for FY19 are indicated in the following Table:

TABLE – 4.17
O & M Expenses – CESC's submission

Amount in Rs. Crores

Particulars	FY19
Employee cost	528.68
Administrative & General Expenses	94.01
Repairs and Maintenance	62.40
Total O & M Expenses	**685.09**

Commission's analysis and decisions:

The Commission, in its Tariff Order dated 14th May, 2018 had approved the revised O&M expenses including the contribution to the P&G Trust for FY19 as detailed below:

TABLE – 4.18

Approved O&M Expenses as per Tariff Order dated 14.05.2018

(Amt.in Rs. Crores)

Particulars	FY19
No. of installations as per actuals as per Audited Accounts	3221003
Weighted Inflation Index	8.1059%
CGI based on 3 Year CAGR	4.16%
Base Year O&M expenses (as per actuals of FY16)- Rs. Crores	418.40
Total approved O&M Expenses for FY19 in Rs. Crores.	**540.74**

CESC, in its APR application, had claimed an amount of Rs.685.09 Crores as O & M expenses for FY19. It has submitted that the KPTCL, vide its Order No. KPTCL/B16/69517/2017-18, dated 09.03.2018 accorded approval for revision of pay scales of all KPTCL and ESCOM's officers/employees with effect from 1st April, 2017. Further, due to the pay revision arrears from 1.04.2017 to 31.03.2018 of Rs.59.15 Crores under salaries head were given in 4 instalments during June, 2018, July, 2018, August, 2018 and September, 2018. Also, there was an increase of earned leave encashment amount of Rs.34.92 Crores from 17.02 Crores due to the pay scale revision, merging of dearness payment and increasing in annual increment. Thus, there is an overall increase of Rs.112.98 Crores in FY19 over the FY18. Further, CESC has stated that for arriving at the normative O&M charges of Rs.604.07 Crores for FY19, it has considered a weighted inflation index of 8.26% and consumer's growth rate based on 3 year CAGR of 3.56%, in accordance with the methodology followed by the CERC. CESC has submitted that the difference of Rs.81.01 Crores between the actual O&M cost and the normative O&M cost is mainly attributable to the additional employee cost due to revision of pay scales of Rs.59.15 Crores under salaries head, Rs.17.90 Crores against earned leave encashment due to the pay scale revision and merging of dearness payment. CESC also has informed that there is an increase in R&M cost due to heavy rains and floods.

The Commission's preliminary observations and the replies furnished by CESC on O&M expenses are discussed in the following paragraphs:

a. Employee Costs

The O&M expenses of Rs.685.09 Crores claimed by CESC for FY19, include the additional employees cost an account of contribution of Rs.112.09 Crores to P&G Trust. The Commission, in its Tariff Order 2019, while undertaking the APR for FY18, had reckoned and allowed the provisions of Rs.51.85 Crores towards arrears of revision of pay scale to the employees from 01.04.2017 to 31.03.2018, as an additional employees cost and Rs.7.68 Crores towards the additional contribution to P&G Trust on the arrears of pay revision, on the basis of the audited accounts for FY18. Thus, CESC was directed to furnish the actual payment of arrears to its employees on account of pay revision for FY18 during FY19 and the additional contribution made to P&G trust thereon.

Further, CESC was directed to furnish the actual employees cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust thereon for the FY18.

CESC in its reply to the preliminary observation, has submitted the details of actual employee cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust for FY18 as indicated below:

Sl.No.	Particulars	Amount (Crores)
1	Total employee cost for FY19	528.68
2	Total Arrears paid w.r.t pay revision	59.53
3	Payment towards P&G trust for FY18	12.45
4	Total actual employee cost excluding Arrears and P&G trust payment for FY19	456.70

b. Contribution to P&G Trust:

The Commission noted that CESC, in its filing of APR for FY19, had claimed an amount of Rs.112.09 Crores towards contribution to P&G Trust for FY19. CESC was directed to furnish the computation sheet for factoring in Rs.112.09 Crores duly considering the contribution to the employees recruited up to 31.03.2006 and employees recruited after 31.03.2006 separately, for FY19.

CESC in its replies, has submitted that the amount of Rs.112.09 Crores claimed in the APR for FY19 is towards the terminal benefits which includes contribution of pension and gratuity P&G Trust on its employees recruited upto 31.03.2006 and after 31.03.2006 covered under NDCP scheme for FY19. CESC has submitted the detailed break-up for Rs.112.09 Crores claimed as terminal benefits for FY19.

c. A&G Expenses:

The Commission noted that CESC in its filing of APR for FY19, had claimed an amount of Rs.41.85 Crores towards Other Professional charges, Rs.16.43 Crores as Revenue receipt stamp/ computer billing and Rs.16.01 Crores as Conveyance and Travelling expenses. The Commission notes that as per the provisions of MYT Regulations, the O&M expenses are controllable expenditure and every ESCOM need to control the expenditure under this head by utilizing the available resources within its control in a prudent manner and directed to furnish the reasons for incurring huge amounts under this head of account, along with breakup details for FY19.

CESC in its replies to the preliminary observation has submitted that the other professional charges include the cost of outsourced personal/ contract employees. The increase is due to increase in minimum wages as per the Govt. Order. Various software developments, repair to computer, LAN, etc. are included in the revenue receipt stamp/computer billing and has increased by only Rs.1.01 Crores over previous year.

CESC also submitted that the amount spent on conveyance and travelling expenses has increased by Rs.2.72 Crores over previous year, due to revision of DA rates and revision of hiring charges of vehicles.

The Commission notes that, the actual O&M expenses claimed by CESC at Rs.685.08 Crores for FY19 is more than the approved O&M expenses of Rs.540.74 Crores by Rs.144.34 Crores. The Commission notes the replies furnished and the increase in the O&M expenses than the approved amount and directs CESC to take action to minimize these controllable expenses in future so as to bring down the O&M expenses within the approved amounts.

Commission's Analysis and Decisions:

The Commission has noted the replies furnished by CESC. In accordance with the provisions of the MYT Regulations and the methodology adopted, while approving the ARR for FY19 and earlier APRs, the Commission 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 - 4.19
Inflation to be allowed for FY19

Year	WPI	CPI	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							3036.00
D=B/C							0.08
g(Exponential factor)= Exponential (D)-1							0.0826
e=Annual Escalation Rate (%)=g*100							**8.2604**

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

a) The actual O & M expenses as per the audited accounts for FY16 as the base year 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 3.56%.

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 will be as follows:

TABLE – 4.20

Normative O & M Expenses for FY19

Amount in Rs. Crores

Particulars	FY19
No. of Consumers as per audited accounts	3165053
Compounded Annual Growth rate in % (CAGR) of No. of Installations as per actuals / projections	3.56%
Inflation Index in %	8.2604%
Base Year O&M expenses (FY16 as per actuals) without P&G contribution	354.09
Approved normative O&M expenses without P&G contribution for FY17	389.89
Approved O & M expenses without P&G contribution + pay revision arrears for FY18 (429.18 + 51.85)	481.03
Allowable Normative O&M expenses for FY19, O & M Index= 0&M (t-1)*(1+WII+CGI-X)	**528.26**

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

The Commission also notes the CESC's reply for having paid the pay revision arrears of Rs.51.85 Crores during FY19 for the period from 01.04.2017 to 31.03.2018 and Rs.7.68 Crores contribution to P&G Trust for having made provisions as per audited accounts for FY18 and as approved by the Commission in APR for FY18 and subsequent reversal of the provisions in FY19.

The Commission notes that, CESC in its filing has claimed an amount of Rs.112.09 Crores towards contribution of terminal benefit to P&G Trust for FY19. Further, the Commission note that Rs.112.09 Crores, of contribution to P&G Trust claimed by the CESC also includes the statutory payment made to Family Benefit Fund Compensation Life Cover Scheme, payment of lump-sum to the legal heirs of the employees under NDCP scheme and contribution made on employees on deputation which is required to be claimed under O&M expenses. Thus, the Commission decides to allow Rs.110.05 Crores towards contribution of terminal benefit to P&G Trust as an additional employee cost by excluding Rs.1.906 Crores of statutory payment to FBF compensation to life cover scheme and contribution on deputation employees as these expenses are covered under normal O&M expenditure for FY19. Thus, the Commission decides to allow terminal benefits of Rs.110.05 Crores along with the normative O & M expenses of Rs.528.26 Crores.

The allowable O&M expenses for FY19 are as follows:

TABLE – 4.21
Allowable O & M Expenses for FY19

Amount in Rs. Crores

Sl. No.	Particulars	FY19
1	Normative O & M expenses	528.26
2	Additional employee cost (contribution to P&G Trust)	110.05
	Total Allowable O&M expenses for FY19	**638.31**

Thus, the Commission decides to allow an amount of Rs.638.31 Crores as O&M expenses for FY19.

4.2.6 Depreciation:

CESC's Submission:

CESC, in its application has claimed net amount of Rs.206.01 Crores as depreciation as per the audited accounts for FY19. CESC has submitted that an amount of Rs.8.29 Crores towards the depreciation on account of assets created out of consumers' contributions / grants as per Accounting

Standard (AS) – 12 has been considered in arriving at the net depreciation of Rs.206.00 Crores for FY19.

The asset-wise depreciation claimed by the CESC is as follows:

TABLE – 4.22

Depreciation for FY19- CESC's Submission

Amount in Rs. Crores

Particular	Opening Balance of Asset as on 01.04.2018	FY19	
		Depreciation	Closing Balance of Asset as on 31.03.2019
Buildings	94.59	3.29	100.13
Land and rights	4.16	0.03	5.83
Civil	2.83	0.15	2.97
Other Civil	1.17	0.05	1.51
Plant & M/c	826.69	49.45	909.02
Line, Cable Network	2765.11	148.66	3103.43
Vehicles	5.74	0.36	6.32
Furniture	35.27	2.67	46.98
Office Equipment	12.68	0.78	12.97
Intangible assets	21.30	8.87	30.00
Total	**3769.54**	**214.30**	**4219.17**
Less: Depreciation on asses created out of consumer contribution grant		**8.29**	
Net Depreciation		**206.01**	

Commission's analysis and decisions:

In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity) Regulations, 2006 and amendments thereon, the depreciation for FY19 has been determined by the Commission, duly considering the opening and closing balances of gross blocks of fixed assets for FY19 and the depreciation as per audited accounts. Accordingly, the weighted average rate of depreciation works out to 5.16%. Further, as per the Accounting Standards (AS)–12, an amount of Rs.64.53 Crores of depreciation on assets created out of consumer contribution / grants accounted under Other

Income has been factored in and deducted from the gross depreciation for FY19. The details are as shown below:

TABLE - 4.23

Allowable Depreciation for FY19

Amount in Rs. Crores

Particular	Opening Balance of Asset as on 01.04.2018	FY19	
		Depreciation	Closing Balance of Asset as on 31.03.2019
Buildings	94.59	3.26	100.13
Civil and hydraulics	2.84	0.15	2.98
Other Civil	1.15	0.05	1.50
Plant & M/c	813.07	47.20	893.95
Line, Cable Network	2765.10	143.78	3103.42
Vehicles	5.72	0.30	6.30
Furniture	35.26	2.62	46.97
Office Equipment	12.71	1.00	13.01
computers	13.62	7.63	15.08
Released asset to work	14.86	0.00	16.61
Land and lease hold Land	4.16	0.03	5.83
Intangible assets	10.60		10.89
Total	**3773.69**	**206.01**	**4216.65**
Less: Depreciation on assets created out of Consumer contribution / Grants		64.53	
Net Allowable Depreciation		**141.48**	

Thus, the Commission decides to allow the net depreciation of Rs.141.48 Crores for FY19.

4.2.7 Capital Expenditure for FY19:

The CESC, in its application for APR for FY19, has indicated a capital expenditure of Rs.479.38 Crores. The capital expenditure of Rs.479.38 Crores for FY19 is against the Commission approved capex of Rs.972.25 Crores for the FY19. The breakup of category-wise expenditure as furnished by CESC for having incurred an amount of Rs.479.38 Crores for FY19, is as shown below:

TABLE – 4.24

Capital expenditure of the CESC for FY19

Amount in Rs. Crores

Sl. No	Schemes	As approved in T.O. 2018	Actual expenditure	% of Approved amount utilized
1	Extension & improvement	180.00	88.67	49.26%
2	NJY	20.00	29.63	148.15%
3	HVDS	0.00	0.00	
4	R-APDRP	20.00	5.61	28.05%
5	IPDS	100.00	111.66	44.66%
6	DDUGJY	150.00		
7	RGGVY(Restructured)+DDG	40.00	9.10	22.75%
8	Replacement of failed Transformers	5.00	3.97	79.40%
9	Service Connections	90.00	26.03	28.92%
10	Rural Electrification(General)			
A	Electrification of Hamlets/HB/JC under RGGVY	3.00	7.78	259.33%
B	Providing infrastructure to Irrigation Pump sets & energization of IP SETS	160.00	98.05	61.28%
C	Kutir Jyothi(RGGVY)	2.00	0.00	0.00%
11	Tribal Sub Plan			
A	Electrification of Tribal Colonies (RGGVY)	0.00	10.55	527.50%
B	Energisation of IP sets	2.00		
C	Kutir Jyothi (RGGVY)	0.00		
12	Special Component Plan			
A	Electrification of HB/JC/AC(RGGVY)	0.00	45.38	648.29%
B	Energisation of IP sets	7.00		
C	Kutir Jyothi(RGGVY)	0.00		
13	Tools & Plants	5.00	0.00	0.00%
14	Civil Engineering Works	10.00	12.21	122.10%
15	Providing Meters to DTC, BJ/KJ, Street Light for replacement of electro- mechanical meters, providing modems to meters for communication	20.00	0.00	0.00%
16	Software Development and smart grid project	1.50	21.72	1448.00%
17	Providing Control wire and switches for street lighting, Timer Switches, Providing LED lights etc., in 5 model villages in each MLA/MP Constituency	48.00	0.00	0.00%
18	Model Sub-Division	100.00	0.00	0.00%
19	Mahamastakabhishekha Works	3.75	9.03	240.80%
20	Ag DSM Works	5.00	0.00	0.00%
Total		**972.25**	**479.38**	**49.31%**

Commission's Analysis and Decision:

The CESC, in its filing has stated that, as against the Capex approved of Rs.972.25 Crores for FY19, the actual expenditure incurred is Rs.479.38 Crores and many works sanctioned totalling to an amount of Rs.355.50 Crores have spilled over to FY20 and has provided details of spill over works. The Commission notes that the major portion of the amount of spill over woks is in respect of NJY, IPDS, DDUGJY, Energization of IP sets, providing additional DTCs, model subdivision and metering.

On the observations of the Commission that CESC is not planning and analysing its requirements of capex before submitting the capex proposals to the Commission, CESC has replied that CESC is complying with the CAPEX guidelines while planning Capex for each of the years. CESC has made provision of Rs.972.25 Crores, which includes spill over works of FY18 and major Central Govt. Projects like IPDS & DDUGJY (amounting to Rs.250 Crores) for FY19, for which CESC has achieved financial progress upto Rs.479.38 Crores.

The Commission, in its preliminary observation, had directed CESC to furnish the detailed reasoning for non-utilizing and underutilizing the amount in respect of the capex and consequent loss of amounts to be received through grants from the Government. The majority of these central scheme involves huge amounts of grants. CESC was also directed to illustrate the effect of this non-utilization and underutilization of capex on its AT&C losses, supplying reliable power to un-electrified installations and other relevant aspects.

The CESC has submitted that in respect of works related to model sub-division, an amount of Rs.89.34 Crores has been advanced to the firms and not accounted against the work in progress. In respect of works related to 5 model villages, the DWA has been issued in February, 2019 and works are under progress. As on 21.12.2019, 316 no's of works are completed and the expenditure for completed works is Rs.7.41 Crores. The balance 633 no's of works of Rs.49.14 Crores will be completed by March 2020. It is further submitted that, most of the works having gestation period in FY19 & 20 are being completed by FY20 and the grants allocated for FY19 has been completely utilized.

The CESC has submitted the following details for consideration of the Commission:

Sl. No.	Particulars	For FY18	For FY19	Remarks
1	Distribution losses	13.2	12.2	Distribution loss reduced
2	HT LT Ratio	1:1.52	1:1.47	HT LT ratio improved
3	Transformer failures	9.78%	9.93%	Marginal increase in % failures may be due to increase in unauthorized IP loads
4	Segregation of loads in feeder	1692	1798	106 no. of additional feeders commissioned during FY-19 with effective segregation of loads
5	Power theft reduction (No. of discrepancies detected)	5479	8326	More vigilance activities carried out to check the theft of energy & misuse of energy
6	Awareness programs among consumers on usage and conservation of energy			Awareness programs among consumers has been initiated through advertisements in print media, visual media & vivid Bharathi programmes and highlighting the issues on the reverse side of the monthly electricity bill and highlighting during consumer interaction meeting.
7	Metered Consumption	3277.39	3500	6.79% increase in metered consumption.
8	To improve power factor, at present the reactive compensation is being given by providing capacitor banks at the substations. The techno-economic study is initiated for providing Thyristor controlled switched capacitor bank and if it is found feasible and sustainable, action will be initiated for implementation.			

From the details of physical and financial progress in respect of major schemes taken up by CESC, it is noticed that, CESC is implementing most of the schemes without analyzing the financial feasibility and precise benefits derived from them. CESC is spending amount on most of these schemes through loans and its own funds, as indicated in the following Table. If these 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 CESC in the total capex of the scheme	Scheduled Date of Completion	Target Date of Completion	Cost to Benefit Ratio	Status of Work
Model village	65.20	Capex	March 2020	March-2020	Not Indicated	Work under progress
Model Sub Division	369.45	100%	December 2020	December 2020	Not indicated	Work under progress
DDUGJY	295.73	10% ; Balance: REC-60% Grant; 30% Loan	March 2020	March 2020	Not indicated	Only one work completed out of total Six works
IPDS	190.18	10% Balance: PFC-60% Grant, 30% Loan	Dec-2019	Dec-2019	Not indicated	One work yet to completed out of total Seven works

In the light of the above observations, CESC is directed to analyze the financial feasibility of the schemes and precise benefits to be achieved from such schemes before taking up schemes. In future, CESC shall submit the Capex proposal 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 investments, are kept aware of the benefits of the schemes they are going to get. Further, CESC is directed to submit the study report on techno-economic study initiated for providing Thyristor controlled switched capacitor bank, on completion of the study.

The Commission, after reviewing the capex achieved by CESC for FY19, decides to allow capex of Rs.479.38 Crores, which is below the approved capex of Rs.972.25 Crores for FY19, subject to Prudence Check.

Prudence Check of Capital Expenditure incurred by CESC 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 CESC for the period FY17 and FY18 respectively, subject to carrying out the prudence check of the various works undertaken by CESC. Accordingly, the Commission had entrusted conducting prudence check work of CESC to M/s Power Research Development Consultants Pvt. Ltd. (PRDC), Bengaluru.

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

Financial Year	FY17		FY18	
Particulars of works executed and selected for prudence check	**(Nos.)**	**(Rs in Crs.)**	**(Nos.)**	**(Rs in Crs.)**
Works executed, costing above Rs. 5 Lakhs	715	182.13	355	127.71
Works Selected for carrying out prudence check	134	87.54	66	52.20
Percentage of works selected for carrying out prudence check	18.74%	48.06%	18.59%	40.87%
Abstract of Prudent / Non-Prudent works	**(Nos.)**	**(Rs in Crs.)**	**(Nos.)**	**(Rs in Crs.)**
Total no. of Prudent works	133	87.47	65	52.00
Total no. of Prudent works subject to conditions	1	0.07	1	0.21
Total no. of works non-prudent including those not completed	0	0.00	0	0.00
Abstract of Cost-over run works	**(Nos.)**	**(Rs. in Crs.)**	**(Nos.)**	**(Rs. in Crs.)**
No. of works with no cost over-run	101	36.60	57	32.10
No. of works with cost over-run up to 10%	6	2.63	2	4.99
No. of works with cost over-run between 10% and 25%	15	19.20	5	12.84
No. of works with cost over-run exceeding 25%	12	29.14	2	2.29
Abstract of Time over Run works	**(Nos.)**	**(Rs in Crs.)**	**(Nos.)**	**(Rs in Crs.)**
No. of works with no time over-run	86	18.74	47	25.68
No. of works with time over run of upto 1 year	30	29.84	14	12.26
No. for works with time over run of between 1 to 2 years	8	16.31	2	5.82
No. of works with time over run more than 2 years	10	22.65	3	8.46

The Commission has forwarded a copy of the Report of the Consultant to CESC for information and to submit its comments on the findings of the report in the matter of conditionally prudent works.

After analyzing CESC's replies on the findings of the Consultant on the conditionally prudent works and justifications furnished by CESC, the Commission has decided that, one work amounting to Rs. 0.067 Crores for FY17 and one work amounting to Rs.0.2122 Crores for FY18, among the samples selected by the consultant, do not qualify for being treated as prudent. However, the one work not qualifying for being treated as prudent for FY18 is for reasons attributable to KPTCL. This has been considered in Annual Performance Review (APR) of KPTCL for FY19.

Accordingly, the corresponding depreciation and interest on loans allowed by the Commission in the tariff have to be disallowed in APR of FY17 and as detailed below:

The amount to be disallowed for CESC due to imprudent works of FY17 (Amount in Rs in Crores)		
1	Total cost of capital works categorized during the year as per Annual report of CESC for FY17	629.29
2	Total cost of categorized works costing more than Rs. 5 Lakhs considered for prudence check	182.13
3	Total cost of sample works out of Rs 182.13 Crores	87.54
4	Cost of sample works not meeting prudence norms	0.28
5	Cost of sample works not meeting prudence norms attributable to other companies (viz. KPTCL(Rs 0.2122 Crores))	0.21
6	Net Capex which is not meeting prudence norms as per the Report of Prudence check of CESC	0.07
7	**Name of the imprudent Work:** Construction of link line for Nallur feeder from 66/11 KV Ponnampet MUSS to 11 KV Kanoor feeder in Balele section, Gonikoppal Sub-division, Madikeri division.	0.07
8	Target date of completion, Year of completion and categorization	09.07.2016, 26.06.2016 and 31.03.2017
9	The capex not meeting the prudence norms at 0.07 Crores is 0.87% (0.07/7.6524) of cost of total sample of Rs.7.6524 Crores in category of E&I works/11kV Evacuation & UG Cable works/ additional DTC/HT &LT reconductoring/TC failure. This is escalated to the total categorized amount of Rs.94.13 Cores in respect of E&I works/11kV Evacuation & UG Cable works/ additional DTC/HT &LT reconductoring/TC failure for FY17 (0.07*94.13/7.6524)	0.82

10	Period for which amount to be disallowed towards works not meeting prudence norms calculated on the basis of weighted average interest on loan and weighted average depreciation rate on the amount in the above item	26th June 2016 to March 2019
11	Amount to be disallowed for 26th June 2016 to March 2017	0.10
	Amount to be disallowed for FY18	0.13
	Amount to be disallowed for FY19	0.13
	Sub-total amount to be disallowed	**0.36**
12	**The capex not meeting prudence norms in KPTCL, BESCOM and MESCOM attributable to CESC**	**0.00**
13	**Total amount to be disallowed**	**0.36**

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

Company	FY17		FY18		FY19	
	Wt. Avg. Dep.	Wt. Avg. Interest on loan	Wt. Avg. Dep.	Wt. Avg. Interest on loan	Wt. Avg. Dep	Wt. Avg. Interest on loan
CESC, Mysore	5.09%	11.08%	5.31%	10.53%	5.16%	10.13%

CESC 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 disallowance of amounts towards imprudent works:

i) Lack of coordination between CESC and KPTCL resulting in delay in completion and utilization of works.

ii) Alternative proposals studied before preparing the estimate for a given work are not indicated.

iii) Downward trend in material stocked at the end of the year (CB), except for HT UG cables and conductors, as compared to the beginning (OB).

iv) Time overrun and Cost overrun in Projects

v) Need for strengthening Monitoring system at division's level and at circle's level.

vi) Lack of conducting post work analysis in case of DTC metering, re-conductoring, feeder bifurcation, NJY and additional DTC works.

vii) There were anomalies with respect to No. of works carried out and the cost of works.

viii) In a number of cases, it was evident that the estimates were prepared hurriedly without proper details/data just for fulfilling the targets or for implementation of schemes. Lack of time allowed for this activity was very evident in such cases.

ix) The reports enclosed in estimates are very brief (in a number of cases, repetition of nomenclatures only) and do not convey all the details of the work involved.

x) The sketch accompanying the estimates does not depict the existing network system, proposed work details and the modified network conditions.

xi) In a few cases, in respect of system improvement works and additional DTC works, the energy saved data with calculation sheets, and V.R. charts were not available.

xii) In some instances, it was difficult to assess the exact advantages / outcome of work and the extent of benefits derived out of the work, as the data was not completely available.

xiii) There were anomalies in respect to the data given in PDPE format and that furnished in the comprehensive works list. They did not match with the information given in the supporting documents received from the CESC authorities.

In view of the above, the Commission hereby disallows Rs.0.36 Crore for FY17 towards depreciation and interest on loans allowed in respect of imprudent works. Accordingly, the same is ordered to be deducted in CESC's APR of FY19.

4.2.8 Interest and Finance Charges:

a) Interest on Capital loan:

CESC's Submission:

CESC in its filing has claimed an amount of Rs.122.45 Crores as against the approved amount of Rs.148.49 Crores towards interest on capital loans drawn from Banks/Financial Institutions for FY19 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, the weighted average of the interest on capital loans claimed by CESC works out to 10.13%.

Commission's analysis and decisions:

The Commission in its preliminary observations had observed that CESC, in its application for APR for FY19, has clubbed both the short-term loans (working capital) and the long-term loan balances in Form D-9. CESC was directed to furnish the Bank-wise/ Financial institution-wise details of loans along with the loan-wise details of amount of loan sanctioned, opening balance, amount borrowed, repayment, interest for the year, closing balance, rate of interest, purpose of loan availed and tenure of loans for both short-term (working capital) and long-term (capital loan) separately for FY19 (actuals).

CESC in its replies, has furnished the bank-wise/financial institution wise details of loans along with the loan-wise details of amount of loan sanctioned, opening balance, amount borrowed, repayment, interest for the year, closing balance, rate of interest, purpose of loan availed and tenure of loan for both short-term (working capital) and long -term (capital loan), which has been appropriately considered by the Commission.

The Commission takes note of the loan portfolios of CESC as per the audited accounts of CESC for FY19.

The Commission has also noted the status of opening and closing balances of capital loans as per the audited accounts for FY19, the details furnished under Format D-9 of the tariff application and the replies to the preliminary observations and accordingly has computed the interest on capital loans as shown in the following table:

TABLE – 4.25

Allowable Interest on Capital Loans – FY19

Amount in Rs. Crores

Particulars	FY19
Opening balance of Long term secured & unsecured loans	1172.97
Add: new Loans	227.73
Less: Repayments	155.89
Total loan at the end of the year	**1244.81**
Average Loan	**1208.89**
Interest on long term loans	122.45
Weighted average rate of interest on long term loans in %	10.13%

As per the audited accounts of CESC for FY19, the actual interest on the capital loans is Rs.122.45 Crores. Considering the average loan of Rs.1208.89 Crores, the weighted average rate of interest works out to 10.13%. Considering the rate of interest at which the capital loan barrowed by CESC as indicated in the audited accounts it is noted that, the actual weighted average rate of interest is comparable with the prevailing rate of interest for long term loans.

Thus, the Commission decides to allow an amount of Rs.122.45 Crores towards interest on capital loans for FY19.

4.2.9 Interest on Working Capital:

CESC's Submission:

CESC, in its application has stated that it has raised short-term loans and overdrafts from the Commercial Banks/ Financial Institutions to meet its day to day expenditure (working capital) during FY19. As per the filing, CESC has claimed an amount of Rs.58.05 Crores towards interest on short term loans / overdrafts during FY19 and has sought approval of the Commission for the same.

Commission's analysis and decisions:

The Commission notes the port-folios of the short term loans and overdraft availed by CESC, and the rate of interest at which the short-term loans and overdrafts availed by CESC during FY19. As per audited accounts CESC has incurred an amount of Rs.58.06 Crores towards interest on short term loans / overdraft for FY19. The Commission notes that, CESC has availed the short term loans at the interest rate of Rs.8.50% to 12% and the overdraft at 9.40%. Considering the rate of interest charged by the Banks/Financial Institutions for the short-term loan, and the working capital loan availed by CESC, the Commission decides to allow the interest on working capital loan at 11%.

Considering the higher interest rate at which certain short-term loans are availed by CESC during FY19, the Commission directs CESC to avail the loan, in future, at a competitive reduced rate to avoid burden to the consumers.

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

TABLE – 4.26
Allowable Interest on Working Capital for FY19

Amount in Rs. Crores

Particulars	FY19
One-twelfth of the amount of O & M expenses	53.19
Opening GFA as per Audited Accts.	3773.69
Stores, materials and supplies-1% of opening balance	37.74
One-sixth of the Revenue	678.79
Total Working Capital	769.72
Rate of Interest (% p.a.)	11.00%
Normative Interest on Working Capital	**84.67**
Actual interest on WC as per audited accounts	**58.06**
Interest on Working Capital as claimed	58.05
Allowable Interest on Working Capital (Actual interest + 50% of the difference between normative interest on working capital and the actual interest)	**71.36**

Thus, the Commission decides to allow an amount of Rs.71.36 Crores towards interest on working capital for FY19.

4.2.10 Interest on Consumer Deposits:

CESC's Submission:

CESC, in its filing, has claimed an amount of Rs.39.81 Crores towards payment of interest on consumers' security deposits as against Rs.36.42 Crores approved by the Commission for FY19.

Commission's analysis and decisions:

The Commission, as per the audited accounts, has taken note of the opening and closing balances of consumer security deposit for FY19. The Commission notes that, based on the amount of consumer security deposits, held by CESC, interest of Rs.39.81 Crores on consumer security deposits has been claimed by CESC, as per the audited account for FY19. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits shall be allowed at the bank rate prevailing on the 1st day of April of the relevant year. The bank rate as on 1st day of April, 2018 was 6.25%. The allowable interest on consumer security deposits, by reckoning the amount of Consumers' Security Deposit as per the audited accounts, is as follows:

TABLE - 4.27

Allowable Interest on Consumer Security Deposit for FY19.

Amount in Rs. Crores

Particulars	FY19
Opening balance of consumer deposits	600.85
Closing Balance of consumer deposits	676.77
Interest Claimed as per audited accounts	39.81
Allowable Rate of Interest in %	6.25%
Allowable Interest on consumer deposit	**39.81**

Thus, the Commission decides to allow an amount of Rs.39.81 Crores towards interest on consumer security deposits for FY19.

4.2.11 Other Interest and Finance charges:

CESC in its filing has claimed an amount of Rs.6.27 Crores towards other interest and finance charges paid to banks / financial institutions to raise the loans for FY19, including Guarantee commission paid to GoK. The

Commission, as per the audited accounts, decides to allow Rs.6.27 Crores towards other interest and finance charge for FY19.

4.2.12 Interest on belated payment of Power Purchase Cost:

CESC, in its filing has claimed an amount of Rs.41.57 Crores towards interest on belated payment of power purchase bill amount.

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts, the CESC has incurred an amount of Rs.41.57 Crores towards Interest on belated payment of Power Purchase dues for FY19. The Commission has been consistently allowing the interest on working capital loans as per the norms under MYT Regulations to meet the day to day expenses. Hence, there is no justification for the delay in arranging payments towards power purchase bills and incurring expenses towards interest on power purchase dues. The Commission directs the CESC that in future, it should settle the power purchase bills of the generators, by availing working capital loans and avoid payment of interest to the generators on PP dues.

Thus, the Commission has not allowed the interest on belated payment of power purchase bills claimed by CESC for FY19.

4.2.13 Capitalization of Interest and finance charges:

CESC in its filing and as per the audited accounts for FY19 has capitalized interest of Rs.2.58 Crores incurred on availing capital loans during FY19.

Commission's analysis and decisions:

The Commission has considered the amount of Rs.2.58 Crores towards capitalization of interest on capital loans as per the audited accounts for FY19.

Thus, the allowable interest and finance charges for FY19 are indicated in the following Table:

TABLE – 4.28
Allowable Interest and Finance Charges for FY19

Amount in Rs. Crores

Sl. No.	Particulars	FY19
1.	Interest on Loan capital	122.45
2.	Interest on working capital loan	71.36
3.	Interest on consumer deposits	39.81
4.	Interest on Power Purchase dues	0.00
5.	Other interest and finance charges	6.27
6.	Less: Interest and other finance charges capitalized	-2.58
	Total interest and finance charges	**237.32**

4.2.14 Other Debits:

CESC's Submission:

CESC has claimed an amount of Rs.6.87 Crores towards Other debits for FY19 as detailed below:

TABLE – 4.29
Other Debits for FY19- CESC Submission

Amount in Rs. Crores

Sl. No.	Particulars	FY19
1.	Small and low value items written off	0.02
2.	Loss / gains relating to fixed assets	0.84
3.	Assets decommissioning cost	1.54
4.	Bad debts written off	0.33
5.	Provision for Bad & Doubtful Debts for dues from consumers	1.11
6.	Miscellaneous losses and write off	2.60
7.	Bad and doubtful debts provided for others	0.42
	Total	**6.87**

Commission's analysis and decisions:

The Commission has taken note of the items of expenditure under other debited accounted as per the audited account for FY19. As per the provisions of MYT Regulations, the allowable Other debits by excluding the provision for bad and doubtful debts for FY19, are indicated in the following Table:

TABLE – 4.30

Allowable Other Debits

Amount in Rs. Crores

Sl. No.	Particulars	FY19
1	Assets decommissioning cost	1.54
2	Miscellaneous losses and write offs	2.60
3	Losses relating to fixed assets	0.84
4	Bad debts written off excluding provisions	0.33
	Total	**5.31**

Thus, the Commission decides to consider an amount of Rs.5.31 Crores as other debits for FY19.

4.2.15 Return on Equity:

CESC's Submission:

CESC in its filing has not claimed any Return on Equity for FY19, as against the approved RoE of Rs.34.69 Crores by the Commission in its Tariff Order dated 14th May, 2018.

Commission's analysis and decisions:

i. **Debt – Equity Ratio Vis-à-vis GFA:**

The Commission notes the opening and 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 in the following Table:

TABLE – 4.31
Status of Debt Equity Ratio for FY19

Amount in Rs. Crores

	GFA (Actuals)	Debt (Actuals)	Equity (Net-worth) (Actuals)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	%age of actual debt on GFA	%age of actual equity on GFA
Opening Balance	3763.09	1172.97	104.61	2634.16	1128.93	31.17%	2.78%
Closing Balance	4205.77	1244.81	19.77	2944.04	1261.73	29.60%	0.47%

From the above table it is seen that the debt and equity amounts are within the normative debt and equity ratio reckoned on the basis of the opening and closing balances of GFA for FY19.

ii. ROE Allowable:

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the allowable Return on Equity at 15.5% has to be computed on the equity plus the accumulated balance of profit/loss under Reserves & Surplus account as per the audited accounts as at the beginning of the year and also factoring recapitalization of security deposit amount in compliance with the Orders of the Hon'ble ATE in Appeal No.46/2014. Accordingly, the total net-worth at the beginning of FY19 is Rs.104.61 Crores and hence, the allowable RoE is worked out below:

TABLE – 4.32

Allowable Return on Equity

Amount in Rs. Crores

Particulars	FY19
Opening Balance Paid Up Share Capital	720.84
Opening Balance Share deposit	73.17
Opening Balance Reserves and Surplus as on 01.04.2016	-666.39
Less Recapitalization of Consumers' security deposit	-23.00
Total opening balance of Equity	104.62
Allowable RoE @ 15.50%	**16.22**

Further, it is noted that as reported by CESC and as per the audited accounts, an additional equity of Rs.124.51 Crores has been received during the year in different dates from the State Government. Considering the actual dates of receipt of the additional equity, the Commission as per the provision of MYT Regulations has determined the allowable return on additional equity as detailed below:

TABLE – 4.33

RoE on additional Equity received during the year FY19

Amount in Rs. Crores

Additional Equity received during FY19	Amount in Crs	Received on	No. of Months	RoE allowed
EN53 PSR 2018 dated 22.05.2018	22.00	02.06.2018	9	2.56
EN120 PSR 2018 dated 10.08.2018	1.43	30.08.2018	7	0.13
EN129 PSR 2018 dated 30.08.2020	9.38	07.09.2018	6	0.73
EN 53 PSR 2018 dated 10.09.2018	27.00	26.09.2018	6	2.09
EN 53 PSR 2018 dated 17.10.2018	27.00	09.11.2018	4	1.40
EN129 PSR 2018 dated 17.10.2018	4.69	08.11.2018	4	0.24
EN120 PSR 2018 dated 31.10.2018	2.86	15.11.2018	4	0.15
EN129 PSR 2018 dated 25.01.2019	4.69	04.02.2019	1	0.06
EN53 PSR 2018 dated 25.01.2019	24.00	04.02.2019	1	0.31
EN120 PSR 2018 dated 25.01.2019	1.46	04.02.2019	1	0.02
TOTAL	**124.51**			**7.68**
Return on Equity allowed on Additional Equity infusion in FY19				**7.68**

Considering, the additional equity received during FY19, the allowable RoE works out to Rs.7.68 Crores.

Thus, the Commission decides to allow total Return on Equity of Rs.23.90 Crores for FY19.

4.2.16 Income Tax:

CESC in its filing, has submitted that in the MYT application for all the years of the control period, no provision had been made for taxes. CESC added that if any taxes are payable/paid the same will be claimed as per actuals. However, in format A1 of the filing CESC has indicated provision for taxes as Rs.-100.23 Crores for FY19.

Commission's analysis and decisions:

The Commission notes that CESC, in its filing, has made provision for withdrawal of net amount of Rs.100.23 Crores towards provision for taxes. Further, the Commission notes that as per the audited accounts, CESC has accounted an amount of Rs.0.3857 Crores as current year's tax, Rs.-89.0340

Crores as deferred tax and Rs.-11.5848 Crores as MAT credit for FY19. The Commission as per the audited account has considered the allowable current year's tax and MAT credit of Rs.(-)11.20 Crores in the APR for FY19.

Thus, the Commission decides to allow the net income tax of Rs.(-)11.20 Crores as income tax for FY19.

4.2.17 Other Income:

CESC's Submission:

CESC in its application has claimed an amount of Rs.119.03 Crores as Other Income for FY19 as against Rs.171.64 Crores indicated as per the audited accounts.

Commission's analysis and decisions:

The Commission has taken note of the various items of other income earned by the CESC as per the audited accounts for FY19. As per the audited accounts, Rs.171.64 Crores has been indicated as other income for FY19. This includes rental from staff and others rebate on remittance of electricity duty, delayed payment charges from consumers, depreciation written back on the asset created out of consumer contribution / grants, as per Accounting Standards – 12, interest incomes, rebate on power purchase and miscellaneous recoveries. The delayed payment charges from consumers amounting to Rs.52.61 Crores, included under other income has been considered as revenue from sale of power an and an amount of Rs.64.52 Crores towards Depreciation written back on assets created from consumer contribution / grants included as other income, has been considered as deduction in the depreciation for FY19. By excluding these items, the Commission has considered Rs.54.50 Crores as other Income for FY19

Thus, the Commission decides to allow an amount of Rs.54.50 Crores as other income for FY19.

4.2.18 Fund towards Consumer Relations / Consumer Education:

The Commission had allowed an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. CESC in its filing has not claimed any expenditure for FY19.

Commission's analysis and decisions:

The Commission, as per the audited account notes that an amount of Rs.0.06 Crores has been incurred towards Consumer Relations / Consumer Education for FY19. Thus, the Commission decides to approve Rs.0.06 Crores as the expenses towards consumer relation / education for FY19.

4.2.19 Revenue for FY19:

The CESC, in its application as per the audited accounts has considered Rs.4156.39 Crores as revenue from sale of power from consumers and miscellaneous charges which also includes subsidy of Rs.1696.18 Crores on account of BJ/KJ and IP Set installations for FY19.

Commission's analysis and decisions:

The Commission notes that CESC as per the audited accounts has indicated Rs.4156.39 Crores as the revenue from sale of power and miscellaneous charges for FY19, by recognizing the delayed payment charges from consumers of Rs.52.61 Crores included under other income, as revenue from sale of power.

As stated earlier, the Commission has disallowed 152.13 MU of IP set consumption. Thus, the subsidy corresponding to the said consumption amounting to Rs.83.672 Crores, at CDT of Rs.5.50 per unit, has been deducted out of the subsidy of IP sets.

Accordingly, the Commission decides to consider Rs.4072.72 Crores as revenue from sale of power to consumers and miscellaneous charges in approving the revised ARR as per APR of CESC for FY19.

4.2.20 Tariff Subsidy for FY19:

The Commission in its Tariff Order dated 14th March, 2018 has approved tariff subsidy of Rs.1693.00 Crores towards sale of power to BJ/KJ and IP sets for FY19, in accordance with the prevailing Government Order. CESC in its filing has claimed an amount of Rs.1696.18 Crores as subsidy towards sale of power to BJ/KJ and IP Sets for FY19.

Commission's analysis and decisions:

The Commission notes that the subsidy payable to BJ/KJ and IP Sets installations as per audited accounts is Rs.68.14 Crores and Rs.1586.17 Crores towards BJ/KJ and IP Sets installations respectively for FY19. After disallowing of Rs.83.67 Crores towards disallowed energy of 152.13 MU in the IP Set consumption as stated earlier, the allowable net subsidy for BJ/KJ and IP Sets installation works out Rs.1570.64 Crores for FY19, (Rs.68.14 Crores BJ/KJ, Rs.1502.50 Crores to IP Sets). Thus, the Commission **in computation of APR for FY19, decides to approve the revised tariff subsidy of Rs.1570.64 Crores towards sale of power to BJ/KJ and IP set installations for FY19.**

4.3 Abstract of Approved ARR for FY19:

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

TABLE – 4.34

Approved revised ARR for FY19 as per APR

Amount Rs.in Crores

Sl. No.	Particulars	APR FY19		
		As approved 14.05.2018	As filed	As approved under APR of FY19
1	Energy at Gen Bus-MU	7663.94	7654.19	7654.19
2	Energy at Interface in MU	7427.66	7225.69	7225.70
3	Distribution Losses in %	12.75%	12.04%	14.15%
4	**Sales in MU**			
	Sales to other than IP & BJ/KJ	3415.92	3339.77	3369.84
	Sales to BJ/KJ	85.20	130.28	100.21
	Sales to IP	2979.51	2885.52	2733.39
	Total Sales	6480.63	6355.57	6203.44
5	**Revenue in Rs. Crs**			
	Revenue from tariff and Misc. Charges	2436.32	2460.21	2502.08

Sl. No.	Particulars	APR FY19		
		As approved 14.05.2018	As filed	As approved under APR of FY19
	Tariff Subsidy to BJ/KJ	54.27	85.65	68.14
	Tariff Subsidy to IP	1638.73	1610.53	1502.50
	Total Revenue	**4129.32**	**4156.39**	**4072.72**
	Expenditure in Rs. Crs			
6	Power Purchase Cost	2465.66	2749.44	2749.44
	Transmission charges of KPTCL	312.87	315.34	315.34
	SLDC Charges	3.01	3.01	3.01
	Power Purchase Cost including cost of transmission	**2781.54**	**3067.79**	**3067.79**
7	Employee Cost		528.68	
	Repairs & Maintenance		62.40	
	Admin & General Expenses		94.01	
	Total O&M Expenses	**540.74**	**685.09**	**638.31**
8	Depreciation	127.45	206.01	141.48
9	**Interest & Finance charges:**			
10	Interest on Loans	148.49	122.45	122.45
11	Interest on Working capital	80.94	58.05	71.36
12	Interest on belated payment on PP Cost	0.00	41.57	0.00
13	Interest on consumer deposits	36.42	39.81	39.81
14	Other Interest & Finance charges	0.52	6.27	6.27
15	Less: interest capitalized	-24.00	-2.58	-2.58
16	**Total Interest & Finance charges**	**242.37**	**265.57**	**237.32**
17	Other Debits	0.00	6.87	5.31
18	Net Prior Period Debit/Credit	0.00	0.00	0.00
19	Return on Equity	34.69	0.00	23.90
20	Provision for Income Tax	0.00	-100.23	-11.20
21	Funds towards Consumer Relations/Consumer Education	0.50	0.00	0.06
22	**Other Income**	-89.43	-119.03	-54.50
23	**ARR**	**3637.86**	**4012.07**	**4048.47**
24	**Surplus/Deficit (-) for FY17 carried forward**	-491.45	0.00	0.00
25	Penalty for non-performance on distribution losses	0.00	0.00	-38.20
26.	Disallowance of financial charges on imprudent CAPEX during FY17	0.00	0.00	-0.36
27	Regulatory asset	0.00	353.67	0.00
	Net ARR	**4129.32**	**4365.74**	**4009.91**
	Surplus for FY19	0.00	-209.35	62.81

4.3.1 Gap in Revenue for FY19:

As against an approved ARR of Rs.4129.32 Crores, the Commission, after the Annual Performance Review of CESC, decides to allow a revised ARR of Rs.4009.91 Crores for FY19. Considering the revenue of Rs.4072.72 Crores, a surplus in revenue, of Rs.62.81 Crores is determined for the year FY19.

The Commission decides to carry forward the surplus of Rs.62.81 Crores of FY19 to the proposed ARR for FY21, as discussed in the subsequent Chapter of this Order.