CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY17

4.0 CESC's Application for APR for FY17:

The CESC has filed its application on 30th November, 2017 for Annual Performance Review (APR) for FY17, and revision of Annual Revenue Requirement (ARR) and revision of retail supply tariff for FY19. The CESC has sought the Annual Performance Review (APR) for FY17 and approval of revised ARR thereon based on the Audited Accounts.

The Commission had communicated its preliminary observations on the application of CESC on 21st December, 2017. The CESC has furnished its reply to the preliminary observations of the Commission on 28th December, 2017.

The Commission in its Multi Year Tariff (MYT) Order dated 30th March, 2016 had approved CESC's Annual Revenue Requirement (ARR) for FY17 along with the retail supply Tariff for FY17.

During the course of Annual Performance Review (APR) for FY17, revision of various items of revenue and expenditure with reference to the audited accounts for FY17, are discussed in this Chapter.

4.1 CESC's Submission:

CESC in its application dated 30th November, 2017, has submitted its proposals for revision of ARR for FY19 as follows:

TABLE – 4.1

ARR for FY17 – CESC's Submission

Rs. Crores

Sl. No	Particulars	As Filed
1	Energy at Gen Bus in MU	7544.85
2	Energy at Interface in MU	7204.35
3	Distribution Losses in %	13.10
	Sales in MU	
4	Sales to other than IP & BJ/KJ	3081.96
5	Sales to BJ/KJ installations	35.19
6	Sales to IP-sets	3143.13

	Total Sales	**6260.28**
	Revenue	
7	Revenue from other than IP & BJ/KJ and Misc. Charges	1944.82
8	Tariff Subsidy to BJ/KJ installations	23.90
9	Tariff Subsidy to IP-sets	1550.05
	Total	**3518.77**
	Expenditure	
10	Power Purchase Cost	2918.01
11	Transmission charges of KPTCL	346.50
12	SLDC Charges	2.40
	Power Purchase Cost including cost of transmission	**3266.91**
13	Employee Cost	315.41
14	Repairs & Maintenance	42.77
15	Admin. & General Expenses	73.27
	Total O&M Expenses	**431.45**
16	Depreciation	147.58
	Interest & Finance charges	
17	Interest on Loans	95.98
18	Interest on Working capital	48.29
	Interest on belated payment of PP Cost	27.65
19	Interest on consumer deposits	38.11
20	Other Interest & Finance charges	0.00
21	Less: interest & other expenses capitalised	12.84
	Total Interest & Finance charges	**197.19**
22	Other Debits	57.37
23	Net Prior period Debit/Credit	22.05
24	Return on Equity	0.00
25	Provision for taxation	25.75
26	Funds towards Consumer Relations/Consumer Education	0.00
27	Other Income	132.99
	Net ARR	**4015.32**

Considering the revenue of Rs.3518.77 Crores against a net ARR of Rs.4015.32 Crores, CESC has reported a gap in revenue of Rs.496.55 Crores for FY17.

4.2 CESC's Financial Performance as per Audited Accounts for FY17:

An overview of the financial performance of CESC for FY17 as per its Audited Accounts is as given below:

TABLE – 4.2

Financial Performance of CESC for FY17

Rs. Crores

Sl. No.	Particulars	Amount
	Receipts	
1	Revenue from Tariff and misc. charges	1941.37
2	Tariff Subsidy	1537.66
3	Income on account of Regulatory Asset/Truing up of Subsidy	517.99
	Total Revenue	**3997.02**
	Expenditure	
4	Power Purchase Cost	2918.01
5	Transmission charges of KPTCL	346.50
6	SLDC Charges	2.40
	Power Purchase Cost including cost of transmission	**3266.91**
7	O&M Expenses	431.45
8	Depreciation	147.57
	Interest & Finance charges	
9	Interest on Loans	95.98
10	Interest on Working capital	47.15
11	Interest on belated payment of power purchase	27.65
12	Interest on consumer deposits	38.11
13	Other Interest & Finance charges	1.15
14	Less; Interest and other expenses capitalized	12.84
	Total Interest & Finance charges	**197.20**
15	Other Debits	57.37
16	Net Prior Period Debit/Credit	22.05
17	Other income	172.73
18	Income tax	25.75
	Total Expenditure	**3975.58**

As per the Audited Accounts, CESC has a surplus of Rs.21.44 Crores for FY17. The profits / losses reported by CESC in its audited accounts in the previous years are as follows:

TABLE – 4.3

CESC's Accumulated Profit / Losses

Particulars	Amount in Rs. Crores
Accumulated losses as at the end of FY10	(285.15)
Profit earned in FY11	11.38
Losses incurred in FY12	(123.45)
Losses incurred in FY13	(269.63)
Losses incurred in FY14	(15.61)
Profits earned in FY15	40.27
Profits earned in FY16	7.92
Profits earned in FY17	21.44
Accumulated losses as at the end of FY17	**(612.82)**

As seen from the above table, the accumulated loss as at the end of FY17 is Rs.612.82 Crores.

APR Exercise by the Commission:

The Commission has taken up the Annual Performance Review for FY17, duly considering the actual revenue and expenditure as per the Audited Accounts vis-à-vis the revenue and expenditure approved by the Commission, in its Tariff Order dated 30th March, 2016. The item-wise review of revenue and expenditure and the decisions of the Commission thereon are as discussed in the following paragraphs:

4.2.1 Sales for FY17:

A. Sales Other than IP Sets :

The Commission, in its Tariff Order dated 31.03.2016 2016, had approved total sales to various consumer categories at 5966.83 MU as against the CESC's proposal of 6009.80 MU. The actual sales of CESC as per the current APR filing [D-2 FORMAT] is 6260.28 MU indicating increase in sales to the extent of 293.45 MU as compared with the approved sales. There is an increase in sales by 589.26 MU in LT-categories and decrease in sales by 295.82 MU in HT-categories. The Commission has observed that, as against approved sales of 3306.72 MUs to categories other than BJ/KJ installations and IP-sets, the actual sales achieved by CESC is 3081.96 MU, resulting in the reduction of sales to these categories by 224.76 MU. Further, CESC has sold 3178.32 MU to BJ/KJ and IP sets categories as against the approved sales of 2660.11 MU, resulting in increased sales to these categories by 518.21 MU.

The category-wise sales approved by Commission and the actuals for FY 17 and the difference are indicated in the table below:

TABLE-4.4

Category-wise Sales for FY17

Million Units

Category	Approved	Actuals	Difference (Actuals-Approved)
(1)	**(2)**	**(3)**	**(3-4)**
LT-2a*	1001.92	1009.86	7.94
LT-2b	8.72	8.97	0.25
LT-3	286.98	274.45	-12.53
LT-4b	1.24	1.02	-0.22
LT-4c	10.96	17.56	6.60
LT-5	141.96	140.59	-1.37
LT-6	153.88	220.22	66.34
LT-6	100.24	103.51	3.27
LT-7	13.55	14.32	0.77
HT-1	473.96	418.24	-55.72
HT-2a	837.72	634.73	-202.99
HT-2b	118.50	117.24	-1.26
HT-2c	44.62	48.07	3.45
HT-3a & b	102.53	66.02	-36.51
HT-4	5.16	3.73	-1.43
HT-5	4.78	3.42	-1.36
Sub total	**3306.72**	**3081.96**	**-224.76**
BJ/KJ	37.72	35.19	-2.53
IP-sets	2622.39	3143.13	520.74
Sub total	**2660.11**	**3178.32**	**518.21**
Grand total	**5966.83**	**6260.28**	**293.45**

***Including BJ/KJ installations consuming more than 18 units/month**

The Commission notes that the major categories contributing to the reduction in sales were HT Industries (202.99 MU) and HT Water supply (55.72 MU) and the categories contributing to increase in sales are IP-sets (520.74 MU) and LT-Water supply [66.34 MU].

CESC in its tariff petition, has attributed the reduction in HT-2a sales, to sixteen industries consuming 440.17 MU under Open Access/wheeling. CESC has also stated that HT-2b consumers and HT-2c consumers have consumed 11.57 MU and 4.52 MU respectively under OA/wheeling in FY17. Further, CESC has stated that the increase in sales to LT-water supply is due to servicing of 1813 new installations and providing independent transformers to most of these installations, thereby reducing interruptions.

The Commission has taken note of the above explanation furnished by CESC. Further, the preliminary observations made by the Commission on the FY17 sales and the replies furnished by CESC are as indicated below:

i. The Number of BJ/KJ installations consuming less than 18 units is indicated as 367500 at page-73 whereas at page 80 it is indicated as 343172. CESC shall furnish the reconciled figures.

   CESC has replied that the number of BJ/KJ installations consuming less than 18 units is 367500 as indicated at page-73 and further, has stated that the installations indicated at page-80 are live installations.

ii. In the case of LT-3 category, though the number of installations has increased by 711 in FY17 as compared to the approved figures, the sales have decreased. CESC may furnish the reasons for the same.

   CESC has attributed the reduction in LT-3 sales to use of LED bulbs & tube-lights and 5-star rated fans. The CESC has stated that during the period FY16 to FY-18, it has saved 71.53 MU cumulatively due to the above DSM programmes.

iii. CESC has not furnished any explanation for reduction in HT-1 water supply sales. As such CESC may furnish the reasons for reduction in HT-1 Water supply sales.

   CESC has stated that the marginal reduction in sales to this category, due to the drought situation prevailing in FY17.

B. Sales to IP sets :

1. In its Tariff Order dated 30th March, 2016, the Commission had approved the specific consumption of IP-sets as 7,843 units/installation/annum for the FY17, whereas, the specific consumption as reported by the CESC, in its Tariff filing for APR for FY17, works out to 9,578 units/installation/annum, which indicates a huge increase in the specific consumption by 1,735 units/installation/annum.

2. The total sales to IP-sets reported for the FY17 is 3,143.13 MU as against 2,622.39 MU sales quantum approved by the Commission, which

corresponds to increase in sales to an extent of 520.74 MU in absolute terms. The increase in sales in terms of percentage over the approved quantum is around 20 percent. Thus, the specific consumption has increased by 1,735 units /installation/annum with the corresponding increase in sales by 520.74 MU as compared to the quantum of sales approved by the Commission, for the FY17. Further, the variation in sales in FY17, as compared to actual sales of 2,077.97 MU in FY16 is a whopping 1,065 MU i.e., an increase by around 34 per cent. The growth rate of sales by 34 percent in FY17, by any standards, is abnormal when compared to the previous years.

3. Further, the Commission had approved 3,45,526 as the number of installations for the FY17, whereas the actual number of installations reported is 3,38,682. The difference in number of installations between the approved and the actuals reported for FY17 is 6,844. This indicates a fail of around 2 per cent in the number of installations serviced, as compared to the approved number of installations by the Commission for the FY17. The CESC needs to explain that, despite reduction in number of installations with regard to approved figures, both specific consumption and sales have increased.

Hence, the CESC was directed to explain and justify with proper reasons as to why the sales have increased by a huge quantum despite reduction in the number of installations by 6,884, in FY17.

Further, the Commission in its Tariff Order dated 30th March, 2016, had directed the CESC 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.

4. The CESC has submitted the consumption data deducting energy losses at uniform level of 13 percent prevailing in 11 kV lines, distribution

transformers and LT system to arrive at the net consumption, each month. Since, the variation in sales was huge, the CESC was directed to revise the IP sets' consumption for FY17 as per the energy recorded on the segregated feeders clearly indicating the energy input to the feeders on the basis of energy meters reading data (final reading- initial reading * multiplying constant) and submit the same, as per the format prescribed by the Commission.

5. The Commission, in its preliminary observations had directed the CESC to justify the IP-set consumption of 3,143.13 MU reported in D-2 Format, in its Tariff filing, with necessary data of segregated agricultural feeders, duly indicating the initial and final readings in each feeder, as in the above format, in support of its claim of sales for FY17.

6. The CESC, in its reply to the preliminary observations, has stated that it has submitted the IP-set consumption based on the energy meters' reading data in respect of the segregated agricultural feeders as desired by the Commission. However, the CESC has further stated in its reply that, the consumption of exclusive agricultural feeders considering the initial, final meter readings and the net consumption arrived at by multiplying the multiplying factor of the energy meters, as directed by the Commission, would be submitted separately, at the earliest. It has further stated that number of exclusive agricultural feeders serviced were 503 during FY17 and specific consumption in respect of 2,18,562 number of IP sets as 8,847.48 units/installation /annum. It has also stated that the duration of power supply arranged to exclusive agricultural feeders is 7 hours, as per the direction of the Government of Karnataka. The CESC while submitting the IP sets' consumption as per the agricultural feeders' energy meter reading data, has stated that the specific consumption was high for the FY12, FY13 & FY14 and low for FY15 and FY16 and has requested the Commission to approve the sales quantum of 3,143.13 MU for FY17 as submitted by it.

7. The reply submitted by the CESC that the increase in specific consumption during FY12, FY13 & FY14 was high and only in FY15 and FY17 the specific consumption was low, is not convincing, in view of the fact that the consumption during the past had not increased to the extent claimed by the CESC, for FY17. Further, the Commission is of the view that abnormal increase in both specific consumption and overall consumption in FY17 may be due to supplying of more than scheduled hours of power including supplying on single phase/open-delta system, to IP sets. This should be stopped forthwith as any attempt to give supply to IP sets for more than the scheduled hours of power supply, will result in increased consumption, which in turn will result in higher subsidy burden to the Government. **Therefore, the CESC is directed to strictly regulate the hours of power supply made to agricultural feeders which are segregated under NJY and adhere to the number of hours of power supply as fixed by the Government.**

8. As regards the distribution loss considered to arrive at the net consumption, the Commission notes that the CESC has declared overall 11 kV distribution system losses at 13 per cent, whereas, the same could have been directly calculated for each exclusive agricultural feeder considering the 11 kV and LT sketches in respect of all the agricultural feeders to arrive at IP set consumption.

9. **The CESC is directed to report, henceforth, the total IP set consumption on the basis of data from energy meters of agricultural feeders segregated under NJY, to the Commission, every month regularly duly calculating the distribution system losses in 11 KV lines, distribution transformers and LT lines, instead of arriving at the consumption considering the standard distribution losses as per the prescribed format, as discussed above.**

10. As regards arriving at the total sales to IP sets for FY17 considering the data of GPS survey conducted, the Commission notes that the CESC has deducted 10,476 number of dried-up/defunct IP set installations it has identified, from its account, as directed. Hence, the total number

of installations considered for FY17 are net figures after deducting the dried up/defunct installations.

11. Further, the CESC in its subsequent replies submitted to the Commission vide No. CESC/GM(coml.)/RA1/F25/1/2017-18/19460, dated 8th January, 2018 and email dated 18th January, 2018, has reiterated the consumption as 3,143.13 MU for FY17 with necessary justification for the energy input considered in respect of exclusive agricultural feeders at the substations, considering initial readings, final readings and multiplying factor of energy meters, to arrive at net consumption as indicated below.

TABLE-4.5

Month-wise IP set Consumption

Month	IP consumption based on energy input to agri. feeders by deducting 13% dist. loss from it, in MU	IP consumption (in respect of around 7831 metered installations) in MU	IP set consumption in subdivisions where NJY is not taken up, in MU	Total consumption in MU
	(1)	(2)	(3)	(4) =(1+2+3)
Apr-16	271.94	2.48	3.841	278.26
May-16	247.78	2.48	0.718	250.97
June-16	183.16	1.37	0.606	185.14
July-16	171.03	0.86	0	171.89
Aug-16	253.59	0.85	0	254.44
Sep-16	273.55	1.55	0	275.10
Oct-16	287.93	2.08	0	290.01
Nov-16	304.40	2.06	0	306.46
Dec-16	264.10	2.68	0	266.78
Jan-17	313.24	2.44	0	315.68
Feb-17	265.90	2.53	0	268.43
March-17	276.92	3.76	0	280.68
Total	3113.53	25.14	5.165	3143.13

13. Therefore, as discussed above, the IP sets' consumption submitted by the CESC as per the segregated agricultural feeders' meter reading data is 3,143.13 MU which is in line with the IP sets consumption claimed by the

CESC in its tariff filing. As can be seen, the CESC has provided justification for the IP set consumption of 3,143.13 MU claimed by it in its application form. **Hence, the Commission approves 3,143.13 MU as the sales to I.P. Sets for FY17.**

The Commission has noted the replies furnished by CESC to the queries raised in the preliminary observations. In the light of the above discussion, the Commission approves total sales of 6260.28 MU for FY17 and the category wise sales as indicated in the table above.

4.2.2 Distribution Losses for FY17:

The Commission in its Tariff Order dated 30th March,2016 had approved distribution losses for FY17 as indicated below:

Distribution Loss Range	FY17
Upper limit	13.50%
Average	**13.25%**
Lower Limit	13.00%

The CESC, in its annual accounts, has reported the distribution losses at 13.10% for FY17.

1	Energy at Interface Points in MU	7,204.34
2	Total sales including wheeled energy in MU	6,260.28
3	**Distribution losses as a percentage of input energy at IF points**	**13.10%**

Commission's Analysis and Decisions:

The CESC, in its current tariff application has reported the average distribution losses at 13.10% considering the energy input at interface points and sales as per the audited accounts for the FY17. The Commission notes that the distribution losses of 13.10 per cent reported by the CESC is below the average targeted losses approved by the Commission for FY17 by 0.15 percentage points. Therefore, allowing any incentive or levy of any penalty for non-achievement of loss targets, will not arise. Accordingly, the Commission has not factored the same for FY17.

4.2.3 Power Purchase for FY17:

CESC Submission:

The Commission in its Tariff order dated 30th March, 2016, had approved source-wise quantum and cost of power purchase for FY17. The CESC, in its application has submitted the details of actual power purchase for FY17 for the purpose of Annual Performance Review. The details of power purchase are as under:

TABLE – 4.6
Power Purchase for FY17- Approved and Actuals

Source of Generation	Actuals for FY17			Approved in Tariff Order 30.3.2016 for FY17			Difference-between Actuals and Approved-for FY17			% increase (+)/decrease (-) over an approved figures	
	Energy in MUs	Cost in Rs Cr.	Rate in Rs per Unit	Energy in MUs	Cost in Rs Cr.	Rate in Rs per Unit	Energy in MUs	Cost in Rs Cr.	Rate in Rs per Unit	Energy	Cost
KPCL Hydel Stations	1047.85	99.65	0.95	1673.73	134.33	0.80	-625.89	-34.68	0.15	-37.39	-25.82
KPCL-Thermal Stations	1269.42	606.49	4.78	1459.99	609.79	4.18	-190.58	-3.30	0.60	-13.05	-0.54
CGS	2540.63	916.18	3.61	2379.19	771.60	3.24	161.44	144.58	0.36	6.79	18.74
Major IPPs	818.85	367.91	4.49	824.85	341.95	4.15	-6.01	25.96	0.35	-0.73	7.59
IPPs -Minor (RE Projects)	475.03	189.94	4.00	649.19	244.84	3.77	-174.17	-54.90	0.23	-26.83	-22.42
Other States Projects	14.64	6.52	4.45	15.93	7.49	4.70	-1.29	-0.97	-0.25	-8.07	-12.96
Short /Medium term ,UI & Sec-11	632.31	255.43	4.04	122.56	61.77	5.04	509.76	193.66	-1.00	415.94	313.53
Transmission Charges (KPTCL & PGCIL)		501.62			449.36			52.26			11.63
SLDC / POSOCO Charges		5.32			2.40						
Misc. Energy	12.50	23.46	18.77								
Energy Balancing	733.64	294.41	4.01								
TOTAL	**7544.85**	**3266.91**	**4.33**	**7125.44**	**2623.51**	**3.68**	419.41	643.40	**0.65**	**5.89**	**24.52**

Commission's analysis and decisions;

1. The actual power purchase for FY17, as filed by the CESC for approval of Annual Performance Review is 7544.85 MU amounting to Rs 3266.91 Crores, as against the approved quantum of 7125.44 MU amounting to Rs 2623.51 Crores. There is increase in quantum of power purchased to an extent of 419.41 MU and increase in the cost by Rs. 643.40 Crores as compared with the approved quantum and cost.

2. As against the approved energy of 7125.44 MU at the cost of energy amounting to Rs 2623.51 Crores, the actual power purchased by CESC is 7544.85 MU at a cost of Rs 3266.91 Crores for FY17, which is about 5.89% more than approved energy and 24.52% more than the approved cost.

3. On an analysis of the source-wise approved and actual power purchases of all the ESCOMs, the following variations in the quantum of energy purchased and its cost are observed:

   i. There is shortfall in supply from sources of power from KPCL Hydel and KPCL Thermal projects as indicated below:

TABLE-4.7

Short-fall in supply from KPCL Hydel Stations

Approved Energy	Actual Energy	Shortfall in energy compared with approved availability in MU	Cost of Shortfall Energy in Rs Crs.
10704.90	6563.74	4141.16	380.99

The shortfall from the above Hydel sources, which is the cheaper source of power, has been met by procuring power from the following sources by ESCOMs.

Short/Medium term purchases	3061.41 MU	Rs.1310.28 Crs
Un-requisitioned surplus power from CGS	357.85 MU	Rs.127.39 Crs
Imposition of Sec-11on the State Embedded Generators (during April and May 2016)	721.90 MU	Rs. 346.33 Crs

Thus, the ESCOMs have met the deficit from hydro sources with other sources such as Short/Medium term purchases, Un-requisitioned surplus power from CGS, and drawal of energy under Sec 11 from the State Embedded Generators (during April and May, 2016) at an additional cost of Rs.1403.01 Crores.

The short-fall in 917.52 MU energy compared with approved availability from the KPCL thermal sources also has been met by procuring Un-requisitioned surplus power from CGS, without any significant cost implications.

ii. The change in the source-wise mix of supply, reconciliation of energy and its cost among ESCOMs has resulted in increase in average power purchase cost of CESC to Rs.4.33 per KWh. as against the approved cost of Rs.3.68 per KWh.

4. **In order to ensure proper accounting of energy and its cost by the ESCOMs, CESC is directed to reconcile the inter-ESCOM energy exchanges and their costs every month and it shall collect/pay the corresponding amounts out of the tariff subsidy received from the Government of Karnataka.**

5. The Commission notes that, so far the SLDC has not implemented the intra-state ABT. As per the directions issued by the Government of Karnataka, vide its letter dated 28th January, 2016, intra-State ABT has to be implemented immediately by the KPTCL and ESCOMs. **The Commission therefore directs the SLDC, KPCL and the CESC to take appropriate action immediately to implement intra-state ABT and to host the details thereof, on their respective websites.**

6. The power purchases made by the CESC during FY17 from different sources of generation also include the energy purchased during April and May 2016, under Section 11 of the Electricity Act, 2003, in pursuance of a Government Order dated 16.09.2015. The Government, in the said order, had fixed a provisional tariff of Rs.5.08 Per unit subject to determination of final tariff by this

Commission. The Commission in its order dated 18th August, 2016, has fixed the final tariff at Rs.4.67 per unit and has ordered recovery of the excess amount paid, if any, from the generators. However, on some of the generators having filed petitions before the Hon'ble High Court, which reminded the matter back to the Commission for fresh disposal. However, the decision in writ petitions has been challenged by the ESCOMs and the Commission in writ appeals. Hence, the Power Purchase cost allowed for 2 months is subject to outcome of the writ appeals and any consequential proceedings thereafter.

Accordingly, the Commission decides to approve power purchases of 7544.85 MU at a cost of Rs. 3266.91 Crores for the purpose of Annual Performance Review for FY17.

4.2.4 RPO Compliance:

1. CESC in their tariff petition have filed the details of RPO compliance for solar and non-solar RPO for 2016-17 as indicated below:

TABLE-4.8

a. Solar RPO details of CESC for 2016-17

SL. NO	PARTICULARS	QUANTUM IN MU
1	Total Power purchase quantum from all sources	7544.85
2	Solar renewable energy purchased under PPA route at generic tariff including solar RE purchased from KPCL	43.58
3	Solar Energy purchased under Short-Term	0.00
4	Solar REC purchased at APPC	0.00
5	Solar energy pertaining to green energy sold to consumers under green tariff	0.00
6	Solar energy purchased from other ESCOMs	0.00
7	Solar energy sold to other ESCOMs	0.00
8	Solar Energy purchased from NTPC as bundled power	13.26
9	Solar energy purchased from any other source	1.43
10	Total Solar energy purchased	58.26
11	Solar Energy accounted for the purpose of RPO	0
12	**Solar RPO complied in %**	**0.77%**

TABLE-4.9

b. Non-Solar RPO details of CESC for 2016-17

SL NO	PARTICULARS	QUANTUM IN MU
1	Total Power purchase quantum from all sources	7544.85
2	Non-solar renewable energy purchased under PPA route @ generic tariff including non-solar RE purchased from KPCL	406.72
3	Non-solar short term purchase from RE sources only (Incl.Sec-11)	72.40
4	Non Solar REC purchased at APPC	0
5	Non-solar RE pertaining to green energy sold to consumers under green tariff	0
6	Non-solar REC purchased from other ESCOMs	0
7	Non-solar REC sold to other ESCOMs	0
8	Non-solar REC purchased from any other source	0
9	Total Non-solar energy purchased	479.13
10	Non-solar RE accounted for the purpose of RPO	0
11	Non-solar RPO complied in %	6.35%

2. The CESC, while furnishing the details of RPO compliance for the FY17, has stated that they have met solar RPO. Regarding non-solar RPO, it is stated that even after considering the excess solar energy of 1.68 MU and reallocation of 276.62 MU of non-solar energy from HESCOM as per the GO dated 26.09.2017, there is shortfall in meeting the non-solar RPO to an extent of 72.51 MU. It has further stated that the CESC had requested the Commission to carry forward the above shortfall. That the Commission, vide letter dated 24.11.2017, after considering its request, has allowed CESC to carry forward the of actual shortfall of the FY17 to the FY18.

3. The observations of the Commission on the RPO compliance and the replies furnished by CESC are as under:

   i. The solar energy purchased for the FY17 is indicated as 45.214 MU at page 149 and, at Page 147, the NTPC solar is indicated as 13.255 MU, totaling to 58.469 MU. Further considering 1.43 MU from other solar sources, the total solar energy purchased would be 59.899 MU, whereas at page 172, solar energy for RPO is indicated as 58.26 MU. The CESC was directed to reconcile the figures and furnish the final data. Further break-up details for Solar procured from other sources was also directed to be furnished.

CESC in its replies has furnished the breakup details of Solar Energy procured as indicated below:

Million Units

Solar Energy purchased under PPA as per audited accounts	45.214
NVVNL Solar	13.255
SRTPV	1.43
Total	**59.899**

The Commission, taking note of the replies furnished, has considered **59.90 MU** [after rounding off] as the solar energy purchased for FY17.

ii. Similarly, in the case of Non-solar RPO, the total non-solar energy under PPA would be 405.21 MU [28.61+7.33+145.71+223.56], 22.36 MU from medium term [page 147] and 4.193 MU from short-term[pg-146], totaling to 431.76 MU, whereas at page 173 it is indicated as 479.13 MU in the table on the RPO. The CESC was directed to reconcile the figures and furnish the final data, along with the breakup of Section11 purchase pertaining to RE source during the FY17.

CESC in its replies has furnished the breakup details of Non-Solar Energy procured as indicated below:

Million Units

Solar Energy purchased under PPA as per audited accounts	405.249
TBHE energy	1.475
Short-Term	19.206
Section 11	20.195
Co-gen under medium -Term	22.36
Energy injected without PPA	10.627
Total	**479.112**

The Commission has noted the replies furnished and the Commission's analysis is discussed in the subsequent paragraphs.

iii. For validating the RPO compliance and to work out APPC, the CESC was directed to furnish the data as per the specified format, duly reconciling the data with the audited accounts.

CESC in their replies has furnished the following data:

TABLE-4.10

a. Non-solar RPO Compliance:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources	7544.85	3266.91
2	Non–solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL	406.724	142.393
3	Non –solar Short-Term purchase from RE sources, excluding Sec11 purchase	41.563	18.35
4	Non –solar Short-Term purchase from RE sources under Sec 11	20.195	10.26
5	Non-solar RE purchased at APPC	4.825	1.72
6	Non-solar RE pertaining to green energy sold to consumers under green tariff	0	0
7	Non-solar RE purchased from other ESCOMs	0	0
8	Non-solar RE sold to other ESCOMs	0	0
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff	10.63	0.01
10	**Total Non-Solar RE Energy Purchased** **[No. 2+ No.3+No.4+No.5 +No.7+No.9]**	483.937	172.73
11	**Non-Solar RE accounted for the purpose of RPO** **[No.10- No.5-No.6-No.8]**	479.112	171.01
12	**Non-solar RPO complied in %** **[No.11/No.1]*100**	6.35%	-

TABLE-4.11

b. Solar RPO Compliance:

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources	7544.85	3266.91
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	45.214	34.46
3	Solar energy purchased under Short-Term, excluding Sec11 purchase	0	0
4	Solar Short-Term purchase from RE under Sec 11	0	0
5	Solar energy purchased under APPC	0	0
6	Solar energy pertaining to green energy sold to consumers under green tariff	0	0
7	Solar energy purchased from other ESCOMs	0	0
8	Solar energy sold to other ESCOMs	0	0
9	Solar energy purchased from NTPC (or others) as bundled power	13.255	14.15
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff	1.43	1.40
11	Total Solar Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9+No.10]	59.899	50.003
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]	59.899	50.003
13	Solar RPO complied in % [No.12/No.1]*100	0.794%	

The Commission has relied on the prevailing Regulations, the Government Order No. EN 43 PSR 2017 dated 26.09.2017 and the available data with the Commission, for ascertaining the RPO compliance for FY17.

The Commission notes that as per the Government Order dated 26.09.2017, the input energy for CESC is 7544.85 MU and as per the APR, the Commission has also approved 7544.85 MU, as per the audited accounts.

Regarding the Non-Solar RPO, considering the input energy of 7544.85 MU, the Non-solar RPO target at 11.00% works out to 829.93 MU. In the GO, the Non-solar energy purchased is indicated as 479.13 MU. Further, considering the 276.62 MU of Non-solar energy allocated to CESC from other ESCOMs as per the Government Order, 3.44 MU of Shimshapura power plant [which is Small Hydro as per MNRE definition] and excess solar energy of 3.31 MU as discussed in the subsequent paragraph, the total energy accounted for Non-solar RPO would be 762.50MU [479.13+276.62+3.44+3.31]. As the prevailing Regulations specify that any obligated entity shall meet its RPO for any financial year before 31st May of the immediate following financial year, 27.41 MU Non-Solar energy purchased during April and May,2017[Data furnished for FAC] is set-off against the balance 67.43 MU]. **Therefore, there is shortfall of 40.02 MU in complying with Non-Solar RPO for FY17 by the CESC, which the Commission allows to CESC carry forward it to FY18.**

As regards the Solar RPO, considering an input energy of 7544.85 MU, the Solar RPO target at 0.75% works out to 56.59 MU. In the Government Order, the Solar energy purchased is indicated as 58.18 MU. As stated earlier the Commission has considered 59.90 MU which is in excess of the target by 3.31 MU. This excess solar energy is allowed to be counted against the Non-Solar RPO target for FY17, in accordance with the prevailing Regulations. **Therefore, the Commission concludes that CESC has met its Solar RPO target of 0.75% for FY17, in terms of the prevailing Regulations.**

4.2.5 Operation and Maintenance Expenses:

CESC's Submission:

CESC, in its application, as per its audited accounts, has requested to approve O&M expenses of Rs.431.45 Crores for FY17. The break-up of O&M expenses are as follows:

TABLE – 4.12

O & M Expenses – CESC's submission

Rs. Crores

Particulars	FY17
Employee cost	315.41
Administrative & General Expenses	73.27
Repairs and Maintenance	42.77
Total O & M Expenses	**431.45**

Commission's analysis and decisions:

The Commission in its Tariff Order dated 30th March, 2016 had approved O&M expenses for FY17 as detailed below:

TABLE – 4.13

Approved O&M Expenses as per Tariff Order dated 30.03.2016

Particulars	FY17
No. of installations as per actuals as per Audited Accounts	2963000
Weighted Inflation Index	7.24%
CGI based on 3 Year CAGR	3.98%
Actual O&M expenses for FY16- in Rs. Crores.	406.02
Total approved O&M Expenses for FY17 in Rs. Crores.	**443.46**

The Commission in its preliminary observations on the application of APR of CESC, had sought the details of conveyance and travelling expenses and professional charges accounted during FY17. The Commission notes the replies furnished and directs CESC to take action to minimize these expenses in future so as to bring down the O&M expenses within the approved amounts.

The Commission notes that, the actual O&M expenses claimed by CESC at Rs.431.45 Crores is less than the approved O&M expenses by Rs.12.01 Crores. The Commission, in accordance with the provisions of the MYT Regulations and the methodology adopted, while approving the ARR for the control period,for the earlier years and the subsequent APRs, 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 FY17 is computed as follows:

TABLE-4.14
Inflation to be allowed for FY17

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2005	103.37	115.8	113.314				
2006	109.59	122.9	120.238	1.06	0.06	1	0.06
2007	114.94	130.8	127.628	1.13	0.12	2	0.24
2008	124.92	141.7	138.344	1.22	0.20	3	0.60
2009	127.86	157.1	151.252	1.33	0.29	4	1.16
2010	140.08	175.9	168.736	1.49	0.40	5	1.99
2011	153.35	191.5	183.87	1.62	0.48	6	2.90
2012	164.93	209.3	200.426	1.77	0.57	7	3.99
2013	175.35	232.2	220.83	1.95	0.67	8	5.34
2014	182.00	246.90	233.92	2.06	0.72	9	6.52
2015	177.03	261.42	244.542	2.16	0.77	10	7.69
2016	180.6	274.3	255.56	2.26	0.81	11	8.95
A= Sum of the product column							39.44
B= 6 Times of A							236.63
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							0.0811
e=Annual Escalation Rate (%)=g*100							**8.11**
As per CERC Notification dated 30.03.2017 with weightage of 80% on CPI and 20% on WPI							

For the purpose of determining the normative O & M expenses for FY17, the Commission has considered the following:

a) The actual O & M expenses allowed for FY16 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 FY17 at 4.00%.

c) The weighted inflation index (WII) at 8.11% as computed above.

d) Efficiency factor at 2 % as considered in the earlier two control periods.

Thus, the normative O & M expenses for FY17 will be as follows:

TABLE – 4.15

Normative O & M Expenses for FY17

Particulars	FY17
No. of Installations As per actuals as per Audited Accts,	2964880
Weighted Inflation Index	8.1059%
Consumer Growth Index (CGI) based on 3 Year CAGR	4.00%
Base year actual O & M expenses for FY16 excluding P&G contribution - Rs. Crores	354.10
O&M Index= 0&M (t-1)*(1+WII+CGI-X)- Rs. Crores.	**389.89**

The above normative O & M expenses have been computed without considering the contribution to Pension and Gratuity Trust for FY17.

The Commission has treated the employee costs on account of contribution to P&G Trust as uncontrollable O&M expenses. This component has been allowed beyond the normative O&M expenses to enable the ESCOMs to meet their actual employee costs.

The CESC, as per the audited accounts has incurred an amount of Rs.54.79 Crores towards contribution to Pension and Gratuity Trust for FY17. Considering the request of CESC to treat the pension and gratuity contribution as uncontrollable O & M expenses, and as per the provisions of MYT Regulations, the Commission computes the allowable O & M expenses for FY17 as follows:

TABLE – 4.16

Allowable O & M Expenses for FY17

Rs. Crores

Sl. No.	Particulars	FY17
1	Normative O & M expenses	389.89
2	Additional employee cost (uncontrollable O & M expenses)	54.79
	Allowable O & M expenses for FY17	**444.68**

Thus, the Commission decides to allow an amount of Rs.444.68 Crores as O&M expenses for FY17.

4.2.6 Depreciation:

CESC's Submission:

CESC, in its application has claimed an amount of Rs.147.58 Crores as gross depreciation as per the audited accounts. Further, an amount of Rs.45.22 Crores towards the depreciation on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS) – 12, is considered under other income as per the Audited Accounts for FY17. Thus the net amount of depreciation claimed by the CESC in its tariff application is Rs.102.35 Crores for FY17.

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

TABLE – 4.17

Depreciation for FY17- CESC's Submission

Rs. Crores

Particulars	Opening Balance of Asset as on 01.04.2016	Closing Balance of Asset as on 31.03.2017	Depreciation for FY17
Buildings	70.54	78.41	2.61
Civil	1.93	2.4436	0.13
Other Civil	0.73	0.99	0.03
Plant & M/c	575.15	700.63	39.93
Line, Cable Network	1926.80	2318.22	111.93
Vehicles	4.39	4.34	0.14
Furniture	4.24	11.92	0.27
Office Equipment	9.53	10.18	0.65
Intangible assets	2.16	10.16	2.88
Land	2.86	3.82	-
Less: short provision of depreciation booked under account head 83.6007			10.83
Total	**2595.45**	**3137.6913**	**147.58**

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 FY17 has been determined by the Commission. Based on the opening and closing balances of gross blocks of fixed assets for FY17 and the depreciation as per audited accounts, the weighted average rate of depreciation works out to 5.15%. Further, as per the Accounting Standards (AS)–12, an amount of Rs.45.22 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 FY17. The details are as shown below:

TABLE-4.18

Depreciation for FY17

Rs. Crores

Particulars	**Opening Balance of Asset as on 01.04.2016**	**Closing Balance of Asset as on 31.03.2017**	**Depreciation for FY17**
Land	2.85	3.41	0.00
Buildings	70.53	78.81	2.54
Civil	1.93	2.44	0.12
Other Civil	0.72	0.97	0.03
Plant & M/c	575.16	700.64	36.04
Line, Cable Network	1926.79	2318.21	105.71
Vehicles	4.38	4.33	0.08
Furniture	4.23	11.91	0.27
Office Equipment	9.56	10.22	0.71
Intangible assets	2.16	10.16	2.051
Total	2598.31	3141.10	147.57
Less: Depreciation on account of Assets created out of Consumer contribution/grants			45.22
Net Depreciation			**102.35**

Based on the above, the Commission decides to allow the net depreciation of Rs.102.35 Crores for FY17.

4.2.7 Capital Expenditure:

A. CESC's submission:

The CESC, in its application for APR of FY17, has indicated the category-wise capital expenditure of Rs.467.64 Crores, as against the Commission approved capex of Rs.562 Crores. The details of the capital expenditure submitted by CESC vis-à-vis the approved capex are as shown in the following table.

Table -4.19
Capital expenditure of CESC for FY17

Rs. Crores

Sl. No.	Schemes	Approved capex for FY17	Actual expenditure for FY17	Difference
1	Extension & improvement	200	189.12	-10.88
2	NJY	80	127.00	47.00
3	HVDS	80	0.00	-80.00
4	R-APDRP	40	50.91	10.91
5	RGGVY(Restructured)+DDG	8	0.57	-7.43
6	Replacement of failed Transformers	4	1.20	-2.80
7	Service Connections	32	47.42	15.42
8	Rural Electrification(General)			0.00
A	Electrification of Hamlets/HB/JC under RGGVY	50	8.88	-41.12
B	Providing infrastructure to Irrigation Pump sets &Energisation of IP SETS			0.00
C	Kutir Jyothi(RGGVY)			0.00
9	Tribal Sub Plan			0.00
A	Electrification of Tribal Colonies (RGGVY)	3	3.00	0.00
B	Energisation of IP sets			0.00
C	KutirJyothi (RGGVY)			0.00
10	Special Component Plan			0.00
A	Electrification of HB/JC/AC(RGGVY)	10	10.00	0.00
B	Energisation of IP sets			0.00
C	KutirJyothi(RGGVY)			0.00
11	Tools & Plants	4	5.75	1.75
12	Civil Engineering Works	4	8.91	-.91
13	Providing Meters to DTC, BJ/KJ, Street Light for replacement of electromechanical meters, providing modems to meters for communication	47	14.88	-32.12
	Total	**562**	**467.64**	**-94.36**

Commission's analysis and decision:

From the table above, it is observed that, the overall capital expenditure by CESC is well within the approved limit of capex for FY17. However, the CESC has exceeded the approved capital expenditure in respect of a few individual categories of works, as discussed below:

i. CESC has exceeded the capex in respect of NJY scheme by Rs.47 Crores, over and above the approved amount of Rs.80 Crores. The CESC in its replies to the preliminary observations has stated that, because of the delay in commissioning of projects which were supposed to be completed in FY16, but got commissioned in FY17, the bills were submitted for a higher number of works during the FY17, resulting in over achievement of Capex. The Commission notes that in FY16 also, the CESC had exceeded the expenditure without the approval of the Commission, and it was stated that the bills pertaining to previous years were paid during the said year, thereby exceeding the approved amounts.

ii. In the case of R-APDRP works, the CESC has incurred an amount of Rs.50.90 Crores as against the approved capex of Rs.40 Crores. The CESC in its replies to the preliminary observations, has stated that, the progress of works for laying of UG cable in Mysore city under RAPDRP PART-B works was slow due to the delay in approval from Mysore City Corporation. That after the receipt of approval, the capital outlay to that extent, has increased resulting in an additional CAPEX of 10.9 Crores. The Commission notes that during FY16, CESC had incurred an amount of Rs. 21.23 Crores as against approved amount of Rs.50 Crores. Therefore, it is apparent that the previous year's bills have been paid during FY17. This indicates that the CESC is not monitoring the payments with reference to the approved amounts.

iii. In the case of RGGVY (Restructured) and DDG works, CESC has not achieved the capex to the extent approved. The CESC in its replies to the preliminary observations has stated that, the delay in DDG works was due to delay in getting clearances from the Forest Department, since these works were to be taken up in Wild Life Reserve Forest. That after persuasion by the Government of Karnataka & Government of India, necessary action for giving clearances were taken and the works are in progress.

iv. As regards the capex in respects of Tools & Plants and Civil Engineering works, CESC has incurred Rs.5.75 Crores & Rs.8.91 Crores which are in excess by Rs.1.75 Crores & 4.91 Crores respectively as compared to the approved capex of Rs.4 Crores each. The CESC in its replies to the preliminary observations has stated that, the major tools and plants procured during 2016-17 are Transformer test bench of 11 sets –Rs.2.64 Crores and Other T&P materials for the day to day works. Further, the CESC has stated that, the reason for excess expenditure booked in FY17 is that the bills of the materials procured during 2015-16 like Computers for sub divisions etc., were realized during FY17. In respect of civil works, the CESC has stated that, it has planned to construct own buildings for all its offices in a phased manner. That the construction of new buildings for section/sub-division/ division offices were taken up and amounts the for the spill over works of the previous year were paid during FY17, resulting in booking of excess capex over and above the approved amount.

v. In the case of HVDS Scheme, the CESC has not incurred any capex. The CESC in its replies to the preliminary observations has stated that, as per the letter received from the Commission vide Letter No: KERC/D/5/2017-18/1199, dated: 23.10.2017, directing the CESC not to send any new proposals of HVDS works until further orders from the Commission, no Capex has been achieved in the HVDS scheme.

vi. Against works pertaining to 'Providing infrastructure to Irrigation Pump sets & energization of IP SETS' the CESC has not incurred even 20% of the approved capex. The CESC in its replies to the preliminary observations, has stated that, some of the works were considered under E&I category and hence the expenditure was also considered under E&I category.

vii. In respect of works relating to providing Meters to DTC, BJ/KJ, Street Light by replacing the existing electromechanical meters, providing modems to meters for communication, CESC has achieved less than 30% of the approved capex. The CESC in its replies to the preliminary observations made by the Commission has stated that, the reasons for lower achievement is due to the fact that, the works of DTC metering is awarded under IPDS & DDUGJY schemes during October, 2017 and November, 2017. As per the DWA conditions, the works are to be completed within November, 2019.

The Commission takes note of the above explanation and directs CESC that as long as the total amount incurred is within the approved amounts, the CESC shall make re-appropriation of the savings and excess amounts in different heads of capex to other heads under intimation to the Commission. This would ensure that the amounts spent are well within the amount approved in the APR/ARR.

CESC is also directed to monitor the year-wise spill over works and ensure that the amounts incurred cumulatively are within the Commission approved capex, to ensure that the consequential costs on the capital expenditure are well within the amounts reckoned for the tariff computations.

In light of the above discussions, the Commission decides to consider the capex of Rs.467.64 Crores in the APR for FY17, subject to disallowance, if any, as per the results of Prudence Check of capital expenditure for FY17, to be taken up during APR of FY18.

B. Post-Commissioning analysis of the capital expenditure of categorised works for FY17 by CESC:

The Commission has directed the KPTCL & ESCOMs to conduct the Post-Commissioning analysis of the works which have been completed and categorized during FY17 and submit the corresponding report. The Commission also, has specified the methodology and formats for conducting the post-commissioning analysis of the works.

The CESC has submitted that, it has conducted post-commissioning analysis of 715 Nos of works costing more than Rs.5 Lakhs from 16 divisions and 14 different categories of works and reported that, all works are found to be meeting the norms of Prudence as per the grading guidelines issued by the Commission.

The Commission, while taking note of the above points, decides to take up the Prudence Check of these works of FY17 along with works of FY18 through a third party, by selection of random sample of the works, in different categories.

4.2.8 Interest and Finance Charges:

a) Interest on Capital loan:

CESC's Submission:

CESC in its application has claimed an amount of Rs.95.98 Crores towards interest on capital loans drawn from Banks/Financial Institutions for FY17 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 10.15%.

Commission's analysis and decisions:

The Commission has noted the status of opening and closing balances of capital loans as per the audited accounts for FY17, the details furnished under format D9 of the filings and the replies to the preliminary observations, as shown below:

TABLE – 4.20

Allowable Interest on Capital Loans – FY17

Rs. Crores

Particulars	FY17
Opening balance of capital loans	**794.25**
Add: New Loans	221.76
Less: Repayments	77.74
Total loan at the end of the year	938.27
Average Loan	866.26
Allowable Interest on Capital Loans	**95.98**

As per the audited accounts of CESC for FY17, the actual interest on the capital loans is Rs.95.98 Crores. Considering the average loan of Rs.866.26 Crores and an amount of Rs.95.98 Crores incurred towards interest on capital loans, the weighted average rate of interest works out to 11.08%.

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.95.98 Crores towards interest on capital loans for FY17.

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 to meet its day to day expenditure (working capital) during FY17. As per the audited accounts, CESC has incurred an amount of Rs.48.29 Crores towards interest on short term loans / overdrafts during FY17 and has sought approval of the Commission for the same.

Commission's analysis and decisions:

As per the audited accounts, CESC has incurred an interest of Rs.5.24 Crores on over drafts and Rs.41.90 Crores on availing short term loans to meet its working capital requirements for FY17.

As per the Tariff Order dated 30th March, 2016, the Commission on the rate of interest existed at the time of approval of ARR has allowed the working capital loans at a normative interest rate of 11.75% for FY17 to FY19.

The Commission notes that, the rate of interest at which the short term loan and the overdraft availed by CESC during FY17 and considering the rate of interest charged by the Banks/Financial Institutions for the short term loan, the Commission decides to allow the interest on working capital loan at 11.50%.

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 FY17 as follows:

TABLE – 4.21

Allowable Interest on Working Capital for FY17

Rs. Crores

Particulars	FY17
One-twelfth of the amount of O&M Expenses	37.06
Opening GFA	2598.31
Stores, materials and supplies 1% of Opening balance of GFA	25.98
One-sixth of the Revenue	586.46
Total Working Capital	649.50
Rate of Interest (% p.a.)	11.50%
Normative Interest on Working Capital	74.69
Actual interest on WC as per audited accounts for FY17	47.14
Allowable Interest on Working Capital	**60.92**

The Commission therefore decides to allow an amount of Rs.60.92 Crores towards interest on working capital for FY17.

4.2.10 Interest on Consumer Deposits:

CESC's Submission:

CESC in its application has claimed an amount of Rs.38.11 Crores towards payment of interest on consumers' security deposits for FY17 as per the audited accounts and sought approval of the Commission for the same.

Commission's analysis and decisions:

The Commission has taken note of the opening and closing balances of consumer security deposit for FY17. Based on the average amount of consumer security deposits, the interest on consumer security deposits amounting to Rs.38.11 Crores claimed by CESC works out to a weighted average rate of interest of 7.69%. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits shall be allowed as per the bank rate prevailing on the 1st day of April of the relevant year. The bank rate as on 1st day of April, 2016 was 7.75%. The weighted average rate of interest claimed by CESC as per the audited accounts is within the applicable bank rate.

Thus, the Commission decides to allow an amount of Rs.38.11 Crores towards interest on consumer security deposits for FY17.

4.2.11 Other Interest and Finance charges:

CESC as per the audited accounts has claimed an amount of Rs.1.15 Crores towards other interest and finance charges paid to banks / financial institutions to raise the loans for FY17. The Commission decides to allow the same for FY17.

4.2.12 Interest on belated payment of Power Purchase Cost:

The Commission notes that, as per the audited accounts, the CESC has incurred an amount of Rs.27.65 Crores towards Interest on belated payment of Power Purchase dues for FY17. 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 to wards power purchase bills and incurring 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 there on.

4.2.13 Capitalization of Interest and finance charges:

CESC in its filing and as per the audited accounts for FY17 has capitalized interest of Rs.12.84 Crores incurred on availing capital loans during FY17. The Commission has considered the same for computation of APR for FY17.

Thus the allowable interest and finance charges for FY17 are as follows:

TABLE – 4.22

Allowable Interest and Finance Charges

Rs. Crores

Sl. No.	Particulars	FY17
1.	Interest on Loan capital	95.98
2.	Interest on working capital loan	60.92
3.	Interest on consumer deposits	38.11
4.	Interest on Power Purchase dues	0.00
5.	Other interest and finance charges	1.15
6.	Less Interest and other finance charges capitalized	12.84
	Total interest and finance charges	**183.33**

4.2.14 Other Debits:

CESC's Submission:

CESC has claimed an amount of Rs.57.37Crores towards Other debits for FY17.

Commission's analysis and decisions:

The Commission has taken note of the items of expenditure accounted for FY17. As per the provisions of MYT Regulations under Other debits, the Other debits also included the write back of the interest on KPC power purchase dues transferred from KPTCL as per the GoK order dated 31.07.2017 excluding the provision for bad and doubtful debts for FY17, which are as detailed below:

TABLE – 4.23

Allowable Other Debits

Rs. Crores

Sl. No.	Particulars	FY17
1	Small and Low value items written off	0.0038
2	Losses relating to fixed assets	1.69
3	Assets decommissioning cost	0.77
4	Miscellaneous losses and write offs	5.80
5	Bad debts written off excluding provisions	1.12
	Total	**9.38**

Thus, the Commission decides to consider an amount of Rs.9.38 Crores as other debits for FY17.

4.2.15 Net Prior Period Charges:

CESC's Submission:

CESC, in its filings has claimed the net Prior Period expenses (debit) of Rs.22.05 Crores for FY17.

Commission's analysis and decisions:

As per the Audited Accounts for FY17, the prior period expenses/ loss are indicated as Rs.60.65 Crores on account of short provision of power purchase cost, employees cost, A&G expenses, interest and finance charges provision and other expenses of the previous years. Further the prior period income of Rs.38.60 Crores is on account of receipts from consumers, excess provision of depreciation, interest & finance charges, other income relating to prior period and other excess provisions in the previous periods.

Thus, the Commission decides to allow a net prior period expenses (debit) of Rs.22.05 Crores for FY17.

4.2.16 Return on Equity:

CESC's Submission:

CESC in its filings has not claimed any Return on Equity for FY17 on the ground that, the opening balance of equity as per audited accounts depicts a negative net worth.

Commission's analysis and decisions:

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 FY17 as per the actual data as per the audited accounts are indicated as follows:

TABLE – 4.24

Status of Debt Equity Ratio for FY17

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	2598.31	794.25	-134.71	1818.82	779.49	30.56	0
Closing Balance	3141.10	938.27	25.03	2198.77	942.33	29.87	0.80

From the above table it is seen that the debt and equity amounts are within the normative debt and equity ratio amounts reckoned on the basis of the closing balances of GFA for FY17.

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 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 FY17 is (-) 134.71 Crores and hence, no RoE is allowable on the negative net worth as detailed below:

TABLE – 4.25

Allowable Return on Equity

Rs. Crores

Particulars	FY17
Paid Up Share Capital	508.56
Share deposit	14.00
Reserves and Surplus as on 01.04.2016	(634.27)
Recapitalization of Consumers' security deposit	(23.00)
Total Equity	(134.71)
Allowable RoE @ 15.50%	**0.00**

Further, it is noted that as reported by CESC and as per the audited accounts, an additional equity of Rs.138.29 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 – 4.26

RoE on additional Equity received during the year FY17

Additional Equity received during FY17	Amount in Rs. Crores	Received on	No. of Months	RoE allowed
EN 27 PSR 2016 dated 31.05.2016	30.00	09.06.2016	9	3.49
EN 10 PSR 2016 dated 27.06.2016	2.70	08.07.2016	8	0.28
EN 27 PSR 2016 dated 31.08.2016	20.00	22.09.2016	6	1.55
EN 23 PSR 2016 dated 01.09.2016	16.25	22.09.2016	6	1.26

EN 10 PSR 2016 dated 17.09.2016	2.70	04.10.2016	5	0.17
EN 27 PSR 2016 dated 07.12.2016	20.00	19.12.2016	3	0.78
EN 10 PSR 2016 dated 24.12.2015	2.70	13.01.2017	2	0.07
EN 23 PSR 2016 dated 24.12.2016	8.13	13.01.2017	2	0.21
EN 10 PSR 2016 dated31.01.2017	2.70	23.02.2017	1	0.03
EN 23 PSR 2016 dated03.02.2017	8.11	23.02.2017	1	0.10
EN 27 PSR 2016 dated 09.02.2017	25.00	23.02.2017	1	0.32
TOTAL	138.29			8.27
Return on Equity allowed on Additional Equity Infusion in FY16				8.27

Since there was a negative equity of Rs134.71 Crores, the additional equity received during 2016-17 gets setoff against it and for the remaining additional equity of Rs. 3.58 Crores RoE of 15.5% is allowable for one month. The same works out to Rs. 0.05 Crores. Thus, the Commission decides to allow Return on Equity of Rs.0.05 Crores for FY17.

4.2.17 Income Tax:

As per the audited accounts including the deferred tax, CESC, in its filings has factored Rs.25.75 Crores towards payment of Income Tax liability for FY17. The Commission decides to allow the same in the APR for FY17.

4.2.18 Other Income:

CESC's Submission:

CESC in its application has claimed an amount of Rs.132.99 Crores as Other Income for FY17.

Commission's analysis and decisions:

As per the audited accounts, Rs.211.32 Crores is indicated as other income for FY17. This includes income from sale of scrap, income from rent, rebate for collection of electricity duty, delayed payment charges from consumers, income relating to prior period, withdrawal of depreciation charged on consumer contribution/grants, as per Accounting Standards - 12 and miscellaneous recoveries. The delayed payment charges from consumers amounting to Rs.39.74 Crores, included under other income, is considered as revenue from sale of power and miscellaneous charges and, an amount of Rs.38.60 Crores of income relating to prior period is factored and accounted under the head 'prior period debit/credit' and an amount of Rs.45.22 Crores depreciation withdrawn from contribution and grants as per Accounting Standards-12 is factored under depreciation head. Also an amount of Rs.3.88 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 in timely payment of monthly power purchase bills, the Commission continues to allow10% of the total incentive amounting to Rs.0.39 Crores on account of early payment of power purchase bills, to be retained by CESC for FY17.

Thus, the Commission decides to allow an amount of Rs.44.40 Crores as other income for FY17.

4.2.19 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. CESC in its filing has not claimed any expenditure for FY17. The Commission, as per the audited account notes that an amount of Rs.0.13 Crores has been incurred towards Consumer Relations / Consumer Education for FY17.

Thus, the Commission decides to approve the same for FY17.

4.2.20 Revenue for FY17:

The CESC, in its application has considered Rs.3518.77 Crores as revenue from sale of power from consumers and miscellaneous charges for FY17.

As per the audited accounts for FY17, the revenue from sale of power is Rs.3479.03 Crores.

Further, the delayed payment charges from consumers of Rs.39.74 Crores included under other income has been recognized as revenue from sale of power.

Accordingly, the Commission decides to consider Rs.3518.77 Crores as revenue from sale of power to consumers and Miscellaneous Revenue while approving the revised ARR as per APR of CESC for FY17.

4.2.21 Revenue and Subsidy for FY17:

The Commission in its Tariff Order dated 30th March, 2016 has approved tariff subsidy of Rs.1301.12 Crores towards sale of power to BJ/KJ and IP sets for FY17 in accordance with the prevailing Government Order. **The Commission in computation of APR for FY17 has approved the revised tariff subsidy of Rs.1548.34 Crores towards sale of power to BJ/KJ installations and IP sets for FY17.**

The difference of Rs.247.22 Crores in the originally approved Tariff subsidy during ARR for FY17 and the Tariff subsidy computed during the APR of FY17 is payable by the GoK to the CESC.

4.3 Abstract of Approved ARR for FY17:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR for FY16 is as follows:

TABLE – 4.27

Approved revised ARR for FY17 as per APR

Rs. Crores

Sl. No	Particulars	APR FY17		
		As approved 30.03.2016	As filed 30.11.2017	As per APR
1	Energy at Gen Bus	7125.44	7544.85	7544.85
2	Transmission Losses in %	3.47%	4.51%	4.51%
3	Energy at Interface in MU	6878.19	7204.35	7204.34
4	Distribution Losses in %	13.25%	13.10%	13.10%
5	**Sales in MU**			
	Sales to other than IP & BJ/KJ	3306.72	3081.96	3081.96
	Sales to BJ/KJ installations	37.72	35.19	35.19
	Sales to IP-sets	2622.39	3143.13	3143.13
	Total Sales	**5966.83**	**6260.28**	**6260.28**
6	**Revenue at existing tariff**			
	Revenue from tariff and Misc. Charges	2081.02	1944.82	1970.44
	Tariff Subsidy to BJ/KJ	21.39	23.90	23.90
	Tariff Subsidy to IP	1279.73	1550.05	1524.44
	Total Existing Revenue	**3382.14**	**3518.77**	**3518.77**
	Expenditure in Rs Crores			
7	Power Purchase Cost	2276.67	2918.01	2918.00
	Transmission charges of KPTCL	344.44	346.50	346.50
	SLDC Charges	2.40	2.40	2.40

	Power Purchase Cost including cost of transmission	**2623.51**	**3266.91**	**3266.91**
8	Employee Cost		315.41	
	Repairs & Maintenance		42.77	
	Admin & General Expenses		73.27	
	Total O&M Expenses	**443.46**	**431.45**	**444.68**
9	Depreciation	76.28	147.58	102.35
10	**Interest & Finance charges**			
11	Interest on Loans	97.80	95.98	95.98
12	Interest on Working capital	67.87	48.29	60.92
13	Interest on belated payment on PP Cost	0.00	27.65	0.00
14	Interest on consumer deposits	37.97	38.11	38.11
15	Other Interest & Finance charges	0.00	0.00	1.15
16	Less interest capitalized	22.00	12.84	12.84
	Total Interest & Finance charges	**181.64**	**197.19**	**183.33**
17	Other Debits	0.00	57.37	9.38
18	Net Prior Period Debit/Credit	0.00	22.05	22.05
19	Return on Equity	0.00	0.00	0.05
21	Provision for taxation	0.00	25.75	25.75
22	Funds towards Consumer Relations/Consumer Education	0.50	0.00	0.13
23	Other Income	40.77	132.99	44.40
	ARR	**3284.62**	**4015.31**	**4010.22**
25	Surplus for FY15 carried forward	22.90	0.00	0.00
26	Disallowance of capex on account of prudence check	0.00	0.00	0.00
27	Regulatory asset	-120.41	0.00	0.00
	Net ARR	**3382.14**	**4015.32**	**4010.22**
	Deficit for FY17	**0.00**	**-496.55**	**-491.45**

4.3.1 Gap in Revenue for FY17:

As against an approved ARR of Rs.3382.14 Crores, the Commission, after the Annual Performance Review of CESC, decides to allow a revised ARR of Rs.4010.22 Crores for FY17. Considering the revenue of Rs.3518.77 Crores, a deficit in revenue, of Rs.491.45 Crores is determined for the year FY17.

The Commission decides to carry forward the deficit of Rs.491.45 Crores of FY17 to the proposed ARR for FY19, as discussed in the subsequent Chapter of this Order.